Notice to all users:
This software requires that the navigation unit be properly connected to your vehicle's parking brake. If not properly connected 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.
The screen shown in the example may differ from the actual screen. The actual screen may be changed without notice for performance and function improvements.
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Important Safety Information

Before using your Navigation System, be sure to read and fully understand the following safety information:

- Read the entire manual before operating this Navigation System.
- The navigation features of your Navigation System (and rear view camera option if purchased) are intended solely as an aid to you in the operation of your vehicle. It is not a substitute for your attentiveness, judgment, and care when driving.
- Do not operate this Navigation System (or the rear view camera option if purchased) if doing so will divert your attention in any way from the safe operation of your vehicle. Always observe safe driving rules and follow all existing traffic regulations. If you experience difficulty in operating the system or reading the display, park your vehicle in a safe location and apply the parking brake before making the necessary adjustments.
- Never allow others to use the system unless they have read and understood the operating instructions.
- Never use this Navigation System to route to hospitals, police stations, or similar facilities in an emergency. Please call 911.
- Route and guidance information displayed by this equipment is for reference purposes only. It may not accurately reflect the latest permissible routes, road conditions, one way streets, road closures, or traffic restrictions.
- Traffic restrictions and advisories currently in force should always take precedence over guidance given by the Navigation System. Always obey current traffic restrictions, even if the Navigation System provides contrary advice.
- Failure to input correct information about the local time may result in the Navigation System providing improper routing and guidance instructions.
- Never set the volume of your Navigation System so high that you cannot hear outside traffic and emergency vehicles.
- To promote safety, certain functions are disabled unless the vehicle is stopped and/or the parking brake is applied.
- The data encoded in the disc for the Navigation System is the intellectual property of the provider, and the provider is responsible for such content.
- Keep this manual handy as a reference for operating procedures and safety information.
- Pay close attention to all warnings in this manual and follow the instructions carefully.
- Do not install this Navigation System where it may (i) obstruct the driver’s vision, (ii) impair the performance of any of the vehicle’s operating systems or safety features, including air bags, hazard lamp buttons or (iii) impair the driver’s ability to safely operate the vehicle.
- Please remember to wear your seat belt at all times while operating your vehicle. If you are ever in an accident, your injuries can be considerably more severe if your seat belt is not properly buckled.
- Using the most current map DVDs will allow for most accurate destination mapping. Upgrade DVDs are available for purchase through your local Pioneer dealer.
- Never use headphones while driving.

WARNING

- Do not attempt to install or service your Navigation System by yourself. Installation or servicing of the Navigation System by persons without training and experience in electronic equipment and automotive accessories may be dangerous and could expose you to the risk of electric shock or other hazards.
Notes Before Using the System and Additional Safety Information

Failure to operate
Should the Navigation System fail to operate properly, contact your dealer or the nearest authorized Pioneer service facility.

After-sales service for Pioneer products
Please contact the dealer or distributor from which you purchased the product for after-sales service (including warranty conditions) or any other information. In case the necessary information is not available, please contact the companies listed below.

Please do not ship your product to the companies at the addresses listed below for repair without making advance contact.

**U.S.A**
Pioneer Electronics (USA) Inc.  
CUSTOMER SUPPORT  
P.O. Box 1760  
Long Beach, CA 90801-1760  
800 421 1404

**CANADA**
Pioneer Electronics of Canada, Inc.  
CUSTOMER SATISFACTION DEPARTMENT  
300 Allstate Parkway  
Markham, Ontario L3R 0P2  
1 877 283 5901

For warranty information, please see the Limited Warranty sheet included with your product.

Purchasing software upgrade
Using the most current map DVDs will allow for most accurate destination mapping. Upgrade DVDs are available for purchase through your local Pioneer dealer.

Product registration
Visit us at the following site:

http://www.pioneerelectronics.com

1. Register your product. We will keep the details of your purchase on file to help you refer to this information in the event of an insurance claim such as loss or theft.
2. Receive updates on the latest products and technologies.
3. Download owner’s manuals, order product catalogues, research new products, and much more.
4. Receive notices of software upgrades and software updates.

Precaution

Parking brake interlock
Certain functions (viewing visual image and certain touch panel keys) offered by this Navigation System could be dangerous and/or unlawful if used while driving. To prevent such functions from being used while the vehicle is in motion, there is an interlock system that senses when the parking brake is set and when the vehicle is moving. If you attempt to use the functions described above while driving, they will become disabled until you stop the vehicle in a safe place, and (1) apply the parking brake, (2) release the parking brake, and then (3) apply the parking brake again. Please keep the brake pedal pushed down before releasing the parking brake.

⚠️ CAUTION ⚠️

- Accuracy/performance of interlock may be impacted by such factors as GPS signal detection, speed pulse wire connectivity, and driving habits or conditions of the place where the vehicle is parked.
- It is strongly suggested that the speed pulse wire be connected for accuracy of navigation and better performance of interlock.
- If the speed pulse wire is unavailable for some reason, it is recommended that the pulse generator (ND-PG1) be used.
To ensure safe driving

- “Visual image” in this manual indicates the moving image from the equipments which are connected to the Navigation System with AV-BUS or RCA cable, such as DVD player and TV tuner.

When you attempt to watch visual images while driving, the warning Viewing of front seat video source while driving is strictly prohibited. will appear on the screen. To watch visual images on this display, stop the vehicle in a safe place, and (1) apply the parking brake, (2) release the parking brake, and then (3) apply the parking brake again. Please keep the brake pedal pushed down before releasing the parking brake.

⚠️ WARNING

- To avoid the risk of damage and injury and the potential violation of applicable laws, the Navigation System is not for use with a visual image that is visible to the driver.
- In some countries or states the viewing of visual images on a display inside a vehicle even by persons other than the driver may be illegal. Where such regulations apply, they must be obeyed.

⚠️ WARNING

- When applying the parking brake in order to view visual image or to enable other functions offered by the Navigation System, park your vehicle in a safe place, and keep the brake pedal pushed down before releasing the parking brake if the vehicle is parked on a hill or otherwise might move when releasing the parking brake.

Color difference of the map display between day and night

The examples in this manual are illustrated using the daytime display. When driving at night, the colors you see may differ from those shown. To use this function, the Orange/white lead of the Navigation System must be connected correctly.

➲ “Day/Night Display” → Page 65

Rear view camera

With an optional rear view camera, you are able to use the Navigation System as an aid to keep an eye on trailers, or backing into a tight parking spot.

⚠️ WARNING

- SCREEN IMAGE MAY APPEAR REVERSED
- USE INPUT ONLY FOR REVERSE OR MIRROR IMAGE REAR VIEW CAMERA. OTHER USE MAY RESULT IN INJURY OR DAMAGE.

About this disc

Only use the Pioneer DVD Map Disc with Pioneer DVD Navigation Unit. You cannot use other discs. CDs and MP3/WMA/WAV discs can be played on AVIC-D1. When using AVIC-D1, refer to the “Hardware Manual”.

Night display
Features (Characteristics of this software)

Touch panel key operation
It is possible to operate the navigation function and the Audio function by using touch panel key.

Variety of View Modes
Various types of screen display can be selected for navigation guidance.
– Map View, Route View, Guide View
The split screen mode is also available.
– Rear View mode (Rear view camera screen and Navigation map screen)
You can also display information on vehicle speed, acceleration, and voltage, etc.
– Vehicle Dynamics

Data communication function with XM tuner
If you connect the optional XM tuner (GEX-P10XMT) to the navigation unit, you can use traffic information as a part of the navigation function.
 Furthermore, using the channel list function of the XM tuner or icon display of station names facilitates your selection of various broadcast stations on a highly visualized display.

Wide Variety of Facility Information for Points of Interest (POI) Search
You can search your destination from all areas.
– Approximately 11 million POIs are included in this database as of January 2004.
– Some POI information may not be accurate or may become inaccurate through the passage of time. Please directly contact the POI to verify the accuracy of the information about the POI which appears in this database. POI information is subject to change without notice.

Auto Reroute Function
If you deviate from the set route, the system will re-calculate the route from that point so that you remain on track to the destination.

Auto CD title and MP3/WMA/WAV file listing
Title lists will automatically be displayed when a CD TEXT or MP3/WMA/WAV disc is played. This system provides easy-to-operate audio functions that allow playback simply by selecting an item from the list.

About XM NavTraffic Service and Pioneer Navigation

XM NavTraffic subscription is required and is available only in select markets. Check www.xmnavtraffic.com for service availability, pricing information, and other details. The availability of XM NavTraffic data depends on the ability of the antenna to receive a signal. The signal may be unavailable if obstructed (e.g., by buildings, mountains, trees, bridges, bad weather, etc.). XM NavTraffic data also may be unavailable or not current if the original data source is not providing data (e.g., scheduled or unscheduled downtime) or has not been updated itself or if there is a time lag between the time the original data source is updated and when you receive the updated XM NavTraffic data.

Depending on the amount of data being transmitted in your area, it may take several minutes to collect all of the available data.

The information content depends on the information provided by XM NavTraffic Service, including data refresh and availability timing.

Pioneer does not bear responsibility for the accuracy of the information transmitted.
Pioneer does not bear responsibility for changes to information services provided by XM, such as cancellation of the services or subscription update.

Traffic information is not taken into account when calculating estimated time of arrival time or travel time for your destination.
Manual Overview

This manual provides the important information you need to make full use of your new Navigation System. The beginning sections outline the Navigation System and describe its basic operation. The later sections describe the details of the navigation functions.

Chapters 6, 7 and 8 describe how to operate the AV functions. Please read these chapters when you use a disc in the built-in CD drive or operate the Pioneer audio equipment connected to the navigation unit.

Please note that when you have decided what you want to do, you can find the page you need from the "Table of Contents".

If you want to check the meaning of each item displayed on the screen, you will find the necessary page from the “Display Information” section at the end of the manual.

How to use this manual

For reasons of safety, it is particularly important that you fully understand your Navigation System before using it. Be sure to read the Introduction and Chapter 1 in particular.

1. Basic Operation
   If you want to use the Navigation System immediately, please read this section. It will explain the basics of operating this system.
   This section also describes the basic operations for playing a CD with the navigation unit.

2. Menu and Map Display
   Describes how to display the menu screen, and the method of changing map view or map scale.

3. Setting a Route to Your Destination
   This section describes various ways of searching for a destination, editing the current route conditions, and the route operation during route guidance.

4. Editing the Navigation Utilities
   Describes convenient functions for navigation, including how to organize information on places you have visited.

5. Customizing Your Navigation System
   The behavior of your Navigation System depends on a number of settings. If you need to change any of the initial settings (default settings), read the relevant section of this chapter.

6. Using the AV Source (Built-in CD Drive and Radio)
   Describes how to use a CD, MP3/WMA/WAV disc and the radio.

7. Using the AV Source (Pioneer AV Equipment)
   When Pioneer audio equipment is connected to the navigation unit, that equipment can be operated from the navigation unit. This chapter describes the operation of the audio source that can be used when Pioneer audio equipment is connected.
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 Unit are described in **ALL CAPITAL, BOLD** lettering:
  e.g.) **MAP** button, **DEST** button.

• Items in the different menus or touch keys available on the screen are described in quotations (" ") and bold:
  e.g.) “**Destination**”, “**Settings**”.

• Extra information, alternative use and other notes are presented like this:
  e.g.)

  □ Touch keys which are not available at this time are grayed out.

• The references are indicated like this:
  e.g.)

  ➡ Setting the Route Options ➔ Page 44
**DVD Map Discs for Navigation System**

**Configuration of data recorded on discs**

The map for this Navigation System is supplied on two discs: one for the west and the other for the east. Please set the disc to use according to your destination or current location. The areas recorded on each disc are as follows:

- **West area disc**
- **East area disc**

- Removing the disc and inserting another disc causes the Navigation System to automatically restart and reload the new route. (This automatic “Reroute” operation cannot be canceled.)
Basic Operation

Flow from Startup to Termination

• If the program is not installed, see page 107 and install the program.

At first, please confirm the positions of the following features using the “Hardware Manual”.
• DVD-ROM loading slot
• MAP button
• DEST button
• OPEN/CLOSE button

1 Start the engine.
After a little time, the navigation opening screen comes on for a few seconds. Then, a message screen is displayed.
- If the disc is not set, the message asking to insert the disc appears. After you set the disc correctly, your Navigation System starts up.

2 Press and hold the OPEN/CLOSE button.
The LCD panel fully opens, and the DVD-ROM loading slot appears.

3 Insert the Pioneer DVD Map Disc to the DVD-ROM loading slot.
The LCD panel closes automatically.
- Make sure the DVD-ROM loading slot is empty before inserting a DVD Map Disc.

4 Press the MAP button to switch the Navigation map screen.
Pressing the AV button switches between the navigation map screen and the audio screen.

5 Check the details of the cautionary message and touch “OK”.
You can operate the Navigation System by touching keys displayed on the screen.
If the route is already set, it changes to route guidance mode. The map of your surroundings is displayed.
- How to read the current position screen ➞ Page 29
- Setting the time ➞ Page 108
- Touch keys which are not available at this time are grayed out.
- Be sure to touch the touch keys with a finger. Touch keys cannot be operated by a pen or similar object.

6 Press the DEST button.
Displays the main menu.

7 Allows you to assign a destination and being route guidance.

- Specifying the address and searching the destination ➞ Page 20
- Searching the destination by map ➞ Page 33
- Other search methods ➞ Page 35 to 38

8 Turn off the vehicle engine.
This Navigation System is also turned off.
- Until the vicinity of the destination is reached, the set route will not be deleted even if the engine is turned off.
Basic Navigation

The most frequently used function is the Address Search, in which the address is specified and the destination searched. This section describes how to use the Address Search and the basics of using the Navigation System. Also, the method of playing CDs is used as an example of switching to the audio source.

⚠️ CAUTION

- For safety reasons, you cannot use these basic navigation functions while your vehicle is in motion. To enable these functions, you must stop in a safe place and apply the parking brake (see page 12 Interlock for details).

Basic flow of operation

1. Park your vehicle in a safe place, and apply the parking brake.

2. Insert the Pioneer DVD Map Disc to the DVD-ROM loading slot.

3. Press the DEST button to display the Main menu.

4. Select the method of searching for your destination.

5. Enter the information about your destination.

6. Your Navigation System sets the route to your destination, and the map of your surroundings appears.

7. After releasing the parking brake, drive in accordance with the navigation information, subject of course to the important safety instructions noted on page 11-13.
How to set your destination

1. Press the DEST button to display the main menu.

2. Touch “Address Search”.
   Selects the method for searching the destination.

   ➡ Return Home ➡ Page 37
   ➡ Go to ➡ Page 37
   ➡ POI Search ➡ Page 35
   ➡ Vicinity Search ➡ Page 36
   ➡ Address Book ➡ Page 38
   ➡ Destination History ➡ Page 38
   ➡ Freeway Search ➡ Page 37
   ➡ Telephone Search ➡ Page 37
   ➡ Cancel Route ➡ Page 38

3. Touch “Zone code key”.
   If the destination is in another zone, this changes the zone setting.
   Once the zone has been selected, you only have to change zones when your destination is outside of the zone you selected.

4. Touch the zone code of the destination and touch “OK”.
   Modifies the zone setting and returns you to the previous display.

5. Input the house number and touch “OK”.
   Touch the characters you wish to input.

6. Input the street name.
   Touch the letter you wish to input. If the next screen is not automatically displayed even though the street name is entered, try touching “OK”.

   “City”:
   Touch if you wish to first specify the destination city or area.

   The input text is deleted letter by letter from the end of the text. Continuing to press deletes all of the text.

   “Back”:
   Returns you to previous screen.
   Also input a prefix to the house number.
   If the house number you have input is not found among subsequently selected “Street” or “City” data, a message appears saying that the address has not been found. In that case, try inputting the house number again.
   Touching “OK” with no input allows you to specify and search a street name or the name of the city or area first.

   The number of applicable candidates.

   You can input text with marks such as “&” and “+”.

   The input text is deleted letter by letter from the end of the text. Continuing to press deletes all of the text.
“0-9”:
You can input text with numbers.
“Back”:
Returns you to previous screen.

☐ For example, for “Early California Ct”, you can just enter part of the name, such as “California”.

☐ When entering the characters, the unit will automatically query the database of all possible options. If there is only one letter that could possibly follow your entry, that letter will automatically be entered.

☐ When touching “Back” on the text input screen to return to the previous screen, you may not be able to input text. In such case, delete the letters entered in the text box.

Searching your destination after specifying the name of city or area
You can narrow down the search candidates by initially specifying the name of city or area where your destination is located. Inputting the name of the city or area then selecting the destination city or area from the list returns you to the Street Name input screen. Now input the street name, select the street from the list, and proceed to step 9.

In the selected area, if you touch “City” without entering the name of city or area, you can check the list of the cities or areas, which you have searched in the past. (This item cannot be selected when searching for the first time with this system or when you have selected an area that you have never searched before.)

7 Touch the street from the list.

Touching the or on the scroll bar scrolls you through the list and allows you to view the remaining items.

☞ Searching the destination by map → Page 33

In the case of an item that cannot be displayed in a single line, touching the to the right of the item allows you to see the whole line.

☐ If only one location is found from the list, route calculation starts after pressing the item.

• Touching the specifies the selected street and streets intersecting it, allowing you to set an intersection as your destination. This is useful when you don’t know the house number of your destination or cannot input the house number of the specified street.

• Touching the displays a map of the place you have selected. (Candidate place names may appear in the list screen.)

8 Input the destination city or area.
If the list screen is displayed, proceed to step 9.

9 Touch the city or area where your destination is located.
Route calculation starts. When the route calculation is completed, the map of your surroundings appears. (The route is displayed in green or light blue.)
If the selected street is very long, and passes through several cities or area, the screen for entering the name of the city or area appears.

If you did not input the house number in Step 5, the house number input screen comes up after the “Street” and “City” are determined. You should now input the house number (perform Step 5).

If there is more than one place for the house number input, or if there is no such house number in that place, a range of house numbers are displayed. To start the route calculation, touch the range within the list you wish to specify as the destination.

You can also see the destination on the map by touching the \( \text{ } \) to the right of the list.

Searching the destination by map ➞ Page 33

If you press the MAP button during route calculation, the calculation is canceled and the map display appears.

When performing a destination search with the route already set, select whether to regard the specified area as your destination and search for a new route, or search for a route via that area.

Adding way points to the route ➞ Page 41

Once searched for, the location is automatically stored in the “Destination History”. ➞ Page 48

10 Drive in accordance with the screen and voice information.

Your Navigation System gives you the following information with the timing adjusted to the speed of your vehicle:

- Distance to the next turning point
- Direction of travel
- Road number of the freeway
- Way point (If this is set)
- Your destination

How to view the screen ➞ Page 29

Searching for another route ➞ Page 40

Canceling route guidance ➞ Page 38

Touching the \( \text{ } \) allows you to hear the information again.

If you deviate from the route with the Guidance set to Route View or Guide View and enter a street not recorded on the disc, the screen changes to Map View. When you return to the route, returns to the original view and resumes route guidance.

If you stop at a gas station or a restaurant during the route guidance, your Navigation System remembers your destination and route Information. When you start the engine and get back on the road, the route guidance resumes.

If a traffic congestion or closure occurs on the set route ahead, traffic information will appear on the screen and voice information will be provided. At that time, select whether to recalculate for a new route or stay on the current route.

Traffic information ➞ Page 50

How to view Map View screen

This section describes only the items that are displayed on the Map View screen.

Details of the map screen ➞ Page 29

1. Current location
2. Distance to the destination
3. Estimated time of arrival (or travel time to your destination)
How to listen to a CD

The built-in CD drive in the navigation unit enables you to listen to CDs and MP3/WMA/WAV discs during navigation. This section describes how to listen to a CD with the built-in CD drive.

1 Press the OPEN/CLOSE button.
The LCD panel opens halfway, and the CD loading slot appears.

2 Insert the CD to the CD loading slot.
The LCD panel closes automatically.
The audio CD set in the navigation unit is played.

- Make sure the CD loading slot is empty before inserting a CD into the slot.
- If you cannot insert a disc completely or if a inserted disc is not recognized, check that the label side of the disc is up. Press CD EJECT button to eject the disc, and check the disc for damage before inserting the disc again.
- If the built-in CD drive does not operate properly, an error message such as ERROR-11 may be displayed.

3 Press the AV button to switch the Audio screen.
Pressing the AV button switches between the navigation map screen and the audio screen.

4 Press the VOL (+/−) button to adjust the volume.

5 Touch the track you want to listen to in the track list.
The selected track is played. You can also skip backward or forward to another track by moving the joystick left or right. You can also use / skiprev or / skipfwd touch keys.

- If you touch or , you can switch the list to the next page or the previous page.
- When no touch key is displayed, if you touch the screen, the touch key is displayed.

6 To fast forward or reverse, keep touching / or /.

You can also perform fast reverse/fast forward by holding the joystick left or right.
To hide the touch key, touch “HIDE”.

If you touch the screen, the touch panel keys are displayed again.

Pausing playback

1. Touch “PAUSE”.
   You may pause CD playback by touching “PAUSE”.
   To resume play again, touch “PAUSE”.

   For details on the functions which can be used in the audio source, please see Chapters 6, 7 and 8.

Buttons you can use

The status of the buttons appearing on the screen is indicated by their color.
Depending on the function the navigation is performing, you can touch some buttons, while other buttons are not available.

Light gray touch key:
The button is operable.

Dark gray touch key:
The function is not available (e.g., operation is prohibited while driving).
This section describes the basic operations, including how to display the main menu and how to use the shortcut menu and the map screen.

How to Use Menu Screens

The basic operation of the navigation is performed by using menus. There are two types of menu: the “Main menu” and the “Shortcut menu”.

Main menu

You use this menu for basic operation of your Navigation System.

1 With the map displayed, press the DEST button.

2 To change to the menu you want to use, touch the name of the menu displayed at the top of the screen.

The main menu is divided into four: “Destination”, “Info/Traffic”, “Route Options”, and “Settings”.

3 If you want to return to the map, press the MAP button.

Destination menu

Select the destination search method. Also the route set can be canceled from this menu.

- Specifying the address and searching for the destination → Page 20
- Searching the destination by map → Page 33
- Other search methods → Page 35 to 38

Info/Traffic menu

Use this menu to check traffic information mainly using the GEX-P10XMT*.

- “Traffic On Route”, “Traffic Events”, “Traffic Flow”, “Stock Info”, “Browse”, and “My Favorites” can be used only when the GEX-P10XMT* is connected to the Navigation System.

GEX-P10XMT*:
XM Digital Satellite Data & Audio Receiver (sold separately). Traffic information only available for cities where information is provided by XM NavTraffic service. Active subscription to XM NavTraffic required to receive traffic information on the Navigation System.

- Confirming traffic information → Page 50
- Registering information for emergencies → Page 57

Route Options menu

Used to specify the conditions for setting the route to the destination.

- Setting the Route Options → Page 44
- “Edit Current Route”, “View Current Route”, and “Recalculate” can be used when the route is set.
Menu and Map Display

Chapter 2

**Settings menu**

Set the navigation functions so they can be used easily.

➲ Settings menu ➔ Chapter 5

**Shortcut menu**

Shortcuts allow you to perform various tasks, such as route calculation for the location indicated by the scroll cursor, or registering a location in the **Address Book**, faster than using the Main menu.

☐ The shortcuts displayed onscreen can be changed. The shortcuts described here are those that can be selected with the system as default setting.

☐ Items marked with an asterisk (*) cannot be removed from the shortcut menu.

➲ Changing a shortcut ➔ Page 64

1 When the map is displayed, briefly touch any part of the map.

If you continue to touch the map, it will start scrolling.

➲ Moving the map to view the part you want to see ➔ Page 32

**.dest** : **Destination**

Displayed when the map is scrolled. Set the route to the place specified with the scroll cursor.

➲ Searching the destination by map ➔ Page 33

**Ш** : **Chg.Route**

Displayed when the map is not scrolled and this item can be selected only during route guidance.

You can add changes to your route and check it.

➲ Searching another route ➔ Page 40

➲ Detour for a specified distance ➔ Page 40

➲ Checking the route ➔ Page 38

➲ Canceling the route guidance ➔ Page 38

➲ Skipping a way point ➔ Page 41

** hå** : **Whole Route Overview**

Displays the whole route up to the destination.

**&** : **Vicinity Search**

You select a location with the scroll cursor. Nearby POIs (Points Of Interest) will also be found.

➲ Searching the facilities surrounding a certain place ➔ Page 36

**آ** : **Registration**

Registering the location indicated by the scroll cursor to **Address Book**.

➲ Touching “Registration” and selecting “Save” allows you to register the location to Address Book.

➲ Registering a place ➔ Page 48

**є** : **Menu Close**

Hides the shortcut menu.
How to Use the Map

Most of the information provided by your Navigation System can be seen on the map. You need to get to know how the information appears on the map.

Switching the current position screen display mode

This section describes how to display the current position screen and change the map display mode. There are three types of map display and two additional view modes.

- **Map View**
- **Guide View** (during route guidance only)
- **Route View** (during route guidance only)
- **Vehicle Dynamics**
- **Rear View** (Only possible when the “CAMERA” is set to “ON”.)

1. Press the MAP button to display a map of the area around your current position.
2. Press the MAP button again.
3. Touch the mode name or press the MAP button to select the mode you want to display.

- If the mode is selected by pressing the MAP button, the screen automatically switches to the selected map display mode after 4 seconds.

How to view the map of the current location

**Map View**
Displays standard map.

**Guide View**
The standard map of your surroundings is overlaid with the name of the street you will turn onto next, and 2 arrows: the larger one to the left indicating the direction of your next maneuver and how far you are from approaching it, and the smaller one to the right indicating the direction of your second to next maneuver and how far you are from approaching it.

**Route View**
Displays the name of the street you will next travel along and an arrow indicating the direction of travel.

**Normal condition**
Vehicle Dynamics Display
Indicates the status of your vehicle.

- You can change the items indicated to the meters on the left and right.
- In the Vehicle Dynamics Display mode, the speedometer display may show a different speed than your vehicle’s actual speedometer, because your unit measures speed in a different way.

Setting the Vehicle Dynamics Display → Page 60

Rear View
Rear view image is displayed on the left-hand side of the screen, while the map of your surroundings is indicated on the right.

- If the “CAMERA” is set to “OFF”, the rear view image is not displayed. Please set it to “ON”.

Camera setting → Page 102
- When using a camera set to turn OFF/ON in conjunction with the reversing signal, no camera images will be displayed in rear view mode while you are moving forward.
- If the camera is set always ON, it can display images in rear view mode when the vehicle is moving forward. In that case, you should ask the camera maker or dealer whether the camera’s functions or longevity would be affected.

Rear View can be displayed at all times (e.g. when monitoring an attached trailer, etc.) as a split screen where map information is partially displayed. Please beware that in this setting, camera image is not resized to fit to screen, and that a portion of what is seen by the camera is not viewable.

Enlarged map of the intersection
When “Close-up of Junction” in the Settings menu is “On”, an enlarged map of the intersection appears.

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.

When keep driving on the freeway, freeway exit numbers and freeway signs may be displayed when in the vicinity of interchanges and exits.
If the DVD Map Disc does not contain the data for these items, the information is not available.

**City Map**
In certain metropolitan city areas, a more detailed “City Map” is available at the 0.05 mi (50m) map scale or lower.

If the DVD Map Disc does not contain the data for city area, detailed “City Map” is not available.

Except when on a freeway, if you are driving by an area where a City Map is available, at the 0.1 mi (100 m) map scale, a message appears informing you that have entered a city map area.

**Display items**

**Guidance point***
The next guidance point (next turning point, etc.) is shown by a yellow flag.

**Destination***
The checker-flag indicates your destination.

(1) **Name of the next street to be used***
The name of the street to be used.

(2) **Distance to the guidance point***
The distance to the guidance point.

(3) **Current location***
The current location of your vehicle. The tip of the triangular mark indicates your heading and the display moves automatically as you drive.

(4) **Distance to the destination (or distance to way point)***
If way points are set, the display changes with each touch. When two or more way points are set, the distance to the destination and the distance to the next way point are switched.

(5) **Name of the street your vehicle is traveling along (or City Name, etc.)***

(6) **Compass***
The red arrow indicates north. If the scale is less than 25 mi (50 km), touching the map changes the direction it is displayed in (north up/heading up). When the scale of the map is not less than 25 mi (50 km), it is fixed to “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.

(7) **Zoom in/Zoom out***
Touch to change the map’s scale.

- Changing the map’s scale ➔ Page 32

(8) **Map scale***
The scale of the map is indicated by distance. Except for on the **Vehicle Dynamics** Display, the scale of the map is displayed at the top right of the screen.

- Changing the map’s scale ➔ Page 32

(9) **TRAFFIC icon***
This appears when an XM tuner (GEX-P10XMT, sold separately) is connected, and traffic information is received.

(10) **Current time***

(11) **Estimated time of arrival (or travel time to your destination)***
The estimated time of arrival is automatically calculated from the **Average Speed** set and the actual average speed.

- How to set average speed ➔ Page 64

(12) **Tracking mark***
The tracking mark shows the route your vehicle has traveled by the dots.

- Select the tracking setting ➔ Page 65

(13) **Map of your surroundings (Side map)**
Touching on the map briefly shows the shortcut menu, while touching longer changes the map to Scroll mode.

- Moving the map to the location you want to see ➔ Page 32
(14) **Distance to an intersection***
Displayed on the enlarged intersection map. The green bar gets shorter as your vehicle approaches an intersection.

(15) **Next direction of travel***
When you approach an intersection, it appears green. The screen displays the distance to the next guidance point, and the next guidance point after that.

(16) **Area to Avoid**
➢ About detour area → Page 42

(17) **Direction line**
The direction towards the location set in (4) is indicated with a straight line.

(18) **Lane information***
Lane information is displayed the first time voice guidance is used. When the guidance screen is displayed near an interchange or exit, the lane information disappears.

(19) **Freeway signs***
These show the road number and give directional information.

(20) **Freeway exit information***
Displays the freeway exit.

Information with the mark (*) appears only when the route is set.

Depending on the conditions and settings, some items may not be displayed.

### Changing the scale of the map
Touching the “Zoom in/Zoom out” key displayed on the upper right of the screen displays the scale gauge and “Direct scale” key. Directly touching the “Direct scale” key changes the map to the selected scale. Touching or above the scale gauge allows you to specify the scale in greater detail within a range of 25 yards - 1000 miles (25 meters - 2000 kilometers).

- The icon of a registered location and the traffic information icons are displayed when the map scale is 10 miles (20 km) or lower.
- POI icons and the line for traffic congestion and traffic flow are displayed when the map scale is 0.75 mile (1 km) or lower.
- The Direct scale key may not appear depending on the map display mode.

### Moving the map to the location you want to see
If you touch the display briefly, the shortcut menu appears. Touching anywhere on the map for at least 2 seconds changes the map to Scroll mode and the map begins scrolling in the direction you touched. The scrolling stops when you release your finger from the screen. At this time, the scroll cursor appears at the center of the screen. Also a line connecting between the current location and scroll cursor appears. Pressing the **MAP** button returns you to the map of your surroundings.

- Touch the area close to the center of the screen to scroll slowly; touch near the sides of the screen to scroll through quickly.

### Notes
- When the scale is 0.25 mi (200 m) or lower, the road appears light blue in the vicinity of the scroll cursor.

#### (1) Scroll location
The position of scroll cursor shows the location selected on the current map.

#### (2) Direction line
The direction towards the scroll cursor is indicated with a straight line.

#### (3) Distance from the current location
Shows the distance in a straight line between the location indicated by the scroll cursor and your current location.

(4) The street name, city name, area name and other information for this location.
(The information displayed varies according to the scale.)
Touching the ▶ on the right displays hidden text.

Displaying information on the specified location ➞ Page 33

(5) Shortcut menu
How to use shortcut menu ➞ Page 28

Viewing the information of a specified location
An icon appears at registered places (home location, specific places, address book 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.)

Registering places ➞ Page 47
Displaying facilities (POI) icon on the map ➞ Page 43
Icon for traffic information ➞ Page 51

3 Touch “Back”.
You are returned to the previous display.

Finding a destination on the map
If you search the location you want to visit by scrolling the map, and touch ◄ in the Shortcut menu, you can specify your destination on the map.

1 Press the MAP button to access the map screen.

2 Touch the map for at least 2 seconds.
The map display changes to Scroll mode.

3 Scroll the map and move the scroll cursor to the place you want to make your destination.
Moving the map to view the part you want to see ➞ Page 32

4 Touch ◄.
If you press the MAP button during route calculation, the calculation is canceled and the map display appears.

When the ➡ appears on the right of the list
You can also set a destination by touching the ➡ to the right of the list. Touch “OK” to confirm. The location pointed by the scroll cursor will be set as a destination.

Alternative option:
Scroll :
The map display changes to the map with Shortcut menu.
If you touch anywhere on the map, the map display changes to Scroll mode.
Shortcut menu ➞ Page 28
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. (see page 12 Interlock for details).

- Some information on traffic regulations by days or time 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 the location. 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.

- If you press the MAP button during route calculation, the calculation is canceled and the map display appears.

- When the DVD Map Disc is inserted, the reroute is done by force. (This rerouting cannot be canceled.)

Finding Your Destination by Selecting the Type of Facility

Information about various facilities (Points Of Interest - POI), such as gas stations, amusement parks or restaurants is available. By selecting the category (or entering the POI Name), you can search for a POI.

- You can also narrow down the search range by initially specifying the name of the city or area where your destination is located.

Searching for Points of Interest (POI)

1 Touch “Destination” in the Main menu, and then touch “POI Search”.

2 Touch the zone code key of the destination and touch “OK”.
   ➡ Selecting the zone where you want to search ➡ Page 21

3 Touch “Category”.

<table>
<thead>
<tr>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
</tr>
<tr>
<td>City</td>
</tr>
</tbody>
</table>

“Name”:
Touch if you wish to first specify the POI Name.

“City”:
Touch if you wish to first specify the destination city or area.

4 Touch the desired category.

POI’s are divided into several categories.

If the category is not sub-divided into more detailed categories, the list will not be displayed. Proceed to Step 6.
5 Touch the subcategory.

6 Input the name of the POI.
   If the list does not automatically appear when
   the name of the POI has been entered, try
   touching “OK”.
   “City”:
   First, touch to specify the destination city or
   area.
   □ If less than six POIs in a subcategory are
     registered, the screen for inputting the POI
     name is not displayed. Please proceed to
     Step 7.

7 Touch POI for your destination.
   □ Touching the displays a map of the
     surroundings of the selected POI.
   ➡ Searching the destination by map ➞ Page 33
   □ If the selected POI is the name of a chain
     of outlets and consequently the same
     store name applies to different locations
     (the number of outlets appears next to the
     chain’s name), touch the name of the POI
     to display a list of those POIs and touch
     the particular POI that is your destination.

Finding a POI in your surroundings

You can search for Points Of Interest in your sur-
roundings on the map. Use it to find a POI to visit
during a journey.

1 Touch “Destination” in the Main menu,
   and then touch “Vicinity Search”.
   The list of Points Of Interest categories
   appears.

2 Touch the desired category.

   Category

The selected category will have a red check
mark.

OK:
   Starts searching
Back:
   Returns to the previous screen
Set:
   Display the screen for registering POI short-
cut
   ➡ Register POI shortcut ➞ Page 43
   □ If you touch one of the POI shortcuts (e.g.
   ), you can start searching POI directly
   by selected category on the POI shortcut.
   □ If you want to search with more detailed
     categories, touch . When the subcate-
     gory list appears, touch the item and touch
     “Back”. When only a few types of the
detailed categories are selected, blue
check marks will appear.
   □ You can select the detail category for up to
   100 items.

3 Touch POI.

   Names of POIs and their distance from your
   current location appear. They are listed in
   nearest-to-furthest order. To the left of each
   item is an icon indicating the category.

   Distance to the facility

   □ When you touch , the POIs around the
     specified location are shown on a map.
   ➡ Searching the destination by map ➞ Page 33
   □ Searching range is approximately 10 miles
     (16 km) square from the current location.

Searching the facilities around
the scroll cursor

1 Scroll the map and move the scroll cursor
   to the place you want to search POI.

2 Touch .
   See Step 2 of “Finding a POI in your surround-
ings” for the following operations.
Setting an Entrance or Exit of a Freeway as Your Destination

You can set the entrance or exit of a freeway as your destination.

1 Touch “Destination” in the Main menu, and then touch “Freeway Search”. The display for entering the name of the freeway appears.

2 Touch the zone code key of the destination and touch “OK”.

3 Enter the name of the freeway and touch “OK”. The list of freeways matching the name appears.

4 Touch the freeway. The display for selecting your destination to the entrance or to the exit of the freeway appears.

5 Touch “Entrance” or “Exit”. The list of entrances to, or exits from, the selected freeway appears.

6 Touch your destination. You can also see the destination by touching the on the right of the list.

Searching the destination by map ➞ Page 33

Searching for Your Destination by Specifying the Telephone Number

If you know the telephone number of your destination, you can quickly search for your destination by specifying the telephone number.

1 Touch “Destination” in the Main menu, and then touch “Telephone Search”. The telephone number entry screen appears.

2 Input a telephone number. If there is more than one place for the number input, a list of those places is displayed. Touch the item you want in the list and proceed to step 3.

3 If the displayed place is satisfactory, touch “OK”. Touching “Scroll” changes the destination.

Route Calculation to Your Home Location or to Your Favorite Location

If your home location is registered, the route home can be calculated by a single touch of the touch key from the Main menu. Also, you can register one location, such as your workplace, as your favorite location, and the route is calculated in a similar way.

1 Touch “Destination” in the Main menu, and then touch “Return Home” or “Go to”.

“Registering your home and your favorite location” ➞ Page 47
Selecting Destination from the Destination History and Address Book

Any place that has been searched before is stored in the "Destination History". Places that you have registered manually, such as your home, are stored in the "Address Book". Simply select the place you want to go to from the list and a route to that place will be calculated.

1 Touch “Destination” in the Main menu, and then touch “Address Book” or “Destination History”.

2 Touch your destination name.

Route calculation starts.

- For information on the Address Book → Chapter 4
- For information on the Destination History → Chapter 4
- You can also see the destination by touching the on the right of the list.
- Searching the destination by map → Page 33

Canceling the Route Guidance

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

1 Touch “Destination” in the Main menu, then touch “Cancel Route”. The message confirming whether to cancel the current route appears.

2 Touch “Yes (all)”. The current route is deleted, and a map of your surroundings reappears. On this screen, you can also select the following items:

- **Yes (one)**: Route is recalculated by canceling the selected way point.
- **No**: Returns to the previous display without deleting the route.

You can also cancel the route using the Chg.Route in the shortcut menu.

Checking the Set Route

You can check information about the route between your current location and your destination.

You can select certain methods: checking the passing streets with a list; checking the shape of the route by scrolling the map along the route; checking the entire distance of the route in a single screen.

Checking the set route with the map

1 After touching “Route Options” in the main menu, touch “View Current Route”.

- "View Current Route" is displayed only when the route is set.
- You can also see the destination by touching the on the right of the list.

2 Touch “Scroll”. The screen to select the point to start scrolling appears.
3 Touch the point to start scrolling.

(1) Starting Point
(2) Way Point (If this is set)
(3) Destination

If you have selected “Way Point”, a list of the way points on the route is displayed. Touch the place you want to start scrolling from and proceed to step 5.

4 Touch or to scroll the map.
To continue scrolling after you release your finger, touch and hold or .
If necessary, the scale of the map can be changed.

5 Touch “Back”.
You can return to the previous display.

Checking the set route with text
This function is not available if your vehicle has deviated from the set route.

1 After touching “Route Options” in the main menu, touch “View Current Route”.
   “View Current Route” is displayed only when the route is set.
   You can also see the destination by touching the on the right of the list.

2 Touch “Profile”.

3 Check the contents on the display.
As necessary, scroll the list.
Name of the streets you are driving through

4 Touch “Back”.
You can return to the previous display.
   When a long distance route is calculated, your Navigation System may not be able to list all the roads. (In this case, the remaining roads will be shown in the list as you drive on.)

Checking the whole route overview
You can check the entire shape of current route.

1 After touching “Route Options” in the main menu, touch “View Current Route”.
   “View Current Route” is displayed only when the route is set.
   You can also see the destination by touching the on the right of the list.

2 Touch “Overview”.
A map of the whole route up to the destination is displayed.
   You can also check the overview by using the shortcut menu if “Whole Route Overview” is selected on the “Short-Cut Selection”.

You can select the following items:
Map:
The scroll screen is displayed.
Searching the destination by map → Page 33
Checking the set route from the shortcut menu
You can also check the information about the set route from the shortcut menu.

1 Touch the map screen.
The Shortcut menu appears.

2 Touch ◼️.
The Route/Detour menu appears.

3 Touch, “Route Profile” or “Route Scroll”.

➲ “Route Profile” ➞ Page 39 (Step 3 and 4)
➲ “Route Scroll” ➞ Page 38 (Step 3 and 4)

4 Touch “Back”.
You can return to the previous display.

Recalculating the Route to Your Destination
You can set the length of the area, and avoid just that area, or you can even search a new route from the current location to your destination. (On the map screen during route guidance, try the following operations.)

Recalculating the route to the destination using the Route Options menu

1 Touch “Route Options” in the Main menu, and then touch “Recalculate”.
Automatically searches the route to the destination again.

☒ “Recalculate” is displayed only when the route is set.
☒ You can also recalculate (reroute) your route using the ◼️ Chg.Route in the shortcut menu.

Recalculating the specified distance in the route ahead of your current position

1 Touch the map screen.
The Shortcut menu appears.

2 Touch ◼️.
The Route/Detour menu appears.

3 Touch the distance from the list.

Detour distance
Searches detours of a specified distance in the route ahead of your current position. After the route is calculated, the map screen shows your surroundings and route guidance is resumed.

➲ For details of switching the display between “mile” and “km” see “KM/Mile Setting” ➞ Page 64
Setting a Route to Your Destination

Chapter 3

Editing Way Points to the Current Route

You can select way points (locations you want to visit on the way to your destination) and you can recalculate the route to pass through these locations.

Editing a way point

You can add up to five way points. This is achieved as follows:

1 Touch “Route Options” in the Main menu, and then touch “Edit Current Route”.

2 Select editing method.

You can see the way point by touching the on the right of the list.

On this display, you can select the following items:

Add :
Switch the display to search for points. Display a point you searched for on a map after searching, then touch “OK” and add to the way points. (You can add up to five way points in total.)

Delete :
You can delete way points from the list. (You can delete way points successively.)

Sort :
Touch to display a screen listing the way points.

Automatic :
You can sort the destination and way points automatically. The system will show the nearest way point (distance in a straight line) from the current location as way point 1, and sort the other points (including your destination) in order of distance from the way point before your current location.

Original :
Returns to the original order.

Select either “Automatic” or “Original” and touch “Done” to start the route search.

Touching or on the left of the list, you can sort the way points manually.

3 Touch “Done”.

If you set a way point(s) in the route to your destination, the route up to the next way point will appear light green. The rest of the route will be light blue.

Skipping a way point

If the points are set, the next way point along the route can be skipped.

1 Touch the map screen.
The Shortcut menu appears.

2 Touch  
The Route/Detour menu appears.

3 Touch “Skip Way Point”.
A message asking whether you want to skip the next way point appears.

4 Touch “Yes”.
A new route to your destination through all the remaining way points, except for the skipped way point, is calculated.
Setting Areas to Avoid

If you register Areas to Avoid, such as crowded intersections or congested areas, routes can be calculated that avoid those areas. Areas to Avoid can be set from the Route Options menu.

An area not stored on the disc cannot be set as an Area to Avoid.

Registering an area to avoid

This section describes how to register an Area to Avoid for the first time. You can register up to five Areas to Avoid.

1 Touch “Route Options” in the Main menu, then touch “Designate Areas to Avoid”.

2 Select one of the items shown in “New Area”.

When registering for the first time, any item on the list is shown as “New Area”.

3 Select the place to register and display the map.

Searching places to register → Page 35 to 38

Once a search is complete, a map with the specified location at its center appears.

If you select the “Map Search”, move the scroll cursor to the place you want to set and touch “OK”.

4 Change the map scale and decide the size of the Area to Avoid.

The Area to avoid is enclosed in a red frame. You can also change the map scale though the maximum map scale for registering Areas to Avoid is 0.1 mile (100 m).

5 Scroll the map, adjust the position of the red frame, and touch “OK”.

If you want to stop registration, touch “Back”.

Depending on the setting of route search conditions, you may not be able to avoid the specified areas. The confirmation message is displayed on the screen at this time.

Information on route calculation conditions → Page 45

Changing or deleting an area to avoid

You can subsequently change(rename)/delete an Area to Avoid.

1 Touch “Route Options” in the Main menu, then touch “Designate Areas to Avoid”.

2 Select the area you want to change or delete.

3 Select the desired operation.

On this screen, you can select the following options:

Rename:
Changes the name. Enter the new name and touch “OK”. This returns you to the Route Options menu.

Change:
A specified area can be changed. For the next steps, see Step 3 in the “Registering an area to avoid” above.

Delete:
Delete the selected Area to Avoid.
Displaying Certain POI on the Map

Selected POI in a certain category can be shown on the map, and you can check the location on the display.

1 Touch “Info/Traffic” in the Main menu, then touch “Overlay POI”.
   The list of POI categories appears.

2 Touch the category you want to display.
   The selected item is marked. If you want to select other categories, repeat this step.
   - If you want to display with more detailed categories, touch . When the subcategory list appears, touch the item you want to display and touch “Back”.
   - You can select the detail category up to 100 items.
   - If you touch one of the POI shortcuts (e.g. ), you can display POI immediately by selected category on the POI shortcut.

3 Touch “Back”.
   POI’s in the selected category appear on the map.
   - Searching the destination by map ➔ Page 33
   - Viewing the information of POI ➔ Page 33
   - When some sub-categories are selected, the corresponding category is marked blue. When all the sub-categories within a category are selected, that category is marked red.
   - You can also display POI by using the shortcut menu if “Overlay POI” is selected on the “Short-Cut Selection”.

Registering/deleting POI Shortcuts

You can register up to six shortcuts to your favorite POI. You can also change or delete the registered shortcuts.

Registering a POI shortcut

1 Touch “Destination” in the Main menu, and then touch “Vicinity Search”.

2 Touch “Set”.

Displays a list of already registered POI shortcuts.

3 Touch “Add”.

Displays a POI category list.

4 Touch category or .

Touching category adds that category to the shortcuts. After touching , please proceed to Step 5 and select a subcategory.

5 Touch subcategory.
   The selected category is added to the list of POI.
   When registering another icon, repeat steps 3 through 5.
You can register a POI shortcut by touching "Overlay POI" under "Traffic/Info" in the main menu, or by touching the icons such as 📍 and ⚡ on the map. The registering steps are the same as described above.

Deleting a POI shortcut

1 Touch “Destination” in the Main menu, and then touch “Vicinity Search”.
   □ You can also touch 📍 in the shortcut menu or “Traffic/Info” in the main menu, then touch “Overlay POI”.

2 Touch “Set”.

3 Touch “Delete”.
   Displays a list of already registered POI shortcuts.

4 Touch the category to be deleted.
   A red check appears on the selected shortcut.
   All :
   A red check will appear on all registered categories.

5 Touch “Delete”.
   Deletes the selected shortcut from the list.

Modifying the Route Calculation Conditions

You can change the route calculation conditions using the Route Options menu. The following description features an example of changing the number of the route to be searched.

1 Touch “Route Options” in the Main menu.
   The Route Options menu appears.

2 Touch “Number of Routes”.
   The content currently set appears under the name of the item. Each time you touch the item, the setting changes. Repeatedly touch the item until the value you want to set appears.

   □ When you touch items with a setting below them, their setting changes. When you touch items with no setting below them, a setting screen appears.

Items that users can operate

This section describes the details of the each item. Settings marked with an asterisk (*) show that they are default or factory settings.

Edit Current Route”

This displays a screen for adding or deleting way points. The method is the same as described in “Editing Way Points to the Current Route”.

   □ “Edit Current Route” is displayed only when the route is set.

   ➡ “Editing Way Points to the Current Route” ➡ Page 41

View Current Route

   ➡ Checking the Set Route ➡ Page 38
Recalculate
Automatically searches the route to the destination again.
☐ “Recalculate” is displayed only when the route is set.

Number of Routes
This setting controls whether the system should calculate only one route, or several routes.
1*:
Only one route judged as being optimum by your Navigation System is calculated.
Multiple :
Several route options are calculated (maximum 6 routes).

Route Condition
This setting controls whether the route be calculated with taking into account the time or the distance.
Fast* :
Calculate a route with the shortest travel time to your destination as a priority.
Short :
Calculate a route with the shortest distance to your destination as a priority.

Avoid Freeway
This setting controls whether or not freeways may be included in the road calculation. (A route using freeway may be calculated in some cases, such as when setting your destination far away.)
On :
Calculate a route that avoids freeways.
Off* :
Calculate a route that may include freeways.
☐ The system may calculate a route that includes freeways even if “On” is selected.

Avoid Ferry
This setting controls whether or not ferry crossings should be taken into account.
On :
Calculate a route that avoids ferries.
Off* :
Calculate a route that may include ferries.
☐ The system may calculate a route that includes ferries even if “On” is selected.

Avoid Toll Road
This setting controls whether or toll roads (including toll areas) should be taken into account.
On :
Calculate a route that avoids toll roads (including toll areas).
Off* :
Calculate a route that may include toll roads (including toll areas).
☐ The system may calculate a route that includes toll road even if “On” is selected.

Perform the route calculation of the several route options, and select one
You can get route calculations of several route options. After route options are calculated, select the one you want.

1 Set the “Number of Routes” to “Multiple”.

2 Search your destination and set the route. Calculated routes are shown in different colors (from two to six routes).

3 Touch “Next” to change the displayed route.

The following information is displayed on this screen:
(1) Route calculation condition
Displaying the conditions set by the Route Options menu by icon.
• Use/avoid freeway
• Use/avoid toll road
• Use/avoid ferry
Displaying impracticability of fulfilling the conditions by icon.
• Pass through Area to Avoid.
• Use toll road against the setting “Avoid Toll Road” is “On”.
  Use Ferry against the setting “Avoid Ferry” is “On”.

(2) Distance to your destination

(3) Travel time to your destination

☐ The “Avoid Freeway” setting may not be reflected, depending on the distance to the destination.

☐ You can see other places while displaying a candidate route by scrolling the map. Touching “Next” moves the next candidate route to the center and indicates the map.

4 Touch “Information” to check the information on the selected route.
  You can also check details of the roads along the selected route. (If you touch “Back”, you can return to the previous display.)

➲ “Route Scroll” ➞ Page 38 (Step 3 and 4)
➲ “Route Profile” ➞ Page 39 (Step 3 and 4)

☐ After the route is calculated, it may take some time until the detailed route information (Route Profile) can be confirmed.

5 Touch “OK”.
  The route you selected is accepted, and the map of your surroundings appears. When you start driving, the route guidance begins.

☐ If the above operations are not performed within 30 seconds after the route calculation is completed and you have already started your vehicle, the route selected at the time is automatically chosen.
Chapter 4 Editing the Navigation Utilities

⚠️ CAUTION ⚠️
- For safety reasons, these 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 (see page 12 Interlock for details).

Editing Registered Locations

The Address Book can store up to 300 registered locations. These can include home location, favorite places, and destinations you have already registered. This registered location information can also be modified. Also, routes to registered locations can be calculated by touching the screen. Registering places you visit frequently saves your time and effort.

☑ The Address Book is automatically updated in alphabetic order. However, “Return Home” and “Go to” always appear at the top.

Registering your home and your favorite location

Of the 300 registered locations that can be stored, home location and favorite locations can be stored separately in the Address Book. Registering your favorite location for the first time is described here. You can change the registered information later. You might find it useful to register your workplace or a relative’s home as your favorite location.

Map icons:

🏠: Home location icon
⭐: Favorite location icon

1 Touch “Setting” in the Main menu, then touch “Defined Locations”.

2 Touch “Set ”Go To””.
When registering your home location, touch “Set ”Home””.

You can select a method of location search on the display.
☐ The items already registered under “Return Home” or “Go to” can be modified.

3 Search for a location to register.
➤ Information on searching locations to register ➞ Page 35 to 38
☐ If you select the “Map Search”, move the scroll cursor to the place you want to set and touch “OK”.

4 Point the scroll cursor to the location you want to register and touch “OK”.

5 Touch “Save”.
Completes the registration.
☐ If you want to stop registration, touch “Back”.
➤ “Editing a location’s information” ➞ Page 48
Registering a previous location in the Address Book

Once a destination or way point is searched, it is automatically retained and stored in the Destination History. If a search is canceled while still in progress, only the places where the map was displayed and scrolled through or places where the short-cut menu was displayed are retained and stored. Note that after 100 places are stored, new places are automatically overwritten on top of old ones, in oldest to most recent order. Therefore, to ensure that certain places are kept and not overwritten, be sure to register them in the Address Book.

1 Touch “Destination” in the Main menu, then touch “Destination History”.

2 Touch on the right-hand side of the place you want to register in the Address Book.

That place can be registered or deleted.

The map of that place can be displayed.

Searching the destination by map ➞ Page 33

3 Touch “Registration”.

4 Touch “Save”.

Registration is now complete.

If you want to stop registration, touch “Back”.

“Editing a location’s information” ➞ Page 48

Editing a location’s information

In the Address Book menu, touching the on the right-hand side of the place displays the Address Book Operate menu. To edit the information about the location:

1 Touch “Destination” in the Main menu, then touch “Address Book”.

2 Touch on the right-hand side of the place whose information you want to edit.

The information related to that place can be edited.

The map of that place can be displayed.

Searching the destination by map ➞ Page 33

Add:

The screen for selecting the method for registering the location in the Address Book appears.

Searching places to register ➞ Page 35 to 38

If you select the “Map Search”, move the scroll cursor to the place you want to set and touch “OK”.

3 Touch “Edit Information”.

The Address Information menu appears. Refer to the item corresponding to the subsequent operation. After finishing the operation, the Address Book menu appears. You can continue to edit other information items if necessary.
Selecting a pictograph to appear on the map

1 Touch “Select Image”.

2 Touch the Pictograph to appear on the map.
   The Address Information menu appears.
   You cannot change the mark of your home or of your favorite location.

Selecting sound

1 Touch “Select Sound”.

2 Select the sound.
   The Address Information menu appears.
   If you want to hear the operating sound, touch 🎧.

Modify the Location

❖ Changing the position of locations → Page 50

Deleting Address Book or Destination History Information

Items registered in the Address Book or Destination History can be deleted. All entries of the data in the Address Book or Destination History can be deleted at once.

1 Touch “Destination” in the Main menu, then touch “Address Book”.
   To delete items in the Destination History, touch “Destination History”.

2 Touch  on the right-hand side of the place you want to delete.

3 Select the deletion method.
   A message confirming deletion appears.

Changing a name

1 Touch “Edit Name”.

2 Enter a new name; touch “OK”.
   The name of the current location appears in the text box. Delete the current name, and enter a new name between 1 and 23 characters long.
   The details you set are registered, and the Address Book menu appears.
   You cannot change the name of your home.

Entering or changing a phone number

1 Touch “Edit Phone Number”.

2 Input a phone number; touch “OK”.
   The Address Information menu appears.
   To change a registered phone number, delete the existing number and then enter a new one.
Alternative options :
Delete This Item :
Delete the location selected in Step 2.
Delete All Address Book Entries (or Delete All Destinations) :
Delete all the Address Book or Destination History data.

4 Select “Yes”.
The data you selected is deleted.

Alternative option:
No :
The display shown in Step 3 appears.

☐ Because deleted data cannot be restored, take extra care not to select “Delete All Address Book Entries” by mistake.

Changing the position of locations registered in the Address Book
You can select a location registered in the Address Book, display a map of its surroundings, and change its position.

1 In the Address Book menu, touch \( \text{on the right-hand side of the place whose position you want to change.} \)

2 Touch “Edit Information”, and then touch “Modify Location”. The map of the selected area and its surroundings appears.

3 Touch the display to change its position, then touch “OK”.

The position is changed.

☐ Touching “Back” returns to the previous screen without changing the location.

Using XM NavTraffic Information
If you have a GEX-P10XMT XM Digital Satellite Data & Audio Receiver (sold separately) attached to the Navigation System, and have an active subscription to XM NavTraffic service, you can view current traffic conditions and information on your Navigation display. When the unit receives updated traffic information, the Navigation system will overlay the traffic information on your map, and also display detailed text information when available. When you are traveling along a route and there is traffic information on your current route, the system will automatically detect it, and ask you if you would like to be rerouted. (In such case, route calculation takes into consideration about 90 mile radius of alternative routes and its traffic conditions from your current location).

☐ The “traffic congestion” in this section indicated the following types of traffic information: stop and go, stopped traffic, closed/ blocked roads. This information is always taken into consideration when checking your route, and the information related with these events cannot be turned off. Additionally, the system also takes into consideration the traffic flow information if “Use the traffic flow information” is “On”.

Viewing traffic list
Traffic Information is displayed onscreen in a list. This allows you to check how many traffic incidents have occurred, their location, and their distance from your current position.

Checking all traffic information
1 Touch “Info/Traffic” in the Main menu, then touch “Traffic Events”. The list with received traffic information is shown.

2 Touch ☐ or ☐ to view the incident list. Places (street names) where incidents have occurred are displayed in the list.
Chapter 4 Editing the Navigation Utilities

(1) Street or place
(2) Direction
(3) Incident
(4) Distance to the location
(5) The incident numbers currently displayed and the total number of incidents

- The incidents that have already been read will be displayed in white. Unread incidents will be in yellow.

- Touching the allows you to check the place on a map. (Traffic information without positional information cannot be checked on a map.)

  You can sort the traffic information in alphabetical order.

  You can sort the traffic information according to the incident.

  You can sort the traffic information by distance from your current position.

  When new traffic information is received, current information is changed, or old information has been removed, the list is updated to reflect the new situation.

3 Select an incident you want to view in detail.

The details of the selected incident are displayed.

- Touching an incident you want to see allows you to view the detailed information of the incident. If the information cannot be displayed on one screen, touch or to view the remaining information.

4 Touch “Back” to return to the list with traffic information.

A list with traffic information appears again.

Checking traffic information on the route

1 Touch “Info/Traffic” in the Main menu, and then touch “Traffic On Route”.

The currently set traffic information on the route appears on the screen.

- The method for checking the content displayed on the screen is the same for “Checking all traffic information”.

- Checking all traffic information ➞ Page 50

Confirming traffic information on the map

The traffic-related information displayed on the map is as follows.

(1) TRAFFIC icon

When a route has been calculated, touch to check whether there is any traffic congestion information on your route. When no route has been calculated, touch to display the traffic list.

- When is displayed, the data is being loaded from the DVD Map Disc.

(2) A line to indicate the length of the traffic congestion

(displayed only when the scale on the map is 0.75 mile (1km) or lower).

Traffic congestion:

Orange with white outline: stop and go traffic
Red with white outline: stopped traffic
Black with white outline: closed/block roads

(3) Icon for traffic information

(appears only when the scale on the map is 10 mi (20 km) or lower)

- Traffic-related icons are not displayed on city maps.
“Selecting traffic information to display” → Page 53
If you want to check the traffic information details, move the scroll cursor onto the  , etc., and touch . This allows you to view place names and other information.

Information on avoiding traffic congestion on route ahead
If you are approaching traffic on your current route, the Navigation System has the ability to recommend an alternative route. Depending on the information of traffic congestion you have received and the setting of Use traffic flow information, the Navigation System will recommend you an alternate route automatically. On the freeway, the Navigation System will detect at least 1.6 miles (2.6 km) ahead of the specific traffic incident. If a better route can be calculated, the following screen will appear.

- Following types of traffic incidents on the route will be checked: stop and go, stopped traffic and closed/block roads.

When checking traffic congestion information manually
Touching on the screen allows you to check for traffic congestion information on your route.
If there is any information about a traffic congestion on your route, a message appears asking you whether to search for another route to avoid the traffic congestion. If there is no traffic congestion information along the route being guided, it is announced on screen and by voice.

If there is a traffic congestion information on the route
When receiving information about a traffic congestion, the message announcing the presence of a traffic congestion is indicated.
On this screen, you can select the following items:
- **Yes:** The route is recalculated taking the traffic congestion into account.
- **No:** The message disappears, and the map display reappears.
- **List:** The list with traffic information is displayed.

If there is no traffic congestion information on the route
If there is no traffic congestion information, a message informing you that there is no traffic congestion information on the route is shown.
On this screen, you can select the following items:
- **List:** The list with all traffic information is displayed.
- **Back:** Message disappears, and returns to the map screen.

Following types of traffic incidents on the route will be checked: stop and go, stopped traffic and closed/block roads.

Traffic flow information
When the map scale is between 0.02 mi (25 m) – 1 mi (2 km), red, yellow, or green blinking lines may appear on either sides of a road. These colors indicate the average speed at which traffic
is flowing along these streets. Here is a guide to the colors and the average speed they indicate:

**Red:** average speed in this area is between 5-15 mph (8-24 km/h)

**Yellow:** average speed in this area is between 20-40 mph (32-64 km/h)

**Green:** average speed in this area is 45 mph (72 km/h) or faster (The icon without number indicates the average speed of the road is more than 70 mph (112 km/h))

- In addition to these blinking lines, a round icon with a number may appear on the map. The number in the icon indicates the actual average speed of that specific area.
- You can turn off the use of Traffic flow information.

➲ Set use of Traffic flow information setting to off ➞ Page 54

### Checking traffic flow information on the list

The traffic flow information on the route can also be displayed as an onscreen list.

- The method for checking the traffic flow information displayed on the screen is the same for “Checking all traffic information”.

➲ Checking all traffic information ➞ Page 50

#### 1 Touch “Info/Traffic” in the Main menu, then touch “Traffic Flow”.

The list with the traffic flow information is shown.

You can use ![Traffic Icon](image) instead of ![Traffic Icon](image). The list will be sorted according to the average speed by touching ![Traffic Icon](image).

### Selecting traffic information to display

There are different types of traffic information that can be received via the XM NavTraffic service, and you are able to select which types will be incorporated and displayed on your Navigation System.

1. **Touch “Info/Traffic” in the Main menu, and then touch “Traffic Settings”**.
2. **Touch “Change”**.
   The name of the displayed traffic information items, and list of icons appears on the screen.

3. **Touch the traffic information item to display**.
   A red check appears next to the selected traffic information.

4. **Touch “Done”**.
   The selected traffic information icon is added to the screen.

- Touch “Back” to cancel your selection.
- Traffic congestion of type stop and go, stopped traffic and closed/blocked roads cannot be deselected and are always displayed.

5. **Touch “Back”**
Set use of Traffic flow information setting to off

1 Touch “Info/Traffic” in the Main menu, and then touch “Traffic Settings”.

2 Touch “On”.

   The button changes to “OFF”.

3 Touch “Back”.

   If you wish to use the traffic flow information again, touch “OFF” to turn the button “On” in the Traffic Settings screen.

Using the XM Tuner to View Stock, Sports, and Other Information

When an XM tuner (GEX-P10XMT) is connected, you can receive stock price, sports, etc. and display it onscreen. You may also register favorite information in the Navigation System.

Displaying stock prices

Can display the prices of up to 12 stocks.

1 Touch “Info/Traffic” in the Main menu, and then touch “Stock Info”.

   The screen displays a list of stock prices.

   Although the stock price information displayed onscreen is updated every 30 seconds (approx.), these price information are not real-time values.

Registering stocks to be displayed

1 Touch “Info/Traffic” in the Main menu, and then touch “Stock Info”.

2 Touch “Add”.

3 Input the Ticker text for the stocks you wish to display, then touch “OK”.

The screen displays a list of stock prices.
“Punc”:
You can input text with the punctuation such as “!” and “:”.

“Oper”:
You can input text with the operators such as “+” and “-”.
- The method for inputting the text is the same as for inputting street names.
- Text input method ➞ Page 21
- If the input ticker symbol does not match in full the actual ticker symbol for the stock, you may not be able to find it.

Deleting stocks to be displayed onscreen
Can display the prices of up to 12 stocks. If 12 stocks are already registered, delete as many entries as necessary to add new stocks.

1. Touch “Info/Traffic” in the Main menu, and then touch “Stock Info”.

2. Touch “Delete”.

3. Touch the ticker of the stock you wish to delete.

A red check appears next to the ticker you touched.
- To delete all the registered stocks, touch “All”. Red checks will appear next to all the tickers.

4. Touch “Delete”.

5. A message will appear asking you to confirm the deletion. Touch “OK”.

Displaying browsable information
- The displayed items depend on the information which is sent from each station.

1. Touch “Info/Traffic” in the Main menu, then touch “Browse”.
   The screen will display a list of categories. The information appearing onscreen is automatically updated at regular intervals.

2. Touch a category you want to browse from the list.

3. Touch the topic you wish to view.

4. Touch an item (a topic) to display the content.

   Submenu:
   Displays the submenu. If there is no submenu for the content, the Submenu will be inactive.

   Store:
   Registers the current item (topic) about which information is displayed as a favorite.
   - Confirming your favorite information ➞ Page 56
Displaying favorite browsable Information

An XM special content can be assigned as a shortcut or “My Favorites” so that it can be accessed without having to search every time an update is needed. The following are the instructions on how to do so:

1. Store the desired item (topic).
   ➢ Displaying browsable information → Page 55

2. Touch “Info/Traffic” in the Main menu, and then touch “My Favorites”.

A list of registered items (topics) appears on the screen. Touch the item to display information about this item.

Deleting favorite browsable information

1. Touch “Info/Traffic” in the Main menu, and then touch “My Favorites”.

2. Touch “Delete”.

3. Touch the name of the items you wish to delete.

A red check appears next to the items you touched.

To delete all favorite contents, touch “All”. Red checks will appear next to all the items.

4. Touch “Delete”.

5. A message will appear asking you to confirm the deletion. Touch “OK”.

Checking the Reception Status of the XM Tuner

1. Touch “Info/Traffic” in the Main menu, and then touch “XM Status”.

The current XM tuner’s (GEX-P10XMT) reception status and signal strength appear on screen.

(1) Status
Depending on the XM tuner’s (GEX-P10XMT) reception status, any one of the following may appear.

OK
No problem.

Updating
Updating encryption code.

Check antenna
Improper antenna connection.

Not Connected

(2) Signal Strength
Depending on the signal strength, any one of the following may appear.

Very Strong
Strong
Marginal
Weak
No signal

(3) Radio ID
The radio ID appears.
**Emergency Info**

The Emergency Info screen provides important emergency information pertaining to your vehicle, insurance, and current location. Such emergency information could be useful in the event of an accident or vehicle breakdown. The accuracy of the personal information is dependent on the accuracy of the information entered into the Navigation System by the user.

⚠️ **WARNING**

- The Emergency Info screen is only intended to provide information to a driver that may be useful during an emergency situation, and does not replace the need to call for emergency assistance, when necessary.

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### Checking the information registered as Emergency Info

1. Touch “Info/Traffic” in the Main menu, and then touch “Emergency Info”.

   ![Emergency Info Screen](image)

   - **(1) You are currently at:**
     Your current position is indicated by the street name and your latitude and longitude.

   - **(2) Personal Information:**
     Your VIN number, insurance policy number, and the telephone number of your insurance company can be displayed once entered by the user.

   - **(3) Emergency TOW service phone:**
     1 year of free Emergency Roadside Assistance service is available to all registered owners and provided by Signature’s Nationwide Auto Club, Inc. The first year of Emergency Roadside Assistance service is paid for by Pioneer only if your Navigation System is registered with Pioneer and you sign up on-line with Nationwide Auto Club, Inc. at the time you register your Navigation System with Pioneer. If you have not signed up for this service with Nationwide Auto Club, Inc. or if your free one-year period has expired, you are subject to charges by Nationwide Auto Club, Inc. You are also subject to charges by Nationwide Auto Club, Inc. for roadside services not included in the Emergency Roadside Assistance service. The terms and conditions regarding the Emergency Roadside Assistance service provided by Nationwide Auto Club, Inc. are determined solely and exclusively by Nationwide Auto Club, Inc. Please contact Nationwide Auto Club, Inc. for more information. The telephone number that appears here by default is the toll free number for this service. For additional details on registering for this service, please check your product registration card included with this product. If you are not interested in the free Roadside Assistance service, this number can be edited and replaced by your own roadside assistance telephone number.

   - **(4) Locate Car Service**

     - Searching for car service in an emergency ➔ Page 58

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### Registering user information

1. Touch “Info/Traffic” in the Main menu, and then touch “Emergency Info”.

2. Touch “Setup”.

3. Touch the desired item to register your information.

   ![Setup Screen](image)

   - If information is already registered, that information will appear.
4 Input the number you wish to register, and then touch “OK”.

```
  A B C D E F G
  H I J K L M N
  O P Q R S T U
  V W X Y Z 0 1
  2 3 4 5 6 7 8
  9   O   P   Q
```

**Edit VIN**
Register your Vehicle’s Identification Number. (You can enter the number between 1 and 17.)

**Edit Policy Number**
Register your insurance policy number.

**Edit Insurance Phone**
Register your insurance company’s phone number.

**Edit TOW Service Phone**
Record a towing company’s phone number.

5 Touch “Save”.
Completes the registration.
☐ If you want to stop registration, touch “Back”.

### Searching for car service in an emergency

In times of emergency, you can search the Emergency Info for Auto Services in the vicinity of your current position and set the current route.

**WARNING**

- The Emergency Info screen is only intended to provide information to a driver that may be useful during an emergency situation and if they are in a safe location. If not, or in all major accidents, call 911.

1 Touch “Info/Traffic” in the Main menu, and then touch “Emergency Info”.

2 Touch “Locate Car Service”.

```
You are currently at:
[street address]

Emergency TOW service phone: [phone number]
For non-emergencies, dial: [number]
```

A list of auto services appears onscreen.

3 Touch the Category of the auto service you wish to use.
A red check appears next to the selected category.

☐ The Auto Service categories that can be selected in the Emergency Info are: “Automotive”, “Rental Car Agency”, and “Car Dealer”.

4 Touch “OK”.
Displays a list of names of facilities in the vicinity and the distances from your current position.
☐ Touching displays a list of subcategories. Touch the subcategory you wish to use from among the subcategories displayed and touch “OK” to select the Auto Service from the subcategories.

5 Touch the name of the facility to set the route you want.

```
Mitsubishi
Acura
```

Displays the route to the selected facility.
When the  appears on the right of the list

You can also set a destination by touching the  to the right of the list. Touch “OK” to confirm. The location pointed by the scroll cursor will be set as a destination.

Alternative option:

Scroll :
The map display changes to the map with Shortcut menu.
If you touch anywhere on the map, the map display changes to Scroll mode.

แนะShortcut menu ➞ Page 28

Changing Background Picture

In the menu operation screen, you can indicate a picture you like on the background. Some pictures are already stored on the Pioneer DVD Map Disc. The following two types of background pictures can be changed:

• AV Background : Background for the screen during the operation of audio.
• Navigation Background : Background of navigation menu screen.

1 Touch “Settings” in the Main menu, then touch “System Options”.

2 Touch “Background Picture Setting”.
The picture selected for each screen is indicated on the right side of “AV Background” and “Navigation Background” items.

3 Touch “Navigation Background” or “AV Background”.

4 Touch a picture you want for the background, then touch “OK”.
The background image starts changing. After a short while, the new background image appears.

5 Touch “Done”.

On this screen, you can select the following items:
Select another Picture :
This is selected when you want to change to another picture. Return to Step 4.
Change to another background :
Select if you want to successively change the Audio Operating screen backgrounds or the Navigation backgrounds. Return to step 3.

:flexible:
When changing a picture starts, do not cut off the vehicle engine until the message informing the completion of changing a picture is indicated.

:flexible:
When the Navigation System is reset, or the language setting is changed, the background picture may change back to the original picture. (There is also a possibility that the system will revert to the original picture for some other reason). If this happens, set the background picture again.
Setting the Vehicle Dynamics Display

You can change the values displayed by the instruments on the left and right of the Vehicle Dynamics Display. Until the sensor’s initial learning is complete, only the voltage and clock are available.

1. **Switch to the Vehicle Dynamics Display.**
   - Changing the map display mode → Page 29

2. **Touch the left or right instrument.**
   Touch keys are displayed.

3. **Touch the items you want to display.**

You can select the following items.

- **Voltage:**
  Displays the power supply and voltage supplied from the battery to this system.

- **Acceleration:**
  Acceleration in a forward direction is displayed. The + sign indicates acceleration while the – sign indicates deceleration.

- **Side Acceleration:**
  Acceleration in a side direction such as when turning, is displayed. The + sign indicates a right turn, while the – sign indicates a left turn.

- **Angular Velocity:**
  Displays the vehicle’s turning angle over one second (how far it has turned in a second).

- **Slope:**
  Displays the vehicle’s vertical movement. The + side represents the rising angle, and the - side the falling angle.

- **Direction:**
  The direction your vehicle is traveling in is displayed.

- **Clock:**
  Current time is displayed.

- **Adjust Look:**
  Touch “Adjust Look” to display a screen for selecting the panel pattern. Touch one of the patterns from among those displayed onscreen to change the panel to the selected pattern.

- If you touch “Peak Hold Reset”, the maximum and minimum (green line) values indicated in “Acceleration” and “Side Acceleration” are reset.

- You cannot change the speedometer at the center.

- Selecting Demo mode in the Settings menu enables you to perform a demonstration with random values.

Checking the Navigation Status

The navigation status, including the driving status of a vehicle, positioning status by satellite, learning status of the 3D sensor, and cable connection status can be checked.

Checking sensor learning status and driving status

1. **Touch “Settings” in the Main menu, then touch “Hardware Info”.**

2. **Touch “3D Calibration”.**
   The 3D Calibration screen appears.

   ![3D Calibration Screen](image)

   - (1) **Distance**
     Driving distance is indicated.
   - (2) **Speed Pulse**
     Total number of speed pulses is indicated.
   - (3) **Learning Status**
     Current driving mode is indicated.
   - (4) **Degree of learning**
     Sensor learning situations of distance (Distance), right turn (Right Turn), left turn (Left Turn), and 3D detection (3D Detection) are indicated by the length of bars.
When tires have been changed or chains fitted, turning on the Speed Pulse allows the system detects the fact that the tire diameter has changed, and automatically replaces the value for calculating distance.

If the ND-PG1 is connected, the distance calculation value cannot be replaced automatically.

(5) Speed
Speed detected by the Navigation System is indicated. (This indication may be different from the actual speed of your vehicle, so please do not use this instead of the speedometer of your vehicle.)

(6) Acceleration or deceleration/Rotational speed
Acceleration or deceleration velocity of your vehicle is indicated. Also, rotational speed when your vehicle turns to left or right is shown.

(7) Inclination
Degree of slope of the street is indicated.

To clear values...
If you want to delete the learned results stored in "Distance", "Speed Pulse" or "Learning Status", touch the relevant result, then touch "Clear".

The Navigation System can automatically use its sensor memory based on the outer dimensions of the tires.

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

1 Touch “Settings” in the Main menu, then touch “Hardware Info”.

2 Touch “Connection Status”. The Connection Status screen appears.

(1) Speed Pulse
The Speed Pulse value detected by the Navigation System is shown. “0” is shown while the vehicle is stationary.

(2) GPS Antenna
Indicates the connection status of the GPS antenna, the reception sensitivity, and from how many satellites the signal is received. If the signal is received correctly, “OK” is displayed. If reception is poor, “NOK” appears.

(3) Installation Position
The Installation position of the navigation unit is shown.
If installed correctly, “OK” appears. Indicates whether the Installation position of the navigation unit is correct or not. When the navigation unit is installed at an extreme angle exceeding the limitation of the installing angle, “Incorrect angle” will be displayed.
When the angle of the navigation unit has been changed, “Excessive vibration” will be displayed.

(4) Parking Brake
When the parking brake is applied, “On” is displayed. When the parking brake is released, “Off” is displayed.

(5) Power Voltage
The power supply (reference value) provided from the vehicle battery to the Navigation System is shown. If the voltage does not fall within the range of 11 to 15V, check that power cable connection is correct.

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

(7) Back Signal
When the gear lever is shifted to “R”, the signal switches to “High” or “Low”. (Which of these is displayed depends on the vehicle.)
Correcting the Installation Angle

You can correct the installation angle of the navigation unit. Even if the installation angle is not facing the center, higher-accuracy sensor learning can be performed by correcting it. Select the orientation of the LCD panel from the left, center, and right.

1 Touch “Settings” in the Main menu, then touch “System Options”.

2 Touch “Installation Angle Setup”.

3 Check the direction the LCD panel faces, and touch the corresponding item.

Facing Left :
Select this when the angle is 5° or more to the left from the center.

Facing Center :
Select this when the angle is less than 5° to the left, and 5° or more to the right from the center.

Facing Right :
Select this when the angle is 5° or more to the right from the center.

If the sensor status is “Simple hybrid”, correcting the installation angle will not be invalid.
Chapter 5
Customizing Your Navigation System

CAUTION

- For safety reasons, these 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 (see page 12 Interlock for details).

Modifying the Default Settings

You can tailor default settings such as navigation functions and information display for ease of use. The following example describes how to change settings. In this example, the "KM/Mile Setting" settings is set to "Mile & Yard".

1. Touch "Settings" in the Main menu. The Settings menu appears.

2. Touch "System Options". The screen changes. "Mile" is displayed below "KM/Mile Setting", indicating that this function is currently set to "Mile".
   - When you touch items with a setting below them, their setting changes. When you touch items with no setting below them, a setting screen appears.
   - Touching "Back" switch to Settings Menu.

3. Touch "KM/Mile Setting".

"Mile & Yard" is displayed below "KM/Mile Setting", indicating that "KM/Mile Setting" is set to "Mile & Yard". If you want to change another setting, select the item you want to change and repeat the procedure in step 3.

Items Users can Change

This section describes the details of the setting for each item. Settings marked with an asterisk (*) show that they are default or factory settings.

Volume

The sound volume for the navigation can be set. You can separately set the volume of the route guidance and of the beep sound.

Guidance Volume
Touch "+" or "−" to change the Guidance volume.

Beep Volume
Touch "+" or "−" to change the Beep volume.

- Volume of the audio source is adjusted by the VOLUME dial of the navigation unit.

Mute Settings
Items related to muting of sound volume can be set.

- When Voice Guidance is "On", be sure to set the TEL/GUIDE setting in the Audio Menu to MUTE or ATT.
Switching the muting/attenuation ➔ Page 101

• **Voice Guidance**
  This setting controls whether the volume of the Audio source is automatically muted during voice guidance.

  **On**: During voice guidance, the volume of the Audio source is muted automatically.

  **Off**: Volume of the Audio source stays the same during voice guidance.

**System Options**

Touch “System Options” in the Setting Menu to display.

**Language Selection**

➲ The language displayed can be set ➔ Page 107

Once you change the language, installation of the program starts.

**KM/Mile Setting**

This setting controls the unit of distance displayed on your Navigation System.

  **Mile**: Show distances in miles.

  **Mile & Yard**: Show distances in miles and yards.

  **km**: Show distances in kilometers.

**Installation Angle Setup**

➲ Correcting the installation angle ➔ Page 62

**Average Speed**

When calculating expected time of arrival and the number of hours to the destination, set the average speed for the freeway or ordinary road using “+” and “−”.

• **Minor Ordinary Road**
  • When the “KM/Mile Setting” is set to “Mile” or “Mile & Yard”, it can be set in 5 mile increments from 10 miles to 100 miles (35 miles*).
  • When the “KM/Mile Setting” is set to “km”, it can be set in 5 km increments from 20 km to 110 km (55 km*).

• **Major Ordinary Road**
  • When the “KM/Mile Setting” is set to “Mile” or “Mile & Yard”, it can be set in 5 mile increments from 10 miles to 120 miles (45 miles*).
  • When the “KM/Mile Setting” is set to “km”, it can be set in 5 km increments from 20 km to 150 km (70 km*).

• **Freeway**
  • When the “KM/Mile Setting” is set to “Mile” or “Mile & Yard”, it can be set in 5 mile increments from 30 miles to 120 miles (60 miles*).
  • When the “KM/Mile Setting” is set to “km”, it can be set in 5 km increments from 60 km to 150 km (95 km*).

**Background Picture Setting**

➲ The background picture can be changed ➔ Page 59

**Short-Cut Selection**

Select shortcuts to display on the map screen. In the list displayed onscreen, the items with red checks are displayed on the map screen.

Touch the shortcut you wish to display and then touch “Done” when a red check appears. You can select up to three shortcuts.
Map Display Options

Touch “Map Display Options” in the Setting Menu to display.

Tracking Display

The tracking display setting has the following options.

**Always**
Display tracking for all journeys.

**This Trip**
Display tracking dots but erase them when the Navigation System is turned off (when turning off the engine of your vehicle).

**Off**
Do not display tracking dots.

AV Guide Mode

Setting whether or not to switch to the navigation screen automatically when your vehicle approaches a guidance point such as an intersection while displaying a screen other than navigation.

**On**
Switching from audio operation screen to navigation screen.

**Off**
Screen is not switched.

Day/Night Display

To improve the visibility of the map during the evening, you can change the combination of the colors of the map.

**Nighttime**
You can change the combination of the colors of a map according to whether the vehicle lights are On or Off.

**Daytime**
The map is always displayed with bright colors.

---

**Registration**
Register to the Address Book information on the location indicated by the scroll cursor.

**Vicinity Search**
Find POIs (Points Of Interest) in the vicinity of the scroll cursor.

**Whole Route Overview**
Displays the entire currently set route.

**Overlay POI**
Displays on the map the mark for surrounding facilities (POI).

**Address Book**
Displays the Address Book.

**Route Options**
Displays the Route Options menu.

**Edit Current Route**
Displays the screen for adding or deleting way points.

**Traffic On Route**
Displaying a list of traffic information on the route.

**Stock Info**
Displays share prices.

**Browse**
Displays XM tuner content information.

**My Favorites**
Displays information on your favorite item.

---

Map Display Options

Touch “Map Display Options” in the Setting Menu to display.

Tracking Display

The tracking display setting has the following options.

**Always**
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**This Trip**
Display tracking dots but erase them when the Navigation System is turned off (when turning off the engine of your vehicle).

**Off**
Do not display tracking dots.

AV Guide Mode

Setting whether or not to switch to the navigation screen automatically when your vehicle approaches a guidance point such as an intersection while displaying a screen other than navigation.

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Switching from audio operation screen to navigation screen.

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Displaying a list of traffic information on the route.

**Stock Info**
Displays share prices.

**Browse**
Displays XM tuner content information.

**My Favorites**
Displays information on your favorite item.
### Close-up of Junction
This setting enables to switch to an enlarged map around the point where your vehicle is approaching an intersection, entrance/exit of freeway, or a junction.

**On**: Display switches to an enlarged map.

**Off**: Does not switch to an enlarged map.

### Arrow in AV
Set whether to display the guidance information by arrow on the Audio Operation screen.

**On**: Display guidance information by arrow on the Audio Operation screen.

**Off**: Do not display guidance information by arrow on the Audio Operation screen.

### Defined Locations
Touch “Defined Locations” in the Setting Menu to display.

### Set "Home"
- Registering and changing your home location ➞ Page 47

### Set "Go to"
- Registering and changing your favorite location ➞ Page 47

### Demo Mode
This is a demonstration function for shops. After a route is set, the simulation of the route guidance to a destination is automatically displayed. Normally, set this to “Off”.

**Repeat**: Repeat demo drive.

**Off**: Demo Mode is set off.

- If you eject the DVD Map Disc during the demo drive, the demo mode will be stopped.

### Time
Adjusts the systems clock. The time difference (+, –) between the time originally set in your Navigation System is set here. You can also select summer time On/Off.

- Time settings ➞ Page 108

### Summer Time
Choose whether or not to take summer time into account.

**On**: Summer time is taken into account.

**Off**: Summer time is not taken into account.

- When the period of summer time comes, or when the summer time ends, your Navigation System does not automatically change the summer time setting.

- Change the summer time setting ➞ Page 108

### Modify Current Location
Touch the screen to adjust the current position and direction of the vehicle displayed on the map.

### Hardware Info
Touch “Hardware Info” in the Setting Menu to display.

### Connection Status
- Connection Status ➞ Page 61

### 3D Calibration
- 3D Calibration ➞ Page 60

### Service Info Screen
Displays the disc production number and version information.
**Restore Factory Settings**

Reset various settings registered to the Navigation System and restores to the default or factory settings. To restore, touch “Yes”.

☐ About the item return to the default, please check “Display Information” at the end of this manual.
You can play a CD or MP3/WMA/WAV disc or use the radio with the navigation unit. This chapter describes how to use the audio source and the basic operation of the audio source.

Basic Operation

For information on most basic operations, refer to “How to listen to a CD” ➝ Page 24

Activating the touch panel keys

1 Press the AV button to switch Audio operation screen.

2 Touch the source icon to select the desired source.

Selecting a source

1 Press the AV button to switch Audio operation screen.

2 Touch the source icon to select the desired source.

You can also press the SRC button to switch the source. Press SRC button repeatedly to switch between the following sources:

- “XM” (XM tuner) — “SIRIUS” (SIRIUS tuner)
- “RADIO” (tuner) — “TV” (television)
- “AV” (video input) — “S-DVD” (DVD player/multi-DVD player)
- “CD” [CD, MP3/WMA/WAV](built-in CD drive)
- “M-CD” (multi-CD player)
- “EXT-1” (external unit 1)
- “EXT-2” (external unit 2)
- “AUX” (Auxiliary equipment)

Touch “SOURCE OFF” to turn the source off.

In the following cases, the sound source cannot to be used:

- When a unit corresponding to each source is not connected to the Navigation System.
- When no disc is set in the CD loading slot.
- When no disc is set in the DVD-player (“S-DVD”).
- When no magazine is set in the multi-CD player.
— When no magazine is set in the multi-DVD player.
— When the “AUX” (auxiliary input) is set to off.
— When the “AV INPUT” (video input) is not set to “VIDEO”.

☒ External unit refers to a Pioneer product (such as one available in the future) that, although incompatible as a source, enables control of basic functions by the Navigation System. Two external units can be controlled by the Navigation System. When two external units are connected, the allocation of them to external unit 1 or external unit 2 is automatically set by the Navigation System.

☒ When the Navigation System’s blue lead is connected to the vehicle’s auto-antenna relay control terminal with the “AUTO ANTENNA” is set to “SOURCE”, the vehicle’s antenna extends with the Navigation System’s source is turned on. To retract the antenna, turn the source off.

➲ “AUTO ANTENNA” ➞ Page 102
How to display each menu

1 Select the desired source.

2 Press the joystick to display MENU.

3 Touch “AUDIO”, “FUNCTION” or “SETUP” to enter the menu you want to operate.

Each menu is displayed. The items that cannot be operated according to the sources or conditions are indicated in gray.

4 Touch “ESC” to return to the display of each source.

- If you do not operate the function within about 30 seconds, the display is automatically returned to the playback display.

(1) FUNCTION key
Touch to enter the FUNCTION menu for each source.

- Using the FUNCTION menu → “Operation using the FUNCTION menu” and “Advanced <each source> operation”

(2) AUDIO key
Touch to select various sound quality controls.

- Using the AUDIO menu → Page 97

(3) SETUP key
Touch to select various setup functions.

- Using the SETUP menu → Page 102

(4) BACK key
Touch to return to the previous display.

(5) ESC key
Touch to cancel the control mode of functions.
You can play a CD or MP3/WMA/WAV disc using the built-in CD drive of the navigation unit. This section describes common operations for these media.

Also see at “Handling and Care of the Disc” in the Hardware Manual for more cautions about handling each media.

**CD or CD TEXT disc**

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

- (2) **Play time indicator**
  Shows the elapsed playing time of the current track.

- (3) **Track number indicator**
  Shows the track currently playing.

- (4) **Current folder name indicator**
  Shows the folder name currently playing or temporarily displayed in the list.

- (5) **Folder number indicator**
  Shows the folder number currently playing.

- (6) **Folder and track list**
  Shows contents of the folder currently playing or temporarily displayed.

When playing discs with MP3/WMA/WAV files and audio data (CD-DA) such as CD-EXTRA and MIXEDMODE CDs, both types can be played only by switching mode between MP3 and CD-DA by touching “MEDIA”. When playing back the CD-DA part, the operation is the same as for CDs. Likewise, when playing back the MP3/WMA/WAV part, the operation is the same as for MP3/WMA/WAV. When you operate it, refer to the instruction for each media.

If you have switched between playback of MP3/WMA/WAV files and audio data (CD-DA), playback starts at the first track on the disc.

This built-in CD drive can play back a MP3/WMA/WAV file recorded on CD-ROM.

When being read in, **READING FORMAT** is displayed.

Playback is carried out in order of file number. Folders are skipped if they contain no files. (If folder 001 (ROOT) contains no files, playback commences with folder 002.)

When playing back files recorded as VBR (variable bit rate) files, the play time will not be correctly displayed if fast forward or reverse operations are used.

If you are using a folder that does not contain an MP3/WMA/WAV file, the folder itself will display but you will not be able to see any files in the folder.

The maximum number of characters which can be displayed for a file name, including the extension (.mp3, .wma or .wav), is 30, from the first character. (20 characters are maximum in the folder and title list.)

The maximum number of characters which can be displayed for a folder name is 30. (20 characters are maximum in the folder and title list.)

In case of files recorded according to the Romeo file system, only the first 30 characters can be displayed. (20 characters are maximum in the folder and title list.)
Touch key operation

1 Touch the source icon and then touch “CD” to select the built-in CD drive.
When the source icon is not displayed, you can display it by touching the screen. If no disc is loaded in navigation unit, you cannot select “CD” (built-in CD drive).

> insert a disc in navigation unit ➞ Page 24

Touch keys (e.g., MP3/WMA)

- When playing a normal CD, (5), (7), (8), (9) are not displayed.
- When playing a CD TEXT disc, (5), (7), (8) are not displayed.

(1) CD: Selecting a desired track from the list
Touch a desired track to play.
- In the case of normal CDs, no title information is recorded. Accordingly, the display shows “--”.
- When playing a CD TEXT disc, the list lets you see the list of track titles.
  —Some discs have certain information encoded on the disc during manufacture. These discs may contain such information as the CD title, track title, artist’s name and playback time and are called CD TEXT discs.

MP3/WMA/WAV: Selecting tracks from the list or viewing contents of the folders
The list lets you see the list of track titles or folder names on a disc. If you touch a folder on the list, you can view its contents. If you touch a track on the list, you can play the selected track.
- Touching △ or △ switches to the next or previous page in the list.
- Touching “UP” displays the next or previous page in the list.

- If the selected folder does not contain any track which can be played, the track list is not displayed.

(2) Playback and Pause
Pause lets you temporarily stop disc playback. Touching “PAUSE” switches between “playback” and “pause”.

(3) Touch: Skip the track forward or backward
Touching ▶ or ▶ skips to the start of the next track. Touching ◀ once skips to the start of the current track. Touching again will skip to the previous track.
- When “ROUGH” is selected in “SEARCH MODE”, you can skip 10 tracks forward or backward.

> Setting the search mode ➞ Page 75
- You can also skip back or forward to another track by moving the joystick left or right.

Touch and hold: fast backward or forward
Keep touching ◀ or ▶ to perform fast backward or forward.
- You can also perform fast backward/fast forward by holding the joystick left or right.
- Fast backward is canceled when it reaches the beginning of the first track on the disc.
- In the case of MP3/WMA/WAV, there is no sound on fast backward or forward.
- When “ROUGH” is selected in “SEARCH MODE”, you cannot perform fast backward or forward.

(4) Disappear the touch keys
Touch anywhere on the LCD screen, and the touch keys appear again.

(5) MP3/WMA/WAV: Viewing contents of upper folder
Touching “UP” to display contents of the upper folder. If you touch and hold “UP”, it return to folder001 (ROOT) and playback will start. However, if folder 001 (ROOT) contains no files, playback commences with next folder.
- If the current folder is the ROOT folder, “UP” is not displayed.

(6) Searching for a desired track
You can use the search function to specify a track to search for.
1 Touch “0” — “9” to input the desired number.
   • To select 3, touch 3.
   • To select 10, touch 1 and 0 in order.
   • To select 23, touch 2 and 3 in order.
To cancel the input numbers, touch “CLEAR”.

2 While the input number is displayed, touch “ENTER”.
This starts playback from the selected track.
If the track number you entered does not exist, the track near that number will be played.

(7) Switching mode between MP3/WMA/WAV and CD-DA
When playing discs with MP3/WMA/WAV files and audio data (CD-DA) such as CD-EXTRA and MIXEDMODE CDs, both types can be played only by switching mode between MP3/WMA/WAV and CD-DA.

(8) MP3/WMA/WAV: Using the folder up or down
In the case of an MP3/WMA/WAV disc in which the data is divided into folders, you can move up or down another folder. This is used to playback tracks recorded in other folders.
▲ : Moves to the next folder.
▼ : Moves to the previous folder.
You can also skip back or forward to another folder by moving the joystick up or down.

(9) CD TEXT disc: Displaying text information on CD TEXT disc
Text information recorded on a CD TEXT disc can be displayed.
The next piece of information is displayed.
• Disc Title (disc title)
• Disc Artist (disc title)
• Track Title (track title)
• Track Artist (track title)

MP3/WMA/WAV: Displaying text information on MP3/WMA/WAV disc
Text information recorded on a MP3/WMA/WAV disc can be displayed.
The next piece of information is displayed.
• Disc Title (disc title)
• Track Title (track title)

• Folder Title (folder name)
• File Name (file name)
• Artist Name (artist name)
If specific information has not been encoded on MP3/WMA/WAV files on disc, nothing may be displayed.
Depending on the version of Windows Media Player used to encode WMA files, album names and other text information may not be correctly displayed.
Unlike MP3 and WMA file format, WAV files display only Folder Title and File Name.

Operation using the FUNCTION menu
➲ How to display the FUNCTION menu ➔ Page 71

FUNCTION menu (e.g., CD)

(1) Repeating play
Each touch of the “REPEAT” changes the settings as follows:
CD :
• DISC — Repeat the current disc
• TRACK — Repeat just the current track
If you perform track search or fast forward/reverse, repeat play is automatically canceled.
MP3/WMA/WAV :
• DISC — Repeat all tracks
• TRACK — Repeat just the current track
• FOLDER — Repeat the folder currently playing
If you select another folder during repeat play, the repeat play range changes to DISC.
If you perform track search or fast forward/reverse during TRACK, the repeat play range changes to FOLDER.
When FOLDER is selected, it is not possible to play back a subfolder of that folder.

When playing discs with MP3/WMA/WAV files and audio data (CD-DA), repeat play performs within the each data session even if DISC is selected.

(2) Playing tracks in a random order
Touching “RANDOM” switches between “ON” and “OFF”. In the case of MP3/WMA/WAV, the selected tracks in the repeated range are randomly played.

(3) CD: Scanning tracks of a CD
Touching “SCAN” switches between “ON” and “OFF”. Scan play lets you hear the first 10 seconds of each track on the CD. When you find the desired track touch “SCAN” to turn scan play off.

After scanning of a CD is finished, normal playback of the tracks will begin again.

MP3/WMA/WAV: Scanning folders and tracks
Touching “SCAN” switches between “ON” and “OFF”. Scan play will be performed for the selected repeat range. When “FOLDER” is selected for repeat play, the beginning of each track in the selected folder will play for about 10 seconds. When “DISC” is selected for repeat play, the beginning of the first track of each folder will be played for about 10 seconds. When you find the desired track touch “SCAN” to turn scan play off.

After track or folder scanning is finished, normal playback of the tracks will begin again.

(4) Using compression and BMX
Using the COMP (compression) and BMX functions let you adjust the sound playback quality of CD drive. Each of the functions have a two-step adjustment. The COMP function balances the output of louder and softer sounds at higher volumes. BMX controls sound reverberations to give playback a fuller sound. Listen to each of the effects as you select through them and use the one that best enhances the playback of the track or CD that you are listening to.

Each touch of the “COMP” changes the settings as follows:
- OFF — COMP 1 — COMP 2 — OFF — BMX 1 — BMX 2

(5) Switching the search mode

You can switch the search method between fast forward/backward and skipping every 10 tracks. Each touch of the “SEARCH MODE” changes the setting follows:
- FF/REV — Perform fast forward or backward by touching ◀ or ▶.
- ROUGH — Skips 10 tracks forward or backward by touching ◀ or ▶.

Skip the track forward or backward → Page 73
Chapter 6
Using the AV Source (Built-in CD Drive and Radio)

Radio

Listening to the radio

1 Touch the source icon and then touch “RADIO” to select the radio.

2 Touch “BAND” to select a band.
   Touch “BAND” repeatedly until the desired band is displayed, FM1, FM2, FM3 for FM or AM.

3 To perform manual tuning, touch SEEK or briefly.
   The frequencies move up or down step by step.
   You can also perform manual tuning by moving the joystick left or right.

4 To perform seek tuning, keep touching SEEK for about one second and release.
   The tuner will scan the frequencies until a broadcast strong enough for good reception is found.
   You can cancel seek tuning by touching either SEEK briefly.
   If you keep touching SEEK briefly, you can skip broadcasting stations. Seek tuning starts as soon as you release the keys.
   You can also perform seek tuning by holding the joystick left or right.

Advanced radio operation

1 Function display
   Shows the function names.
   ➡ How to display the FUNCTION menu ➔ Page 71

These are the basic steps necessary to operate the radio.

➲ More advanced radio operation ➔ Page 76

(1) Source icon
   Shows which source has been selected.

(2) Band indicator
   Shows which band the radio is tuned to AM or FM.

(3) Preset number indicator
   Shows what preset has been selected.

(4) Frequency indicator
   Shows to which frequency the tuner is tuned.

(5) Preset list display
   Shows the preset list.

(6) LOCAL indicator
   Shows when local seek tuning is on.

(7) STEREO indicator
   Shows that the frequency selected is being broadcast in stereo.
Storing and recalling broadcast frequencies

If you touch any of the preset tuning keys P1 (PRESET 1) — P6 (PRESET 6) you can easily store up to six broadcast frequencies for later recall 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 — P6 until the preset number (e.g., P.ch: 1) stops flashing. The number you have touched will flash in the preset number indicator and then remain lit. The selected radio station frequency has been stored in memory.

2 The next time you touch the same preset tuning key P1 — P6 the radio station frequency is recalled from memory. When the touch panel keys are not displayed, you can display them by touching the screen.

Storing the strongest broadcast frequencies

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

1 Touch “BSM” in the FUNCTION menu.

2 Touch “START” to turn BSM on. BSM begins to flash. While BSM is flashing the six strongest broadcast frequencies will be stored under preset tuning keys P1 — P6 in order of their signal strength. When finished, BSM stops flashing. To cancel the storage process, touch “STOP”.

- Storing broadcast frequencies with BSM may replace broadcast frequencies you have saved using P1 — P6.

Tuning in strong signals

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

1 Touch “LOCAL” in the FUNCTION menu.

2 Touch “ON” to turn local seek tuning on. To turn local seek tuning off, touch “OFF”.

3 Touch ◀ or ▶ to set the sensitivity. There are four levels of sensitivity for FM and two levels for AM:

<table>
<thead>
<tr>
<th></th>
<th>FM</th>
<th>AM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Level 2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Level 3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Level 4</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

The four setting allows reception of only the strongest stations, while lower settings let you receive progressively weaker stations.
Chapter 7
Using the AV Source (Pioneer AV Equipment)

When Pioneer audio equipment is connected to the Navigation System using IP-BUS or AV-BUS, such equipment can be operated from the navigation unit. This chapter describes the operation of the audio source that can be used when the Pioneer audio equipment is connected. When reading this chapter, please also refer to the operation manual of the AV equipment connected to the Navigation System.

AVIC-D1 does not support 50-disc multi-CD players.

Multi-CD Player

Listening a CD

(1) Source icon
Shows which source has been selected.

(2) Disc number indicator
Shows the disc currently playing.

(3) Track number indicator
Shows the track currently playing.

(4) Play time indicator
Shows the elapsed playing time of the current track.

(5) Disc title, Disc artist, Track title and Track artist indicator
When playing CD TEXT disc, each Disc title, Disc artist, Track title or Track artist is displayed. Touch \[\text{Disc} \] repeatedly to switch these items.

(6) Disc list display
Shows the disc list in multi-CD player.

1 Touch the source icon and then touch “M-CD” to select the multi-CD player.

2 Touch any of 01 — 12 to select a disc you want to listen to.
If you want to select a disc located at 7 to 12, touch \[\text{Disc} \] or \[\text{Disc} \] to display 07 — 12. When 01 — 06 and 07 — 12 are not displayed, you can display them by touching the screen. You can also sequentially select a disc by moving the joystick up or down.

3 To skip back or forward to another track, touch \[\text{Skip} \] or \[\text{Skip} \].
Touching \[\text{Skip} \] skips to the start of the next track. Touching \[\text{Skip} \] once skips to the start of the current track. Touching again will skip to the previous track.
You can also skip back or forward to another track by moving the joystick left or right.

4 To perform fast backward or forward, keep touching \[\text{Skip} \] or \[\text{Skip} \].
You can also perform fast backward/fast forward by holding the joystick left or right.
- When the multi-CD player has performed the preparatory operations, READY is displayed.
- If the multi-CD player does not operate properly, an error message such as ERROR-11 may be displayed. Refer to the multi-CD player owner’s manual.
- For a normal CD, the disc list shows “–”.
- For a CD TEXT disc, a disc title appears.
- Using CD TEXT function ➞ Page 82
- If there are no discs in the multi-CD player magazine, NO DISC is displayed.
Pausing CD playback
Pause lets you temporarily stop disc playback.

1 Touch “PAUSE”.
Play of the current track pauses.

Advanced multi-CD player operation

(1) Function display
Shows the function names.
➲ How to display the FUNCTION menu ➞ Page 71

Repeating play
There are three repeat play ranges for the multi-CD player: M-CD (multi-CD player repeat), TRACK (one-track repeat) and DISC (disc repeat).

1 Touch “REPEAT” in the FUNCTION menu.
Each touch of the “REPEAT” changes the settings as follows:
• M-CD — Repeat all discs in the multi-CD player
• TRACK — Repeat just the current track
• DISC — Repeat the current disc
☐ If you select other discs during repeat play, the repeat play range changes to M-CD.
☐ If you perform track search or fast forward/reverse during TRACK, the repeat play range changes to DISC.

Playing tracks in a random order
Random play lets you play back tracks in a random order within the repeat range, M-CD and DISC.

1 Select the repeat range.
➲ Repeating play ➞ Page 80

Using compression and bass emphasis
You can use these functions only with a multi-CD player that supports them.
Using COMP (compression) and DBE (dynamic bass emphasis) functions lets you adjust the sound playback quality of the multi-CD player. Each of the functions has a two-step adjustment. The COMP function balances the output of louder and softer sounds at higher volumes. DBE boosts bass levels to give playback a fuller sound. Listen to each of the effects as you select through them and use the one that best enhances the playback of the track or CD that you are listening to.

1 Touch “COMP” in the FUNCTION menu.
If the multi-CD player does not support COMP/DBE, NO COMP is displayed and you cannot select the function.

Scanning CDs and tracks
When the repeat play range is set to DISC, the beginning of each track on the selected disc plays for about 10 seconds. When the repeat play range is set to M-CD, the beginning of the first track of each disc is played for about 10 seconds.

1 Select the repeat range.
➲ Repeating play ➞ Page 80

2 Touch “SCAN” in the FUNCTION menu.
Touching “SCAN” switches between “ON” and “OFF”. The first 10 seconds of each track of the current disc (or the first track of each disc) is played.

3 When you find the desired track (or disc)
touch “SCAN” to turn scan play off.
☐ After track or disc scanning is finished, normal playback of the tracks will begin again.
Touch **COMP** repeatedly to switch between the following settings:

- **OFF** — **COMP 1** — **COMP 2** — **OFF** — **DBE 1** — **DBE 2**

## Selecting tracks from the track list

Track list lets you select a track from the list. When the CD TEXT disc is played, you can see the track titles on a CD TEXT disc and select one of them to playback.

- This function may be invalid depending on the multi-CD player.

1. Touch **“TRACK LIST”** in the FUNCTION menu.
2. Touch ▲ or ▼ to switch between the lists of tracks.
3. Touch the track in the list. That selection will begin to play.

## Using ITS playlists

ITS (Instant Track Selection) lets you make a playlist of favorite tracks from those in the multi-CD player magazine. After you have added your favorite tracks to the playlist you can turn on ITS play and play just those selections.

### Creating a playlist with ITS programming

You can use ITS to enter and playback up to 99 tracks per disc, for up to 100 discs (with the disc title). (With multi-CD players sold before the CDX-P1250 and CDX-P650, up to 24 tracks can be stored in the playlist.)

1. Play a CD that you want to program.
   - How to select a CD ➔ Page 79
2. Touch **“ITS MEMORY”** in the FUNCTION menu.
3. Touch ▲ or ▼ to select a track you want to memorize.
4. Touch **“MEMORY”** to store the currently playing track in the playlist.

### Erasing a track from your ITS playlist

When you want to delete a track from your ITS playlist, you can if ITS play is on.

1. Play a CD you want to delete a track from your ITS playlist, and turn ITS play on.
   - Playback from your ITS playlist ➔ Page 81
2. Touch **“ITS MEMORY”** in the FUNCTION menu.
3. Touch ▲ or ▼ to select a track you want to erase.
4. Touch **“CLEAR”** to erase a selected track from your ITS playlist.

Playback begins of those tracks from your playlist within the previously selected **M-CD** or **DISC** ranges.

If no tracks in the current range are programmed for ITS play then **ITS EMPTY** is displayed.

### Erasing a track from your ITS playlist

When you want to delete a track from your ITS playlist, you can if ITS play is on.

1. Play a CD you want to delete a track from your ITS playlist, and turn ITS play on.
   - Playback from your ITS playlist ➔ Page 81
2. Touch **“ITS MEMORY”** in the FUNCTION menu.
3. Touch ▲ or ▼ to select a track you want to erase.
4. Touch **“CLEAR”** to erase a selected track from your ITS playlist.

The currently playing selection is erased from your ITS playlist and playback of the next track from your ITS playlist begins.

If there are no tracks from your playlist in the current range, **ITS EMPTY** is displayed and normal play resumes.
Chapter 7 Using the AV Source (Pioneer AV Equipment)

Erasing a CD from your ITS playlist
When you want to delete all tracks of a CD from your ITS playlist, you can if ITS play is off.

1. **Play a CD that you want to delete.**
   - How to select a CD ➞ Page 79

2. **Touch “ITS MEMORY” in the FUNCTION menu.**

3. **Touch “CLEAR” to erase all tracks on the currently playing CD from your ITS playlist.**
   All tracks on the currently playing CD are erased from your playlist and **ALL CLEAR** is displayed.

Using CD TEXT functions
You can use these functions only with a CD TEXT compatible multi-CD player.
Some discs have certain information encoded on the disc during manufacture. These discs may contain such information as the CD title, track title, artist’s name and playback time and are called CD TEXT discs. Only these specially encoded CD TEXT discs support the functions listed below.

Displaying titles on CD TEXT discs
When playing a CD TEXT disc, you can switch the information of the CD displayed on the screen.

1. **Touch .**
   Each touch of changes the information as follows:
   Disc Title — Disc Artist — Track Title — Track Artist
   - If specific information has not been recorded on a CD TEXT disc, **NO XXXX** will be displayed (e.g., **NO ARTIST**).

XM Tuner (GEX-P10XMT)

Listening to XM Satellite Radio

You can use navigation unit to control a XM satellite digital tuner (GEX-P10XMT), which is sold separately.
For details concerning operation, refer to the XM tuner’s operation manuals. This section provides information on XM operations with navigation unit which differs from that described in the XM tuner’s operation manual.
Only the logo data that is contained in the navigation DVD Map Disc can be displayed for each channel. The icon of a newly set-up channel that is not contained in the disc cannot be displayed. When no icon can be displayed, the following substitute icon is displayed.

![Substitute icon](image)

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

(2) **XM band indicator**
Shows the XM band which has been selected.

(3) **XM preset number indicator**
Shows what XM preset has been selected.

(4) **XM channel number indicator**
Shows to which XM channel number the tuner is tuned.

(5) **XM channel select mode indicator**
Shows what channel select mode has been selected. You can select a channel from all channels in **ALL CH** mode, and select a channel from selected category in **CATEGORY** mode.
- Switching the XM channel select mode ➞ Page 83

(6) **XM channel category**
Shows the category of broadcast channel.
(7) **Detail information or preset list display**
Shows the detail information of the broadcast channel currently being received or the preset list.

(8) **Category icon**
Shows the category icon for the selected channel.

Switching between the detail information display and the preset list display ➔ Page 83

1 **Touch the source icon and then touch “XM” to select the XM.**

2 **Touch “BAND” to select a XM band.**
Touch “BAND” repeatedly until the desired XM band is displayed, XM1, XM2 or XM3.

3 **To perform tuning, touch [SEEK] or [SEEK+].**
The channels move up or down step by step. If you keep touching [SEEK] or [SEEK+], you can increase or decrease channel number continuously. You can also perform manual tuning by moving the joystick left or right.

**Switching the XM channel select mode**
You can switch the mode between the two methods for selecting and listing the channel.

**ALL CH mode :**
You can select a channel from all channels when you operate.

**CATEGORY mode :**
You can select a channel within selected category when you operate.

1 **Touch “MODE” to select the desired channel select mode.**
Touch “MODE” repeatedly to switch between the two modes.

**Switching between the detail information display and the preset list display**
You can switch the left side of the basic screen according to your preference.

1 **Touch 🆕 (or “PRESET”).**
Each touch of 🆕 (or “PRESET”) changes the detail information display or preset list display.

**Storing and recalling broadcast stations**
If you touch any of the preset tuning keys P1 — P6 you can easily store up to six broadcast stations for later recall with the touch of a key.

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

2 **Touch “PRESET” to display the preset list.**

3 **Keep touching a preset tuning key P1 — P6 until the XM preset number (e.g., P.ch: 1) stops flashing.**
The number you have touched will flash in the XM preset number indicator and then remain lit. The selected station has been stored in memory.

The next time you touch the same preset tuning key P1 — P6 the station is recalled from memory.

- Up to 18 stations, 6 for each of three XM bands can be stored in memory.
- You can also use the following operations to recall stations assigned to preset tuning keys P1 — P6.
  - Using “UP” or “DOWN” in the detail information display when the “ALL CH” mode is selected.
  - Moving the joystick up and down when the “ALL CH” mode is selected.

Selecting a channel in the channel category

1 Touch “MODE” to select the CATEGORY mode.
2 Touch “UP” or “DOWN” to select the desired category.
   - You can also select the category by moving the joystick up and down.
3 Touch SEEK or SEEK to select the desired channel within the selected category.

Selecting a channel from the XM channel list display

The list content can be switched so you can search for the track you want to listen to not only by the channel name but also by the artist name or song title.

- The channel list shows all the channels during the “ALL CH” mode, and the channels included in the selected category during the “CATEGORY” mode. To switch the channel mode, touch “MODE”.

1 Touch “LIST”.
   XM channel list appears in the display.
   Each touch of the “LIST” changes the settings as follows:

Detail information display or Preset list display — Ch Name List (Channel name) — Song Title List (Song title) — Artist Name List (Artist name)

2 Touch the desired channel that you want to listen to.

Press A or B to switch to the next page or previous page.

- During the CATEGORY mode, press “UP” or “DOWN” to switch to another category.

Selecting a XM channel directly

You can select a XM channel directly by entering the desired channel number.

1 Touch “DIRECT”.
   CHANNEL INPUT appears in the display.
2 Touch 0 — 9 to input the desired channel number.
   To cancel the input numbers, touch “CLEAR”.
3 While the input number is displayed, touch “ENTER”.
   The entered XM channel is selected.
4 Touch “Back”.
   You can return to the previous display.

Using the MyMix function

The MyMix function memorizes the song title and artist name of the song currently being received. When the track that matches the memorized song title and artist name is being broadcasted on a station other than the one you are listening to, you will be alerted, and you can switch the station to listen to that song.

- A track itself is NOT downloaded BUT only the song title and the artist name are memorized.
Memorizing the song title and the artist name of a song
The song title and artist name of the song you are listening to can be memorized.

1 **Press and hold the MEMO button for two seconds or more.**
   - The song title and artist name of the song you are listening to are memorized, and a confirmation message appears.
   - The song title and artist name of up to 12 tracks can be memorized. Trying to save more than 12 tracks will overwrite old ones.
   - You cannot memorize the song title or the artist name when “– – – – – – – –” is displayed on the title information.
   - You cannot memorize the song title or the artist name of the channel 000.
   - There is a possibility the memorized title is not displayed correctly.

When the memorized track is broadcast
The **MEMO** button on the navigation unit flashes as soon as the beep sounds, and a message is displayed. Touch “Yes” to switch to that station, and you can listen to that track.
   - If the memorized track is not selected in the MyMix list, no notification will be provided even when that track is broadcast.
   - Notification may not be provided depending on the situation of the Navigation System.

Setting the notification of the memorized track ➞ Page 86
If there is slight difference between the memorized title and the title of the track being broadcast, no notification will be provided though they are the same song.

Using the direct traffic announcement function
You can listen to the memorized traffic channel by directly calling it up with the **TRFC** button.

Memorize a traffic channel

1 **Tune into the Traffic channel.**
2 **Press and hold the TRFC button for two seconds or more.**
   - That traffic channel will be memorized.
   - The channel 000 and 001 can not be memorized newly (although the channel 001 is the default).

Calling up the memorized traffic channel

1 **Press the TRFC button.**
   - You can call up a traffic channel even from a source other than the XM source.
   - To cancel the traffic announcement, press the **TRFC** button once again.

Returning to the channel that was received immediately before

1 **Touch “PREVIOUS”.**
   - The channel returns to the one received immediately before.
   - Depending on the last conditions, the channel may not return to the previous station.

Display the Radio ID
If you select CH : 000, the Radio ID is displayed.

1 **Touch “DIRECT”.**
2 **Input “000” and then touch “ENTER”.**
   - If you select another channel, display of the Radio ID is canceled.
   - Display of the Radio ID repeats displaying “RADIO ID” and the ID code one after the other.
   - You can also display the Radio ID to select “RADIO ID” from channel category in the **CATEGORY** mode.
Advanced XM tuner operation

(1) Function display
Shows the function names.

How to display the FUNCTION menu ➞ Page 71

Setting the notification of the memorized tracks
Display the song title list memorized for the MyMix Function (MyMix list). You can change the setting of the notification when the track is broadcast again. You can enable or disable notification for each track.

1 Touch “MEMO” in the FUNCTION menu.
You will receive notification for all items with a check mark.

2 Touch the song title that you want to exclude from the notification list.
The check mark is removed, and the song title is excluded from the notification list.

Deleting the memorized tracks
You can delete each one of the memorized tracks from the song title list.

1 Touch “MEMO” in the FUNCTION menu.

2 Touch the track you want to delete for two seconds or more.
That track will be deleted from the song title list.

☐ To delete all the tracks that are memorized, touch “DELETE ALL”.

3 A message will appear asking you to confirm the deletion. Touch “OK”.

XM Tuner (GEX-P910XM)

Listening to XM Satellite Radio

You can use navigation unit to control a XM satellite digital tuner (e.g. GEX-P910XM), which is sold separately.

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

• This Navigation System does not have the text scroll function.
• With the Navigation System, you can operate one additional function: XM channel direct selection.

(1) Source icon
Shows which source has been selected.

(2) XM band indicator
Shows the XM band which has been selected.

(3) XM preset number indicator
Shows what XM preset has been selected.

(4) XM channel number indicator
Shows to which XM channel number the tuner is tuned.

(5) XM channel select mode indicator
Shows what channel select mode has been selected. You can select a channel from all channels in CH NUMBER mode, and select a channel from selected category in CATEGORY mode.

Switching the XM channel select mode ➞ Page 87

(6) XM channel information
Shows the channel information of broadcast channel.

(7) Preset list display
Shows the preset list.
1 Touch the source icon and then touch “XM” to select the XM.

2 Touch “BAND” to select a XM band. Touch “BAND” repeatedly until the desired XM band is displayed, XM1, XM2 or XM3.

3 To perform tuning, touch SEEK or SEEK. The channels move up or down step by step. Channels that cannot currently be selected are skipped, and the next channel is selected. If you keep touching SEEK or SEEK, you can increase or decrease channel number continuously. You can also perform manual tuning by moving the joystick left or right. You can also perform tuning within selected channel category. ➡ Selecting the channel in the channel category ➡ Page 87

Switching the XM display

1 Touch . Each touch of changes the information as follows: Channel name — Artist name/feature — Song/program title — Channel category

Storing and recalling broadcast stations

If you touch any of the preset tuning keys P1 — P6 you can easily store up to six broadcast stations for later recall with the touch of a key.

1 When you find a station that you want to store in memory keep touching a preset tuning key P1 — P6 until the XM preset number (e.g., P.ch: 1) stops flashing. The number you have touched will flash in the XM preset number indicator and then remain lit. The selected station has been stored in memory. The next time you touch the same preset tuning key P1 — P6 the station is recalled from memory. When the touch panel keys are not displayed, you can display them by touching the screen. ➡ Up to 18 stations, 6 for each of three XM bands can be stored in memory.

Switching the XM channel select mode

You can switch if you select a channel with a channel number or within a selected category when you select a channel.

1 Touch “MODE” to select the desired channel select setting.

2 Touch “MODE” repeatedly to switch between the following channel select settings: CH NUMBER (channel number select mode) — CATEGORY (channel category select mode)

Selecting a channel in the channel category

1 Touch “MODE” to select the CATEGORY mode.

2 Touch ▲ or ▼ to select the desired channel category.

3 Touch SEEK or SEEK to select the desired channel in the selected channel category. ➡ You can also perform steps 2 and 3 by using the joystick.

Selecting a XM channel directly ➡ Refer to page 84

Display the Radio ID ➡ Refer to page 85
SIRIUS Tuner

Listening to the SIRIUS

You can use navigation unit to control a 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 unit which differs from that described in the SIRIUS tuner’s operation manual.

(1) Source icon
Shows which source has been selected.

(2) Channel information display
Shows the various information of the channel.

Switching the display ➞ Page 89

(3) Preset list display
Shows the preset list.

1 Touch the source icon and then touch “SIRIUS” to select the SIRIUS tuner.

2 Touch “BAND” to select a SIRIUS band.
Touch “BAND” repeatedly until the desired SIRIUS band is displayed, SR1, SR2 or SR3.

3 To perform tuning, touch SEEK or SEEK. The channels move up or down step by step. Channels that cannot currently be selected are skipped, and the next channel is selected.
If you keep touching SEEK or SEEK, you can increase or decrease channel number continuously. You can also perform manual tuning by moving the joystick left or right.

Display changes as follows when you switch channels or operate in other ways. The text of selected display* is automatically scrolled.

CH NUMBER mode:
Channel name — Selected display*

CATEGORY mode:
Channel number — Channel name — Selected display*

For details, refer to “Switching the display” ➞ Page 89

Storing and recalling broadcast stations

If you touch any of the preset tuning keys “PRESET 1” — “PRESET 6” you can easily store up to six broadcast stations for later recall with the touch of a key.

1 When you find a station that you want to store in memory keep touching a preset tuning key “PRESET 1” — “PRESET 6” until displaying PCH1 SET (e.g., P.ch: 1). The selected channel has been stored in memory.

The next time you touch the same preset tuning key “PRESET 1” — “PRESET 6” the channel is recalled from memory.
When the touch panel keys are not displayed, you can display them by touching the screen.

Up to 18 stations, 6 for each of three SIRIUS bands can be stored in memory.

You can also use moving the joystick up or down to recall stations assigned to preset tuning keys “PRESET 1” — “PRESET 6”.

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Advanced SIRIUS tuner operation

(1) Function display
Shows the function names.

➲ How to display the FUNCTION menu ➞ Page 71

Switching the channel select mode
You can switch if you select a channel with a channel number or within a selected category when you select a channel.

1 Touch “FUNCTION 1” in the FUNCTION menu.

2 Touch “SEND”.
Touch “SEND” repeatedly to switch between the following channel select settings:
CH NUMBER (channel number select mode)
— CATEGORY (channel category select mode)

Switching the display

1 Touch “FUNCTION 2” in the FUNCTION menu.

2 Touch “SEND”.
Each touch of “SEND” changes the information as follows:
Channel number — Channel name — Channel category — Artist name/feature — Song/program title — Composer
➲ When you switch the display, the text is automatically scrolled.

Switching the scroll setting

1 Touch “FUNCTION 2” in the FUNCTION menu.

2 Touch and hold “SEND” to select the scroll setting.
Touch and hold “SEND” selects scroll setting in the following order:
Continuous scroll setting — One-time scroll setting
➲ When you switch the scroll setting, the beep sounds.

Selecting a channel in the channel category

1 Select the channel category select mode.
➲ “Switching the channel select mode” ➞ Page 89

2 Touch “ESC” to return to the previous display.

3 Move the joystick up or down to select the desired channel category.
Once you select a channel category, the navigation unit searches for channels in that category. During search, the channel category doesn’t immediately change even if you move the joystick. To successively change the channel category, hold the joystick up or down.

4 Touch SEEK or SEEK to select the desired channel in the selected channel category.
The channel number moves up or down in the selected channel category.
If channels that does not exist that channel numbers are skipped, and the next channel in that channel category is selected.
➲ If you select a channel of another category by channel recall, etc., during steps 3 and 4, the category selected in step 3 still remains in memory. If you touch SEEK or SEEK, the channel number moves up or down in the category selected in step 3 regardless of the category of the present channel.
TV Tuner

⚠️ CAUTION

- For safety reasons, visual images cannot be viewed while your vehicle is in motion. To view visual images, you must stop in a safe place and put on the parking brake before setting your route (see page 12 Interlock for details).

Watching the TV tuner

You can use the Navigation System to control a TV tuner, which is sold separately. For details concerning operation, refer to the TV tuner’s operation manual. This section provides information on TV operations with navigation unit that differ from those described in the TV tuner’s operation manual.

When you attempt to watch visual images while driving, the warning Viewing of front seat video source while driving is strictly prohibited. will appear on the screen.

1 Source icon  
Shows which source has been selected.

2 Band indicator
Shows which band the TV tuner is tuned to.

3 Preset number indicator
Shows which preset has been selected.

4 Channel indicator
Shows which channel the TV tuner is tuned.

5 Preset list display
Shows the preset list.

1 Touch the source icon and then touch “TV” to select the TV.

2 Touch “BAND” to select a band.
Touch “BAND” repeatedly until the desired band is displayed, TV1 or TV2.

3 To perform manual tuning, touch SEEK or briefly.
The channels move up or down step by step. You can also perform manual tuning by moving the joystick left or right.

4 To perform seek tuning, keep touching SEEK or for about one second and release.
The tuner will scan the channels until a broadcast strong enough for good reception is found.
You can cancel seek tuning by touching either SEEK or briefly.
If you keep touching SEEK or you can skip broadcasting channels. Seek tuning starts as soon as you release the keys.
You can also perform seek tuning by holding the joystick left or right.

Storing and recalling broadcast stations

If you touch any of the preset tuning keys P1—P12 you can easily store up to 12 broadcast stations for later recall with the touch of a key.

1 When you find a station that you want to store in memory keep touching a preset tuning key P1 — P12 until the preset number (e.g., P.ch: 1) stops flashing.
The number you have touched will flash in the preset number indicator and then remain lit.
The selected station has been stored in memory.
The next time you touch the same preset tuning key P1 — P12 the station is recalled from memory.
To switch between P1 — P6 and P7 — P12, touch ▲ or ▼.
When the touch panel keys are not displayed, you can display them by touching the screen.
Up to 24 stations, 12 for each of two TV bands can be stored in memory.
You can also use the joystick up or down to recall stations assigned to preset tuning keys P1 — P12.

Changing the wide screen mode

➲ How to change the wide screen mode → Page 104

Advanced TV tuner operation

1) Function display
Shows the function names.

➲ How to display the FUNCTION menu → Page 71

Storing the strongest broadcast stations sequentially

1 Touch “BSSM” in the FUNCTION menu.

2 Touch “START” to turn BSSM on.
BSSM begins to flash. While BSSM is flashing the 12 strongest broadcast stations will be stored in order from the lowest channel up. When finished, BSSM disappears.
To cancel the storage process, touch “STOP”.

➲ Storing broadcast stations with BSSM may replace broadcast stations you have saved using P1 — P12.
Chapter 7

Using the AV Source (Pioneer AV Equipment)

DVD Player (S-DVD)

**CAUTION**

- For safety reasons, visual images cannot be viewed while your vehicle is in motion. To view visual images, you must stop in a safe place and put on the parking brake before setting your route (see page 12 Interlock for details).

**Playing a disc**

1. Touch the source icon and then touch “S-DVD” to select the DVD player.
2. To skip back or forward to another chapter/track, touch \(\text{[\text{\textbackslash}]}\) or \(\text{[\text{\textbar}\text{\textbar}]}\) briefly. You can also skip back or forward to another chapter/track by moving the joystick left or right.
3. To perform fast forward or reverse, keep touching \(\text{[\text{\textbackslash}]}\) or \(\text{[\text{\textbar}\text{\textbar}\text{\textbar}]}\) for about one second and release. If you keep touching \(\text{[\text{\textbackslash}]}\) or \(\text{[\text{\textbar}\text{\textbar}\text{\textbar}]}\) for five seconds, fast reverse/fast forward continues even if you release \(\text{[\text{\textbackslash}]}\) or \(\text{[\text{\textbar}\text{\textbar}\text{\textbar}]}\).
   - To stop fast reverse/fast forward, touch “PAUSE”.
   - You can also perform fast reverse/fast forward by holding the joystick left or right.

**Selecting a disc**

- Only when a multi-DVD player is connected to navigation unit, you can use this function.

1. Touch “DISC 1” — “DISC 6” to select a disc.
   - You can also skip back or forward to another disc by moving the joystick up or down.

**Pausing disc playback**

1. Touch “PAUSE” during the normal playback.

**Changing the wide screen mode**

- How to change the wide screen mode → Page 104

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**DVD Player (S-DVD)**

**Playing a disc**

1. Touch the source icon and then touch “S-DVD” to select the DVD player.
2. To skip back or forward to another chapter/track, touch \(\text{[\text{\textbackslash}]}\) or \(\text{[\text{\textbar}\text{\textbar}]}\) briefly. You can also skip back or forward to another chapter/track by moving the joystick left or right.
3. To perform fast forward or reverse, keep touching \(\text{[\text{\textbackslash}]}\) or \(\text{[\text{\textbar}\text{\textbar}\text{\textbar}]}\) for about one second and release.
   - If you keep touching \(\text{[\text{\textbackslash}]}\) or \(\text{[\text{\textbar}\text{\textbar}\text{\textbar}]}\) for five seconds, fast reverse/fast forward continues even if you release \(\text{[\text{\textbackslash}]}\) or \(\text{[\text{\textbar}\text{\textbar}\text{\textbar}]}\).
   - To stop fast reverse/fast forward, touch “PAUSE”.
   - You can also perform fast reverse/fast forward by holding the joystick left or right.

**Selecting a disc**

- Only when a multi-DVD player is connected to navigation unit, you can use this function.

1. Touch “DISC 1” — “DISC 6” to select a disc.
   - You can also skip back or forward to another disc by moving the joystick up or down.

**Pausing disc playback**

1. Touch “PAUSE” during the normal playback.

**Changing the wide screen mode**

- How to change the wide screen mode → Page 104

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**DVD Player (S-DVD)**

**Playing a disc**

1. Touch the source icon and then touch “S-DVD” to select the DVD player.
2. To skip back or forward to another chapter/track, touch \(\text{[\text{\textbackslash}]}\) or \(\text{[\text{\textbar}\text{\textbar}]}\) briefly. You can also skip back or forward to another chapter/track by moving the joystick left or right.
3. To perform fast forward or reverse, keep touching \(\text{[\text{\textbackslash}]}\) or \(\text{[\text{\textbar}\text{\textbar}\text{\textbar}]}\) for about one second and release.
   - If you keep touching \(\text{[\text{\textbackslash}]}\) or \(\text{[\text{\textbar}\text{\textbar}\text{\textbar}]}\) for five seconds, fast reverse/fast forward continues even if you release \(\text{[\text{\textbackslash}]}\) or \(\text{[\text{\textbar}\text{\textbar}\text{\textbar}]}\).
   - To stop fast reverse/fast forward, touch “PAUSE”.
   - You can also perform fast reverse/fast forward by holding the joystick left or right.

**Selecting a disc**

- Only when a multi-DVD player is connected to navigation unit, you can use this function.

1. Touch “DISC 1” — “DISC 6” to select a disc.
   - You can also skip back or forward to another disc by moving the joystick up or down.

**Pausing disc playback**

1. Touch “PAUSE” during the normal playback.

**Changing the wide screen mode**

- How to change the wide screen mode → Page 104

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**DVD Player (S-DVD)**

**Playing a disc**

1. Touch the source icon and then touch “S-DVD” to select the DVD player.
2. To skip back or forward to another chapter/track, touch \(\text{[\text{\textbackslash}]}\) or \(\text{[\text{\textbar}\text{\textbar}]}\) briefly. You can also skip back or forward to another chapter/track by moving the joystick left or right.
3. To perform fast forward or reverse, keep touching \(\text{[\text{\textbackslash}]}\) or \(\text{[\text{\textbar}\text{\textbar}\text{\textbar}]}\) for about one second and release.
   - If you keep touching \(\text{[\text{\textbackslash}]}\) or \(\text{[\text{\textbar}\text{\textbar}\text{\textbar}]}\) for five seconds, fast reverse/fast forward continues even if you release \(\text{[\text{\textbackslash}]}\) or \(\text{[\text{\textbar}\text{\textbar}\text{\textbar}]}\).
   - To stop fast reverse/fast forward, touch “PAUSE”.
   - You can also perform fast reverse/fast forward by holding the joystick left or right.

**Selecting a disc**

- Only when a multi-DVD player is connected to navigation unit, you can use this function.

1. Touch “DISC 1” — “DISC 6” to select a disc.
   - You can also skip back or forward to another disc by moving the joystick up or down.

**Pausing disc playback**

1. Touch “PAUSE” during the normal playback.

**Changing the wide screen mode**

- How to change the wide screen mode → Page 104
Advanced DVD player operation

(1) Function display
Shows the function names.

How to display the FUNCTION menu ➞ Page 71

Repeating play

- During PBC playback of Video CDs, this function cannot be used.

1 Touch “REPEAT” in the FUNCTION menu.
Each touch of the “REPEAT” changes the settings as follows:

- **During DVD-Video playback**
  - DISC — Repeat the current disc
  - CHAPTER — Repeat just the current chapter
  - TITLE — Repeat just the current title

- **During Video CD or CD playback**
  - TRACK — Repeat just the current track
  - DISC — Repeat the current disc

- If you select other discs during repeat play, the repeat play range changes to DISC.
- If you perform track search or fast forward/reverse during TRACK, the repeat play range changes to DISC.

Playing tracks in a random order

- You can operate this function only during CD playback.

1 Touch “RANDOM” in the FUNCTION menu.
Touching “RANDOM” switches between “ON” and “OFF”.
Tracks will play in a random order.

Scanning tracks of a CD

- You can operate this function only during CD playback.

1 Touch “SCAN” in the FUNCTION menu.
Touching “SCAN” switches between “ON” and “OFF”.
The first 10 seconds of each track is played.

2 When you find the desired track touch “SCAN” to turn scan play off.

Using ITS playlists

- Only when a multi-DVD player is connected to navigation unit can you use these functions.
- This function differs slightly from ITS playback with a multi-CD player. With multi-DVD player, ITS playback applies only to the CD playing.

How to display the FUNCTION menu ➞ Page 81

Using ITS playlists

- Using ITS playlists ➞ Page 81
External Unit

Operating the external unit

![External Unit Diagram]

External unit refers to a Pioneer product (such as one available in the future) that, although incompatible as a source, enables control of basic functions by the Navigation System. Two external units can be controlled by the Navigation System. When two external units are connected, the allocation of them to external unit 1 or external unit 2 is automatically set by the Navigation System. For details concerning operation, refer to the external unit’s operation manual. This section provides information on external unit operations with navigation units that differ from those described in the external unit’s operation manual.

- Operation varies depending on the external unit connected. (In some cases, the external unit may not respond.)
- When you use the iPod (sold separately) with this Navigation System, iPod adapter (CD-IB100) is required. iPod® is a trademark of Apple Computer, Inc., registered in the U.S. and other countries.

1 Touch the source icon and then touch “EXT-1” or “EXT-2” to select the external unit.
2 Touch any touch panel key to operate the external unit.

Advanced external unit operation

Operate the external unit by using 1 key — 6 key

The external unit can be operated by transmitting the operating commands set to 1 key - 6 key.

- Operation varies depending on the external unit connected. (In some cases, the external unit may not respond.)

1 Touch “1—6”.
2 Touch desired key (“1—6”) to operate the external unit.

Operate the external unit by using FUNCTION 1 — FUNCTION 4

The external unit can be operated by transmitting the operating commands set to FUNCTION 1 — FUNCTION 4.

- The operating commands set to FUNCTION 1 — FUNCTION 4 vary depending on the external unit.
- Some functions may not be used until you touch and hold the key.

1 Touch “FUNCTION 1” - “FUNCTION 4” in the FUNCTION menu.

(1) Source icon
Shows which source has been selected.

(2) External unit indicator
Displays any connected external units.
2 Touch “SEND”.

The operation command is transmitted to the external unit.

Switching the automatic and manual function

You can turn automatic and manual function on or off.

You can switch between AUTO and MANUAL functions of the external unit connected.

Initially, this function is set to AUTO.

Operating commands set for AUTO and MANUAL operations vary depending on the external unit connected.

1 Touch “AUTO / MANUAL” in the FUNCTION menu.

Touching “AUTO / MANUAL” switches between “AUTO” and “MANUAL”.

AUX

An IP-BUS-RCA Interconnector such as the CDRB20/CD-RB10 (sold separately) lets you connect your navigation unit to auxiliary equipment featuring RCA output. For more details, refer to the IP-BUS-RCA Interconnector owner’s manual.

Selecting AUX as the source

Switching the source → Page 69

If the auxiliary setting is turned off, “AUX” cannot be selected.

When “AUX” is set to “ON”, you can select “AUX” as a source.

Switching the auxiliary setting → Page 100

AV Input (AV)

⚠️ CAUTION

- For safety reasons, visual images cannot be viewed while your vehicle is in motion. To view visual images, you must stop in a safe place and put on the parking brake before setting your route (see page 12 Interlock for details).

Selecting AV as the source

Switching the source → Page 69

If you want to switch AV source, select “VIDEO” in the “AV INPUT”.

Selecting the video input → Page 102

Changing the wide screen mode

How to change the wide screen mode → Page 104
Chapter 8

Customizing the Audio Source Setting

Various settings according to your audiovisual requests are available with the audio source. This chapter describes the methods of changing the various settings and how to set of the LCD panel.

Audio Adjustments

Introduction to audio adjustments

(1) Audio display
Shows the audio function names.
➲ How to display the AUDIO menu ➞ Page 71

Only when the subwoofer controller setting is PREOUT FULL, NON FADING will be displayed instead of SUB WOOFER.
➲ Setting the rear output and subwoofer controller ➞ Page 100

When selecting the FM tuner as the source, you cannot switch to “SLA”.

Using balance adjustment

You can select a fader/balance setting that provides an ideal listening environment in all occupied seats.

1 Touch “FAD/BAL” in the AUDIO menu.
   When the rear output setting is REAR SP SUB. W, BALANCE will be displayed instead of FAD/BAL.
➲ Setting the rear output and subwoofer controller ➞ Page 100

2 Touch ▲ or ▼ to adjust front/rear speaker balance.
   Each time you touch ▲ or ▼ moves the front/rear speaker balance towards the front or the rear.
   FRONT:15 — REAR:15 is displayed as the front/rear speaker balance moves from front to rear.
   FR:00 is the proper setting when only two speakers are used.
   When the rear output setting is REAR SP SUB. W, you cannot adjust front/rear speaker balance.
➲ Setting the rear output and subwoofer controller ➞ Page 100

3 Touch ◀ or ▶ to adjust left/right speaker balance.
   Each time you touch ◀ or ▶ moves the left/right speaker balance towards the left or the right.
   LEFT:9 — RIGHT:9 is displayed as the left/right speaker balance moves from left to right.
Using the equalizer

The equalizer lets you adjust the equalization to match vehicle interior acoustic characteristics as desired.

Recalling equalizer curves

There are six stored equalizer curves which you can easily switch. Here is a list of the equalizer curves:

- **POWERFUL**: A curve in which low-pitched and high-pitched sounds are boosted.
- **NATURAL**: A curve in which low-pitched and high-pitched sounds are slightly boosted.
- **VOCAL**: A curve in which midrange, which is the human vocal range, is boosted.
- **CUSTOM**: An adjusted equalizer curve that you create.
- **FLAT**: A flat curve in which nothing is boosted.
- **SUPERBASS**: A curve in which only low-pitched sound is boosted.

1. Touch “EQ” in the AUDIO menu.
2. Touch ‹ or › to select the equalizer band to adjust.
3. Touch “+” or “−” to adjust the level of the equalizer band.
4. Touch ‹ or › to select the desired frequency.
5. Touch ‹ or › to select the desired Q factor.

Adjusting equalizer curves

You can adjust the currently selected equalizer curve setting as desired. Adjusted equalizer curve settings are memorized in CUSTOM.

- You can adjust the center frequency, level and the Q factor (curve characteristics) of each currently selected curve band (LOW/MID/HIGH).

• **BAND**: You can select the equalizer band.
• **LEVEL**: You can select the decibel (dB) level of the selected EQ.
• **FREQUENCY**: You can select which frequency to be set as the center frequency.
• **Q FACTOR**: You can select the details of the curve characteristics.

1. Touch “EQ MENU” in the AUDIO menu.
2. Touch ‹ or › to select the equalizer band to adjust.
3. Each time you touch ‹ or › selects equalizer bands in the following order:
   LOW — MID — HIGH
4. Touch “+” or “−” increases or decreases the level of the equalization band.
   +6 — −6 is displayed as the level is increased or decreased.
5. Touch ‹ or › to select the desired frequency.
6. Touch ‹ or › until the desired frequency appears in the display.
   LOW: 40 — 80 — 100 — 160 (Hz)
   MID: 200 — 500 — 1K — 2K (Hz)
   HIGH: 3.15K — 8K — 10K — 12.5K (Hz)
7. Touch ‹ or › to select the desired Q factor.
8. Touch ‹ or › until the desired Q factor appears in the display.
   2WIDE — 1WIDE — 1NARROW — 2NARROW
   ❒ If you make adjustments, CUSTOM curve is updated.
Compensating for equalizer curves (EQ-EX)
The EQ-EX function smoothes the effects of each equalizer curve.

1 Touch “EQ-EX” in the AUDIO menu. Touching “EQ-EX” switches between “ON” and “OFF”.

Adjusting loudness
Loudness compensates for deficiencies in the low- and high-sound ranges at low volume.

1 Touch “LOUDNESS” in the AUDIO menu.
2 Touch “ON” to turn loudness on. To turn loudness off, touch “OFF”.
3 Touch ◄ or ► to select a desired level. Each time you touch ◄ or ► selects level in the following order: LOW — MID — HIGH

Using subwoofer output
The Navigation System is equipped with a subwoofer output which can be turned on or off.

- When the subwoofer output is on, you can adjust the cut-off frequency and the output level, and the phase of the subwoofer.

1 Touch “SUB WOOFER” in the AUDIO menu.
   When PREOUT (the subwoofer controller setting in INITIAL menu) is FULL, you cannot select “SUB WOOFER”.
   ➡ Rear speaker setting ➞ Page 100

2 Touch “ON” to turn subwoofer output on. To turn subwoofer output off, touch “OFF”.
3 Touch ◄ or ► to select cut-off frequency. Each time you touch ◄ or ► selects cut-off frequencies in the following order:
50 — 80 — 125 (Hz)
Only frequencies lower than those in the selected range are output from the subwoofer.

4 Touch “+” or “–” to adjust the output level of the subwoofer. +6 — –6 is displayed as the level is increased or decreased.

Using non fading output
When the non fading output setting is on, the audio signal does not pass through navigation unit’s low pass filter (for the subwoofer), but is output through the RCA output.

1 Touch “NON FADING” in the AUDIO menu.
   Only when PREOUT (the subwoofer controller setting in INITIAL menu) is FULL, you can select “NON FADING”.
   ➡ Rear speaker setting ➞ Page 100

2 Touch “ON” to turn non fading output on. To turn non fading output off, touch “OFF”.
3 Touch “+” or “–” to adjust the output level of the non fading. +6 — –6 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, turn the HPF (high pass filter) on. Only frequencies higher than those in the selected range are output from the front or rear speakers.

1 Touch “HPF” in the AUDIO menu.
2 Touch “ON” to turn high pass filter on. To turn high pass filter off, touch “OFF”.
3 Touch ◄ or ► to select cut-off frequency. Each time you touch ◄ or ► selects cut-off frequencies in the following order:
50 — 80 — 125 (Hz)
When PREOUT (the subwoofer controller setting in INITIAL menu) is SW, the HPF function is effective for front speakers only.
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. Touch “SLA” in the AUDIO menu.

3. Touch “+” or “−” to adjust the source volume.

   +4 — −4 is displayed as the source volume is increased or decreased.

   Sources are set to same source level adjustment volume automatically.

   - CD, MP3/WMA/WAV, M-CD
   - EXT-1 and EXT-2
   - AUX and AV
   - XM and SIRIUS

Initial Settings

Adjusting initial settings

Initial settings lets you perform initial set up of different settings for navigation unit.

(1) Function display

Shows the function names.

1. Touch the source icon and then touch “SOURCE OFF” to turn source off.

2. Press the joystick and then touch “INITIAL” to display the function names.

   The function names are displayed and operable ones are selected.

   To return to the previous display, touch “BACK”.

   To return to the display of each source, touch “ESC”.

Switching the auxiliary setting

It is possible to use auxiliary equipment with navigation unit as the one of source. Activate the auxiliary setting when using auxiliary equipment connected to AV INPUT terminal on the navigation unit.

1. Touch “AUX” in the INITIAL menu.

   Touching “AUX” switches between “ON” and “OFF”.

Setting the rear output and subwoofer controller

The navigation unit’s rear output (rear speaker leads output and RCA rear output) can be used for full-range speaker (REAR SP FULL) or subwoofer (REAR SP SUB. W) connection. If you switch the rear output setting to the REAR SP
**SUB. W**, you can connect a rear speaker lead directly to a subwoofer without using an auxiliary amp.

Initially, navigation unit is set for rear full-range speaker connection (**REAR SP FULL**). When rear output is connected to full range speakers (when **REAR SP FULL** is selected), you can connect the RCA subwoofer output to a subwoofer. In this case, you can select whether to use the subwoofer controller’s (low pass filter, phase) built-in **PREOUT SUB. W** or the auxiliary **PREOUT FULL**.

1. Touch “**REAR SP**” in the **INITIAL** menu.
2. Touch “**REAR SP**” to switch the rear output setting.
   - When no subwoofer is connected to the rear output, select **FULL**.
   - When a subwoofer is connected to the rear output, select **SUB. W**.
     - When the rear output setting is **SUB. W**, you cannot change the subwoofer controller.
3. Touch “**PREOUT**” to switch the subwoofer output or non fading output.
   - Even if you change this setting, there is no output unless you turn “**NON FADING**” or “**SUB WOOFER**” in the **AUDIO** menu “**ON**”.
   - Using non fading output ➞ Page 99
   - Using subwoofer output ➞ Page 99
   - If you change the subwoofer controller (**REAR SP**), the subwoofer output (**SUB WOOFER**) and non fading output (**NON FADING**) in the **AUDIO** menu return to the factory settings.
   - Both rear speaker leads output and RCA rear output are switched simultaneously in this setting.

**Switching the muting/attenuation**

When the navigation outputs the guidance voice, or when a mute signal has been received from the yellow/black lead connected to the navigation unit (e.g. using a cellular telephone), the audio volume is muted or attenuated.

This function is activated in the following condition:
- When “**MUTE**” or “**ATT**” is selected in this setting.
- When “**On**” is selected in “**Voice Guidance**” on “**Mute Settings**”.

➲ **Mute Settings** ➞ Page 63

1. Touch “**TEL/GUIDE**” in the **INITIAL** menu.

Each touch of the “**TEL/GUIDE**” changes the settings as follows:
- **MUTE** — Muting
- **ATT** — Attenuation
- **NORMAL** — Volume does not change
  - The sound is turned off, “**MUTE**” is displayed and no audio adjustments are possible.
  - The sound is attenuated, “**ATT**” is displayed and no audio adjustments, except volume control, are possible.
  - Operation returns to normal when the phone connection (the mute signal on the yellow/black lead) is ended or when the navigation guidance is ended.
  - Even when you receive a phone call, navigation voice guidance cannot be attenuated or muted. Use the **Volume** to control the navigation voice guidance volume.
Chapter 8
Customizing the Audio Source Setting

Changing the voice output of the navigation guidance
When there is a navigation guidance, you can mix the guidance voice/beep sound from the navigation unit with the audio sound from this system. You can select the speaker output for the navigation guidance.

1. Touch “GUIDE VOICE” in the INITIAL menu.
   Each touch of the “GUIDE VOICE” changes the settings as follows:
   - **L+R** (Front speakers) — **R** (Front right speaker) — **L** (Front left speaker)

Switching the auto antenna setting
If the blue lead of the navigation unit is connected to the auto antenna of the vehicle, select either of the following settings.
- **RADIO** — Extends the antenna only for the RADIO source. The antenna is stored when the source is switched to another.
- **SOURCE** — Extends the antenna when the source is turned on in the navigation unit. The antenna is stored when the source is turned off.

1. Touch “AUTO ANTENNA” in the INITIAL menu.
   Touching “AUTO ANTENNA” switches between “RADIO” and “SOURCE”
   - Regardless of whether “RADIO” or “SOURCE” is selected, turning off either the source or ignition switch will cause the antenna to automatically retract.

Other Functions

Setup adjustments
(1) Setup menu display
Shows the setup function names.
⋙ How to display the SETUP menu → Page 71

Setting the video input
You can switch the setting according to the connected component.
- Select “VIDEO” to watch video of a connected component as AV source.
- Select “M-DVD” to watch video of a connected DVD player as S-DVD source.

1. Touch “AV INPUT” in the SETUP menu.
   Each touch of the “AV INPUT” changes the settings as follows:
   - **OFF** — No video component is connected
   - **VIDEO** — External video component
   - **M-DVD** — DVD player connected with RCA cable
   When a DVD player is connected with an AV-BUS cable, do not select “M-DVD” or else no picture is displayed even if you select S-DVD.

Setting for rear view camera
The navigation unit features a function that automatically switches to the rear camera image (REAR VIEW CAMERA IN jack) when a rear camera is installed on your vehicle. When the shift lever is in REVERSE (R) position, the screen automatically switches to a rear view camera. (For more details, consult with your dealer.) You can also use the camera as a rear view camera (Rear View). In this case, you can see the image of the rear view camera during normal driving. (The navigation map screen can be displayed on the right-hand side and the camera image can be displayed on the left.) Please beware that in this
Chapter 8
Customizing the Audio Source Setting

Setting camera image is not resized to fit, but that a portion of what is seen by the camera is not viewable.

**CAUTION**

- Pioneer recommends the use of a camera which outputs mirror reversed images, otherwise screen image may appear reversed.

- Confirm the setting immediately whether the display changes to a rear view camera image when the shift lever is moved to REVERSE (R) from another position.
- When the whole screen changes to a rear view camera image during normal driving, switch to another setting.

- **Rear View** can be displayed at all times (e.g. when monitoring an attached trailer, etc.) as a split screen where map information is partially displayed. Please beware that in this setting, camera image is not resized to fit, but that a portion of what is seen by the camera is not viewable.

- Initially, this function is set to OFF.

1. Touch “CAMERA” in the SETUP menu.

2. Touch “CAMERA” to turn rear view camera setting on.

   - Touching “CAMERA” switches between “ON” and “OFF”.
   - Unless this setting is “ON”, you cannot switch to Rear View mode.

3. Touch “POLARITY” to select an appropriate setting for polarity.

   - Each time you touch “POLARITY” switches between the following polarity:
     - **BATTERY** — When the polarity of the connected lead is positive while the shift lever is in the REVERSE (R) position
     - **GND** — When the polarity of the connected lead is negative while the shift lever is in the REVERSE (R) position

**Selecting the video of rear display**

When the navigation screen is displayed on front, you can select to show either the navigation screen or the selected source on the rear display.

- The map screen navigation images output to the rear display differ from standard NTSC format images. Therefore, their quality will be inferior to the images that appear on the front display.

1. Touch “REAR DISP” in the SETUP menu.

   - Each touch of the “REAR DISP” changes the settings as follows:
     - **SOURCE** — Display the video of the selected source on rear display
     - **NAVI** — Display the navigation video on rear display when the navigation screen is displayed on front

   - When selecting “SOURCE” in “REAR DISP”, when the selected source have not the video image, nothing is displayed on rear display.

   - When selecting **Rear View** in the map display, nothing is displayed on the rear display.

**Switching the dimmer setting**

To prevent the display from being too bright at night, the display is automatically dimmed when the vehicle’s headlights are turned on. Also, you can set the display to be dimmed as the surroundings become darker.

1. Touch “DIMMER” in the INITIAL menu.

   - Touching “DIMMER” switches between “AUTO” and “ILLUMI”.
   - When the setting is “ILLUMI”, the display is automatically dimmed when the vehicle’s headlights are turned on.
   - When the setting is “AUTO”, the display is dimmed as the surroundings become darker.

   - Covering the ambient light sensor while operating the navigation unit buttons can inadvertently cause the LCD screen to grow dark.

   - To correct this, set the “DIMMER” to “ILLUMI”.
Changing the Wide Screen Mode

**CAUTION**

- For safety reasons, these 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 (see page 12 Interlock for details).

1. Touch “WIDE” to select the desired setting.
2. Touch “WIDE” repeatedly to switch between the following settings:
   - NORMAL (normal)
   - FULL (full)
   - JUST (just)
   - CINEMA (cinema)
   - ZOOM (zoom)

   **NORMAL (normal):**
   A 4:3 picture is displayed as it is, giving you no sense of disparity since its proportions are the same as that of the normal picture.

   **FULL (full):**
   A 4:3 picture is enlarged in the horizontal direction only, enabling you to enjoy a 4:3 TV picture (normal picture) without any omissions.

   **JUST (just):**
   The picture is enlarged slightly at the center and the amount of enlargement increases horizontally toward the ends of the picture, enabling you to enjoy a 4:3 picture without sensing any disparity even on a wide screen.

   **CINEMA (cinema):**
   A picture is enlarged by the same proportion as FULL or ZOOM in the horizontal direction and by an intermediate proportion between FULL and ZOOM in the vertical direction; ideal for a cinema-sized picture (wide screen picture) where captions lie outside.

   **ZOOM (zoom):**
   A 4:3 picture is enlarged in the same proportion both vertically and horizontally; ideal for a cinema-sized picture (wide screen picture).

   Different settings can be memorized for each video source.

   - When video is viewed in a wide screen mode that does not match its original aspect ratio, it may appear differently.
   - Remember that use of this system for commercial or public viewing purposes may constitute an infringement on the author’s rights protected by the Copyright Law.
   - Video will appear grainy when viewed in CINEMA or ZOOM mode.
   - The navigation map and the rear view camera picture is always FULL.

Operating the Picture Adjustment

**CAUTION**

- For safety reasons, these 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 (see page 12 Interlock for details).

You can adjust BRIGHT (brightness), CONTRAST (contrast), COLOR (color) and HUE (hue) for each source and rear view camera.

1. Press P.ADJ/B.LIGHT button to display PICTURE ADJUST.

   **BRIGHTNESS** — Adjust the black intensity
   **CONTRAST** — Adjust the contrast
   **COLOR** — Adjust the color saturation
   **HUE** — Adjust the tone of color (red is emphasized or green is emphasized)
   **DIMMER** — Adjust the brightness of display
   **BACK-CAMERA** — Switch to the picture adjustment display for the rear view camera

   Different settings can be memorized for each video source.
Touching “SOURCE” (or “NAVI”) while adjusting the rear view camera image returns you to the previous screen. (Except when the vehicle’s shift lever is in reverse [R].)

The adjustments of BRIGHTNESS and CONTRAST are stored separately for light ambient (daytime) and dark ambient (nighttime). A sun ☀ or moon 🌕 is displayed to the left of BRIGHTNESS and CONTRAST, respectively, as the ambient light sensor determines brightness or darkness.

You cannot adjust COLOR and HUE for the source without a video and navigation map display.

You can adjust the picture adjustment for the rear view camera only when CAMERA in SETUP menu is turned on.

Setting for rear view camera ➞ Operation Manual

The picture adjustment may not be able to be used with some rear view cameras.

The same setting is selected for the normal background picture and the navigation map display.

Because of the LCD screen characteristics, you may not be able to adjust the screen at low temperatures.

Touch “+” or “−” to adjust the desired item.

Each time you touch “+” or “−” increases or decreases the level of desired item. +24 — −24 is displayed as the level is increased or decreased.

Touch “ESC” to hide the touch panel keys.

Adjusting the dimmer

When the “DIMMER” is set to “AUTO”, you can set the display to dim as the surroundings become darker.

The adjustment of DIMMER is stored separately for each ambient light; daytime, evening and nighttime. The brightness of the LCD screen adjusts automatically to the optimum level in accordance with the ambient light based on the set values.

When the “DIMMER” is set to “ILLUMI”, the display is automatically dimmed only when the vehicle’s headlights are turned on. The adjustment of DIMMER is stored separately when the headlight is turned on and turned off.

Switching the dimmer setting ➞ Page 103

1 Press P.ADJ/B.LIGHT button and hold to display PICTURE ADJUST.

The ambient light level icon used as the standard for adjusting DIMMER appears above the level bar.

The icons indicating the current ambient brightness used for adjusting BRIGHTNESS and CONTRAST may differ from DIMMER slightly.

- Yellow sun ☀ — bright ambient light (daytime)
- Red sun ☀ — intermediate brightness (evening)
- Blue moon 🌕 — dark ambient light (nighttime)

The icons are not displayed when the “DIMMER” is set to “ILLUMI”.

2 Touch ◀ or ▶ to adjust the brightness.

The level indicates the brightness of the screen being adjusted. The further the level indicator moves to the right, the brighter the screen.

3 Touch “ESC” to hide the touch panel keys.

Because of the LCD screen characteristics, you may not be able to adjust the screen at low temperatures.

Switching the Backlight On/Off

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

1 Press and hold P.ADJ/B.LIGHT button.

The backlight turns off, and the screen turns off.

Press the P.ADJ/B.LIGHT button once again to turn on the backlight, and the screen is displayed.
Installing the Program

The program is installed to the Navigation System using the application disc. **This is not necessary if your dealer already performed the installation.**

When installing the program, you carry out the following operations. When all the setup procedures are completed, you can use the Navigation System.

1. **Insert the disc while the vehicle is parked.**
2. **Select the language used for the Navigation System.**
3. **Press the MAP button to change the navigation screen.**
4. **Touch “Yes/Oui”.**
   - When you start the navigation unit for the first time, you will see a confirmation message asking if you wish to select another language. English is the default language of the Navigation System. If desired, you can select another language as shown.
     - To keep English, touch “No/Non”. After this, proceed to Step 7.
     - When you want to select another language, touch “Yes/Oui”, and proceed to the next step.
5. **Select the language from the list.**
   - Touch the language you want to use.
     - The language selected here is reflected for the Navigation functions (e.g., Destination search, etc.) only.
     - To Change the language ➔ Page 64
   - Installation of the program, in the language you chose, begins.

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**CAUTION**

- Once the installation of the program starts, do not stop the engine of your vehicle nor switch off the Navigation System until the installation is completed and the following Audio screen appears.
When the installation is complete, the opening display appears.

6 Press the MAP button to change the navigation screen.
Some time is needed until navigation is ready.

7 Check the details of the cautionary message and touch “OK”.

8 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 +3 to –3 hours.

9 If necessary, set to summer time.
Daylight Saving Time (DST) is off by default. Touch “Summer Time” to change the time if you are in the daylight saving period. This turns the display below summer time “On”.

10 To complete the setting, touch “Back”.

The map of your surroundings appears.

This completes the setup of your Navigation System. Chapter 1 explains the basic operation of your Navigation System.

➢ To change the time later ➞ Page 66
Positioning Technology

The Navigation System accurately measures your current location by combining the positioning by GPS and by Dead Reckoning.

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 68,900,000 feet (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.

Positioning by dead reckoning

The 3D Hybrid Sensor in the navigation unit also calculates your position. The current location is measured by detecting driving distance with the speed pulse, the turning direction with the Gyrosensor, and inclination of the road with the G sensor.

The 3D Hybrid Sensor can even calculate changes of altitude, and corrects for discrepancies in the distance traveled caused by driving along winding roads or up slopes. Also, the Navigation System learns the driving conditions and stores information in the memory; thus, as you drive more, the precision of the positioning becomes more accurate.

The method of positioning changes as follows depending on whether the speed pulse of your vehicle is detected or not:

3D hybrid mode
This is active when the speed pulse is detected. Inclination of a street can be detected.

Simple hybrid mode
When the speed pulse is not detected, positioning is performed in this mode. Only horizontal movement is detected, so it becomes less accurate. Also, when the positioning by GPS is not available, such as when your vehicle enters a long tunnel, the discrepancy between your actual and calculated position may become bigger.

The speed pulse data comes from the speed sensing circuit. The location of this speed sensing circuit depends on your vehicle model. In some cases, it is impossible to make a connection to it, and in such a case we recommend that the ND-PG1 speed pulse generator (sold separately) be used.

How do GPS and dead reckoning work together?

For maximum accuracy, your Navigation System continually compares GPS data with your estimated position as calculated from the data of 3D Hybrid Sensor. However, if only the data from the 3D Hybrid Sensor is available for a long period, positioning errors are gradually compounded until the estimated position becomes unreliable. For this reason, whenever GPS signals are available, they are matched with the data of the 3D Hybrid Sensor and used to correct it for improved accuracy.

To ensure maximum accuracy, the dead reckoning system learns with experience. By comparing the position it estimates with your actual position as obtained using GPS, it can correct for various types of error, such as tire wear and the rolling motion of your vehicle. As you drive, the dead reckoning system gradually gathers more data, learns more, and the accuracy of its estimates gradually increases. So, after you have driven some distance, you can expect your position as shown on the map to show fewer errors.
If you use chains on your wheels for winter driving or put on the spare wheel, errors may suddenly increase because of difference in wheel diameter. The system detects the fact that the tire diameter has changed, and automatically replaces the value for calculating distance.

If the ND-PG1 is used or if your vehicle is operating in Simple hybrid mode, the distance calculation value cannot be replaced automatically.

Map matching
As mentioned, the GPS and dead reckoning 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, Dead Reckoning, and map matching. However, in some situations, these functions may not work properly, and the error may become bigger.

When the positioning by GPS is impossible
- If signals cannot be received from more than two GPS satellites, GPS positioning does not take place.
- 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
- When driving among high buildings
- When driving through a dense forest or tall trees
• If a car phone or cellular phone is used near the GPS antenna, GPS reception may be lost temporarily.
• Do not cover the GPS antenna with spray paint or car wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals, so keep the antenna clear.

If, for any reason, GPS signals cannot be received, learning and error correction are not possible. If GPS positioning has been operating for only a short time, your vehicle’s actual position and the current location mark on the map may diverge considerably. Once GPS reception is restored, accuracy will be recovered.

Vehicles that Cannot Obtain Speed Pulse Data

The speed pulse data comes from the speed sensing circuit. The location of this speed sensing circuit depends on your vehicle model. In some cases, it is impossible to make a connection to it, and in such a case we recommend that the ND-PG1 speed pulse generator (sold separately) be used.

Conditions Likely to Cause Noticeable Positioning Errors

For various reasons such as the state of the road you are traveling on and the state of reception 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 zig-zags.
• If the road has connected 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 using a spiral ramp.
• If your vehicle is turned on a turntable or similar.
• If your vehicle’s wheels spin, such as on a gravel road or in snow.
• If you put on chains, or change your tires for some of a different size.
• 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 pass around a traffic circle.

• When starting driving immediately after starting the engine.
• If you insert the disc and turn your Navigation System on while driving.

Some types of vehicle may not output a speed signal while driving at just a few kilometers per hour. In such a case, the current location of your vehicle may not be displayed correctly while in a traffic congestion or in a parking lot.

**Limitation of Functions for Areas not Stored on the Disc**

For areas not stored on the disc (unrecorded areas), the functions will operate as follows:

**Displaying the map**
• Maps with a scale of between 0.02 mi and 0.25 mi cannot be displayed. (If the scale was set to between 0.02 mi and 0.25 mi, it is automatically switched to 0.5 mi.)
• When driving with **Guide View** or **Route View**, upon entering an unrecorded area the display automatically switches to **Map View**. (When the vehicle re-enters an area stored on the disc, the display returns to the previous map mode.)

**Destination search**
• You cannot search a destination in an unrecorded area using **Address Search** or **Telephone Search**.
• In case of **POI Search** and **Vicinity Search**, only “City Center” search is possible.
• If you cannot search in a currently selected zone, the system may forcibly switch to the zone selection screen.
• A **Freeway Search** covers all areas, regardless of the disc on which the information is recorded.
• If a **Vicinity Search** is performed on the border of an unrecorded area, the system will not necessarily select the nearest facility. (The search will take place only within the range of areas recorded on the disc.)

**Guidance**
• When your vehicle approaches an unrecorded area, you will be notified three times: when the distance to the unrecorded area is 12 mi (20 km), 6 mi (10 km) and 3 mi (5 km) respectively.
When your vehicle enters the unrecorded area, a caution is given.
• In the unrecorded area, only guidance for reaching the destination is provided. No other guidance is given.
• If a route calculation is operated within an unrecorded area, the route might not be set from the streets you are currently driving. Also, if you set the destination in an unrecorded area of the disc, the system may not be able to set the route up to the destination.

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**About the Data being Deleted**

The information is erased by pushing the **RESET** button or disconnect yellow lead from battery (or remove the battery itself), except for the following items.
• Sensor learning status and driving status
• Area to avoid
• Registered Locations in “**Address Book**”
• Data registered in “**Emergency Info**”
• If the vehicle deviates from the set route in an unrecorded area, the Auto Reroute function will not work.
• Even if “Close-up of Junction” is “On”, the display will not switch to an enlarged map of the intersection.
• Even if you drive on the freeway, lane information, freeway exit numbers and freeway signs will not be displayed.

Route information
• If the set route goes through an unrecorded area, no route profile for the unrecorded area will be displayed. (If the set route traverses both an unrecorded area and area stored on the disc, only the route profile within the recorded area will be displayed.)
• Route scrolling for an unrecorded area is possible only with a map scale of 0.5 mi or above.

Other function limitations

Overlay POI
• Only display “City Center” is available in an unrecorded area.

Avoid area
• An area not stored on the disc cannot be set as an Area to Avoid.

☐ A set Area to Avoid may be deleted when the software is updated. If this happens, the system will automatically try to recover the deleted information, but data can be recovered only for areas stored on the disc. For items that could not be recovered, a recovery process will begin when you set another disc.
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 in the screen

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action (See)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power doesn’t turn on. The unit 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>The fuse is blown.</td>
<td>Rectify the reason for the fuse blowing, then replace the fuse. Be very sure to install the correct fuse with the same rate.</td>
<td></td>
</tr>
<tr>
<td>Noise and other factors are causing the built-in microprocessor to operate incorrectly.</td>
<td>Press <strong>RESET</strong> button. (&quot;Hardware Manual&quot; and refer to page 113 in this manual.)</td>
<td></td>
</tr>
</tbody>
</table>
| You cannot position your vehicle on the map or the positioning error is large. | The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Such a loss of signal quality may happen for the following reasons:  
  - The GPS antenna is in an unsuitable location.  
  - Obstacles are blocking signals from the satellites.  
  - The position of satellites relative to your vehicle is bad.  
  - 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 vehicle phone or cellular phone is used near the GPS antenna, GPS reception may be lost temporarily.  
  - Do not cover the GPS antenna with spray paint or vehicle wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals. | Check the GPS signal reception (➞ Page 61) and the position of the GPS antenna if necessary, or continue driving until reception improves. Keep the antenna clear. |
<p>| Signals from the vehicle’s speed pulse are not being picked up properly. | Check that the cables are properly connected. If necessary, consult the dealer that installed the system. |
| The navigation unit may not be mounted securely in your vehicle. | Check that the navigation unit is securely mounted and, if necessary, consult the dealer that installed the system. |
| Your vehicle is operating in Simple hybrid mode. | Connect the speed signal input (pink lead wire) of the power cable correctly, and reset the 3D Hybrid Sensor memory (&quot;Learning Status&quot;). |</p>
<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action (See)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The navigation unit is installed with an extreme angle exceeding the limitation of the installation angle.</td>
<td>Confirm the installation angle. (The Navigation System must be installed within the allowed installation angle. For details, refer to “Installation Manual” and “Installation Angle Setup” on page 62.)</td>
<td></td>
</tr>
<tr>
<td>Indication of the position of your vehicle is misaligned after a U-turn or reversing.</td>
<td>Check whether or not the reverse gear signal input lead (purple) is connected properly. (The Navigation System works properly without the lead connected, but positioning accuracy will be adversely affected.)</td>
<td></td>
</tr>
<tr>
<td>The map continually reorients itself.</td>
<td>The traveling direction is always set to Heading Up.</td>
<td>Touch [➡️] on the screen and change the map display.</td>
</tr>
<tr>
<td>Tracking marks are not displayed.</td>
<td>The “Tracking Display” is turned off.</td>
<td>Check the “Tracking Display” settings (➡️ Page 65) and make sure “Always” or “This Trip” is selected.</td>
</tr>
<tr>
<td>The daylight display is used even when the vehicle lights are on.</td>
<td>Daytime is selected on “Day/Night Display”.</td>
<td>Check the “Day/Night Display” setting (➡️ Page 65) and make sure “Nighttime” is selected.</td>
</tr>
<tr>
<td>The display is very dim.</td>
<td>The vehicle’s light is turned ON, and “Nighttime” is selected on “Day/Night Display”.</td>
<td>Read about the “Day/Night Display” setting (➡️ Page 65) and, if desired, select “Daytime”.</td>
</tr>
<tr>
<td></td>
<td>The vehicle cabin temperature is extremely low.</td>
<td>A Liquid Crystal Display (LCD) is used, and such displays tend to darken when cold. Wait for the vehicle to warm up.</td>
</tr>
<tr>
<td></td>
<td>Picture quality adjustment of the display is not correct.</td>
<td>Refer to “Operating the Picture Adjustment” (➡️ Page 104) to adjust the picture quality.</td>
</tr>
<tr>
<td></td>
<td>Ambient light sensor of the display is hidden.</td>
<td>Set the ambient light sensor not to be hidden or switch the “DIMMER” to “ILLUMI” in the SETUP menu.</td>
</tr>
<tr>
<td>No sounds are heard. The volume level will not rise.</td>
<td>The volume level is low.</td>
<td>Adjust the volume level.</td>
</tr>
<tr>
<td></td>
<td>The attenuator or mute is on.</td>
<td>Turn the attenuator or mute off.</td>
</tr>
<tr>
<td>Adjusting the volume of navigation guidance and beep is not possible.</td>
<td>You cannot adjust them with VOL (+,–) button.</td>
<td>Turn the volume up or down according to “Volume” (➡️ Page 63) in the Setting menu.</td>
</tr>
<tr>
<td>Slope is not displayed on the Vehicle Dynamics screen. Inclination does not move on the 3D Calibration screen.</td>
<td>The speed pulse lead is not connected.</td>
<td>Connect the speed pulse lead.</td>
</tr>
</tbody>
</table>

**When the screen is frozen...**

Park your vehicle at a safe place, and cut the engine off. Turn the ignition key back to “Acc off”. Then start the engine again, and turn the power to the navigation unit back on. If this does not solve the problem, press the **RESET** button on the navigation unit.
<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action (See)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The navigation does not boot up or CD playback is not possible.</td>
<td>The disc is not inserted into the appropriate slot.</td>
<td>Eject the disc and insert the disc to appropriate slot. (➔ About CD loading slot and DVD-ROM loading slot ➔ Hardware Manual)</td>
</tr>
<tr>
<td></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 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 CD are an irregular file format.</td>
<td>Check the file format. (Refer to “Handing and care of the disc” on the Hardware Manual.)</td>
</tr>
<tr>
<td></td>
<td>The CD format cannot be played back.</td>
<td>Replace disc. (Refer to “Handing and care of the disc” on the Hardware Manual.)</td>
</tr>
<tr>
<td>No picture.</td>
<td>The parking brake cord is not connected or applied.</td>
<td>Connect a parking brake cord correctly, and apply the parking brake.</td>
</tr>
<tr>
<td></td>
<td>Parking brake interlock is activated.</td>
<td>Park your vehicle in the safe place and apply the parking brake.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➔ Parking brake interlock ➔ Page 12</td>
</tr>
<tr>
<td>Rear display picture disappears.</td>
<td>The source without a video is selected.</td>
<td>Switch the source with a video.</td>
</tr>
<tr>
<td></td>
<td>There was a problem with the rear display or a faulty wiring connection, for example.</td>
<td>Check the rear display and its connection.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➔ Select view mode other than Rear View.</td>
</tr>
<tr>
<td></td>
<td>When the shift lever is in [R], displays rear view camera images. (When “NAVI” is selected in REAR DISP menu.)</td>
<td>Select SOURCE in REAR DISP menu.(or when you move the shift lever other than [R] position, the screen will be returned to the previous display.)</td>
</tr>
<tr>
<td></td>
<td>Operating the PICTURE ADJUST.</td>
<td>There is no picture on the rear display while the PICTURE ADJUST is carried out.</td>
</tr>
<tr>
<td>Nothing is displayed and the touch panel keys cannot use.</td>
<td>The setting for the rear view camera is incorrect.</td>
<td>Connect a rear view camera correctly. Press AV button to return to the source display and then select the correct setting for CAMERA. ➔ About CAMERA setting ➔ Page 102</td>
</tr>
<tr>
<td></td>
<td>The shift lever was placed in [R] when the rear view camera was not connected.</td>
<td>Press the P.ADJ/B.LIGHT button to turn on the back light.</td>
</tr>
<tr>
<td></td>
<td>The back light of the LCD panel is turned off.</td>
<td>➔ Press the P.ADJ/B.LIGHT button to turn on the back light.</td>
</tr>
</tbody>
</table>
The following messages may be displayed by your Navigation System.

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.

<table>
<thead>
<tr>
<th>Message</th>
<th>When</th>
<th>What to do</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please insert the appropriate disc.</td>
<td>If you try to use a disc which is incompatible with this system.</td>
<td>Insert a suitable disc.</td>
</tr>
<tr>
<td>This is not the appropriate disc. Please insert the appropriate disc.</td>
<td>If you insert a disc upside down.</td>
<td>Insert the disc with the label upward.</td>
</tr>
<tr>
<td></td>
<td>If the disc is dirty.</td>
<td>Clean the disc.</td>
</tr>
<tr>
<td></td>
<td>If the disc is cracked or otherwise damaged.</td>
<td>Insert a normal, round disc.</td>
</tr>
<tr>
<td>Irregular speed pulse signal is detected. Please power off the system and check the installation. After you have checked, please re-boot the system and press “OK”.</td>
<td>If the Navigation unit does not receive the vehicle speed pulse.</td>
<td>Consult your Pioneer dealer.</td>
</tr>
<tr>
<td>Speed pulse wire is not connected. System will start to learn without speed pulse. Please keep in mind that accuracy is not fully ensured without speed pulse.</td>
<td>The speed signal input (pink lead wire) of the power cable is not connected.</td>
<td>To operate with 3D hybrid mode, connect the speed signal input (pink lead wire) of the power cable correctly. Although it can be operated with Simple hybrid mode without connecting the speed signal input, the precision of the positioning will be less accurate.</td>
</tr>
<tr>
<td>Vibration is detected. Please power off the system and check the installation. After you have checked, please re-boot the system and press “OK”.</td>
<td>While the vehicle is stationary, the Navigation System is installed in a place where the navigation unit may be affected by a large vibration.</td>
<td>Re-install the navigation unit of the Navigation System in a place where the navigation unit will not be affected by vibration.</td>
</tr>
<tr>
<td>Direction of G sensor is not correct. Please power off the system and check the installation. After you have checked, please re-boot the system and press “OK”.</td>
<td>Direction of G sensor is set incorrectly.</td>
<td>See the “Installation Manual” and set the direction of the Hide-away unit correctly.</td>
</tr>
<tr>
<td>Gyro Sensor is not working properly. Please consult your dealer or Pioneer service center.</td>
<td>Abnormal output of Gyrosensor is detected.</td>
<td>Note down the error code shown on the screen; turn off the power, and then contact your nearest Pioneer service facility.</td>
</tr>
<tr>
<td>This function is not available now.</td>
<td>The screen cannot be displayed with Vehicle Dynamics Display. Because the sensor has not been taught so the sensor information cannot be acquired.</td>
<td>If the sensor learning status reaches the Sensor Initializing status or more, the system is ready to be used.</td>
</tr>
<tr>
<td>System detected that the vertical angle of the installation has been changed. Learning status for Gyro Sensor has been initialized.</td>
<td>If the mounting angle of the Hide-away unit has been changed.</td>
<td>The system initializes the sensor in order to operate it within the performance and automatically starts re-learning.</td>
</tr>
<tr>
<td>System detected that the vertical angle of the installation exceeds the permission level. Please install the navigation unit correctly.</td>
<td>The navigation unit is installed with an extreme angle exceeding the limitation of the installation angle.</td>
<td>Confirm the installation angle. (The Navigation System must be installed within the allowed installation angle. For details, refer to “Installation Manual” and “Installation Angle Setup” on page 62.)</td>
</tr>
<tr>
<td>No data available at this time.</td>
<td>If no data is available that can be used with the XM tuner.</td>
<td>Wait for a while and try the operation again.</td>
</tr>
<tr>
<td>Message</td>
<td>When</td>
<td>What to do</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>No XM signal. Please wait.</td>
<td>While waiting for a response from the XM tuner.</td>
<td>Wait for a while and try the operation again.</td>
</tr>
<tr>
<td>You are in an area that cannot receive XM tuner reception.</td>
<td>Move into an area that can receive XM tuner reception.</td>
<td></td>
</tr>
<tr>
<td>Your current location provides very poor reception.</td>
<td>Change your location.</td>
<td></td>
</tr>
<tr>
<td>Route calculation was not possible.</td>
<td>Route calculation has failed because of malfunction of map data, software, hardware, or disc.</td>
<td>• Change the destination.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Clean the disc.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Consult the Pioneer Local dealer if this message persists.</td>
</tr>
<tr>
<td>Route calculation was not possible because the destination is too far.</td>
<td>The destination is too far.</td>
<td>• Set a destination closer to the starting point.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Set one or more way points.</td>
</tr>
<tr>
<td>Route calculation was not possible because the destination is too near.</td>
<td>The destination or way point(s) is too close.</td>
<td>Set a destination [and way point(s)] farther from the starting point.</td>
</tr>
<tr>
<td>Route calculation was not possible due to traffic regulations.</td>
<td>• The destination or way point(s) are in a Control Traffic Zone (CTR) and the route calculation is hampered.</td>
<td>• Set a destination and way point(s) outside the CTR if you know where the restricted area is.</td>
</tr>
<tr>
<td></td>
<td>• Your vehicle is currently in a Control Traffic Zone (CTR) and the route calculation is hampered.</td>
<td>• Try the destination or way point(s) away from the currently set points to some extent.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Drive your vehicle to an unrestricted area and reset the destination and way point(s).</td>
</tr>
<tr>
<td>Route calculation was not possible because no guidance can be provided around the destination or the starting point.</td>
<td>The destination, way point(s), or starting point are in an area where no road exists (e.g. a mountain) and the route calculation is impossible.</td>
<td>• Set a destination and way point(s) on roads.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Reset the destination after you drive the vehicle to any road.</td>
</tr>
<tr>
<td>There is no route to the destination.</td>
<td>The destination or way point(s) are in an isolated island, etc. without a ferry and the route calculation is impossible.</td>
<td>Change the destination.</td>
</tr>
<tr>
<td>The route could not avoid the specified area.</td>
<td>If route setting cannot avoid specified Areas to Avoid.</td>
<td>If the current route is not desired, set destination or way points that do not pass through the Areas to Avoid.</td>
</tr>
<tr>
<td>The route could not avoid the specified area. Toll road has not been avoided.</td>
<td>If the route to the destination (or way point) cannot be established by bypassing toll roads (including toll areas) and Areas to Avoid.</td>
<td>If the current route is not desired, set destination or way points that do not pass through toll roads (including toll areas) and Areas to Avoid.</td>
</tr>
<tr>
<td>Ferry has not been avoided.</td>
<td>In case a ferry route was included in the route to the destination or way points even though “Avoid Ferry” was set to ON.</td>
<td>If the current route is not desired, set destination or way points that do not pass through a ferry route.</td>
</tr>
<tr>
<td>Toll road has not been avoided.</td>
<td>If the route to the destination (or way point) cannot be established by bypassing toll roads (including toll areas).</td>
<td>If the current route is not desired, set destination or way points that do not pass through toll roads (including toll areas).</td>
</tr>
<tr>
<td>The address does not exist. Do you want to continue?</td>
<td>If the house number is entered without specifying City or Street and that house number does not exist on the data.</td>
<td>Re-enter the existing house number by following the instructions shown on the screen. Or, proceed to the next step without entering the house number and specify the City or Street first.</td>
</tr>
<tr>
<td>There is no applicable data for the selected city. Automatically returning to list.</td>
<td>If the history data of the City could not be used (for example, in case that the history data of the City that was used in the POI Search cannot be found in the Address Search.)</td>
<td>Once the search is performed to specify the City, the result is saved as a history. The data of the specified City, however, may not be hit by the different search criteria. In this case, try another search method or change the destination.</td>
</tr>
<tr>
<td>Message</td>
<td>When</td>
<td>What to do</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>There is no Freeway in this area.</td>
<td>If no freeway was found in the selected Zone.</td>
<td>Set the destination or way points using another search method or change the location of the destination or way points.</td>
</tr>
<tr>
<td>This area does not contain any POI’s of the selected type.</td>
<td><strong>Vicinity Search</strong> cannot be performed because the searched location is in areas not stored on the DVD Map Disc (unrecorded areas).</td>
<td>Replace the DVD Map Disc and perform the <strong>Vicinity Search</strong> again.</td>
</tr>
<tr>
<td>Facilities of the selected category do not exist in the surrounding areas.</td>
<td></td>
<td>Use another search method or move to another location and perform the <strong>Vicinity Search</strong> again.</td>
</tr>
<tr>
<td>Only City Center can be searched.</td>
<td>If <strong>POI Search</strong> was performed on areas not stored on the DVD Map Disc (unrecorded areas).</td>
<td>Only the City Center can be searched. If you want to search other categories in unrecorded areas, replace the DVD Map Disc and perform the <strong>POI Search</strong> again. Set the “areas stored on the DVD Map Disc” to destination or way points.</td>
</tr>
<tr>
<td>This zone is not available on this disc. Please insert appropriate disc.</td>
<td>When areas not stored on the DVD Map Disc (unrecorded areas) are included in the search.</td>
<td>Set the destination or way points in the areas stored on the DVD Map Disc, or replace the DVD Map Disc and perform the search again.</td>
</tr>
<tr>
<td>Failed to make the route profile.</td>
<td>Failed to generate the route profile because the set route passes through areas not stored on the DVD Map Disc (unrecorded areas).</td>
<td>Insert the DVD Map Disc and retry.</td>
</tr>
<tr>
<td>The maximum number of registrations has been completed. Please clear existing registered items and re-register current item.</td>
<td>If there are already 300 items when you attempt to register an item in the Address Book.</td>
<td>Delete unnecessary data and try to register again.</td>
</tr>
<tr>
<td>Data Read error. Back to Original Background. Please do not turn power off.</td>
<td>Failed to read the data because the DVD Map Disc is damaged or dirty. Or, the pick-up lens of the DVD-ROM drive is dirty.</td>
<td>Try re-reading the data by inserting a clean DVD Map Disc. Clean the pick-up lens with a commercially available cleaning kit for DVD, then try to reading again.</td>
</tr>
<tr>
<td>No route data can be stored. You should insert the disc that contains the map data of the current position.</td>
<td>Areas not stored on the DVD Map Disc (unrecorded areas).</td>
<td>Insert the DVD Map Disc containing that area.</td>
</tr>
<tr>
<td>No map data available on this scale. Scaling up.</td>
<td>When the scale that had been displayed could not be displayed because the map was scrolled to areas not stored on the DVD Map Disc (unrecorded areas) or the vehicle moved to areas not stored on the DVD Map Disc (unrecorded areas).</td>
<td>If the desired scale cannot be selected, insert the DVD Map Disc that contains that area and then change the scale.</td>
</tr>
<tr>
<td>This function is not available with the current map disc.</td>
<td>In case the current position is “areas not stored on the DVD Map Disc (unrecorded areas)” and an attempt was made to zoom in to make the scale 0.5 mile or more.</td>
<td>Zoom in again after the vehicle moves into an area stored on the DVD Map Disc. Or, replace the DVD Map Disc and try to zoom in again.</td>
</tr>
</tbody>
</table>
Understanding Built-in CD Drive Error Messages

When you contact your dealer or your nearest Pioneer Service Center, be sure to record the error message.

<table>
<thead>
<tr>
<th>Message</th>
<th>When</th>
<th>What to do</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caution !</td>
<td>System detected improper connection of Parking Brake lead. Please check your configuration for safety. Please see Operation Manual for more information regarding safe operation.</td>
<td>Confirm once more that their connections are correct.</td>
</tr>
<tr>
<td></td>
<td>Parking brake lead is incorrectly connected.</td>
<td>Drive your vehicle for a while until the sensor learning status “Initializing” is turned to “Simple Hybrid” or “3D Hybrid”.</td>
</tr>
<tr>
<td>CAUTION!</td>
<td>Navigation Initialization is currently in process, or there may be an improper connection of the Parking Brake lead. This caution window will no longer appear after Initialization is complete. If this message continues, please check your configuration for safety. Please see Operation Manual for more information regarding safe operation.</td>
<td>Confirm once more that their connections are correct.</td>
</tr>
<tr>
<td></td>
<td>Parking brake lead is incorrectly connected.</td>
<td>Drive your vehicle for a while until the sensor learning status “Initializing” is turned to “Simple Hybrid” or “3D Hybrid”.</td>
</tr>
<tr>
<td></td>
<td>For a certain period after the installation of your Navigation System.</td>
<td></td>
</tr>
<tr>
<td>Viewing of front seat video source while driving is strictly prohibited.</td>
<td>Parking brake interlock is activated.</td>
<td>Park your vehicle in the safe place and apply the parking brake.  ➡ Parking brake interlock ➡ Page 12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Message</th>
<th>Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERROR-11, 12, 17, 30</td>
<td>Dirty disc</td>
<td>Clean disc.</td>
</tr>
<tr>
<td>ERROR-11, 12, 17, 30</td>
<td>Scratched disc</td>
<td>Replace disc.</td>
</tr>
<tr>
<td>ERROR-10, 11, 12, 15, 17, 30, A0</td>
<td>Electrical or mechanical</td>
<td>Turn the ignition ON and OFF, or switch to a different source, then back to the CD drive.</td>
</tr>
<tr>
<td>ERROR-15</td>
<td>The inserted disc does not contain any data</td>
<td>Replace disc.</td>
</tr>
<tr>
<td>ERROR-22, 23</td>
<td>The CD format cannot be played back</td>
<td>Replace disc.</td>
</tr>
<tr>
<td>ERROR-44</td>
<td>All tracks are skip tracks</td>
<td>Replace 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 disc.</td>
</tr>
<tr>
<td>TRK SKIPPED</td>
<td>The inserted disc contains WMA files that are protected by DRM</td>
<td>Replace disc.</td>
</tr>
<tr>
<td>PROTECT</td>
<td>All the files on the inserted disc are secured by DMR</td>
<td>Replace disc.</td>
</tr>
<tr>
<td>HEAT</td>
<td>CD drive overheated</td>
<td>Switch another source and wait until the CD drive cools down.</td>
</tr>
</tbody>
</table>
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 is automatically set. Also, for day or time traffic regulations, only information about traffic regulations 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.
- Upgrade DVD Map Discs are available for purchase from your local Pioneer dealer that includes the most current map and point of interest information. Contact your local Pioneer dealer for details.

About the route condition
When the calculation of only one route is set, you can search a route option by combining the following conditions.

How to set the calculation conditions → Page 44

For example, when “Fast” and “Avoid Freeway” (“On”) are combined, the route, which avoids freeway, and has the shortest travel time, will be calculated and displayed on the screen.

Condition 1: whether to put priority on the distance, or time

Short:
Calculate a route with the shortest distance to your destination as a priority.

Fast:
Calculate a route with the shortest travel time to your destination as a priority.

Condition 2: whether to use freeway or not

Avoid Freeway:
Calculate a route that avoids freeway. (A route using the freeway may be set if your destination is far away.)

- The system assumes the driver deviated either intentionally or inadvertently from the route and searches for another route (intelligent rerouting). Depending on the situation, the system may search a new route that does not return to the original one.
- The calculated route is one example of the route to your destination decided by the Navigation System whilst 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 pass. If you want to pass a certain street, set the way point on that street.)
- The route set by your Navigation System is based on the assumption that the driver does not know the area. Thus, the streets known to local drivers, such as small streets or special roads, may not be used for the set route.
- Some route options may become the same route. If visiting points are set, only one route is calculated.
- Route setting is limited to the range of the disc in use.
- The destination is too far, there may be instances where the route cannot be set. (If you want to set a long-distance route going across several areas, set way points along the way.)
- During voice guidance, turns and intersections from the freeway are announced. However, if you pass intersections, turns, and other guide points in rapid succession, some may not be announced.
- It is possible that guidance may direct you off a freeway and then back on again.
- In some cases, the set 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, guidance may direct you past your destination and then indicate a U-turn to get back to it.
• 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.
• In the following cases, the route that passes through an Area to Avoid may be set:
  - when your vehicle is in the Area to Avoid
  - when your destination or way points are in the Area to Avoid
  - when it is not possible to avoid doing so
• If a suitable route cannot be set in compliance with the specified “Detour” distance, or your preference to avoid freeways, toll roads, ferry route, the setting or parameter may be ignored.
• When there is a traffic congestion or closure ahead, if driving through the traffic congestion or closure is better than taking the detour, a detour route may not be set.
• There may be instances when the starting point 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.

Auto Reroute
• Auto Reroute is used when you deviate more than 0.01 mi (30m) from the route.
• Auto Reroute function does not work in the following cases:
  - when your vehicle is not on a street
  - when you are too close to your destination
  - when your vehicle is on a ferry
  - when driving on a road inside a facility
  - when driving on a traffic circle
  - when the vehicle goes out of the area stored in the disc
  - when driving on the routes are described in “Roads not used in calculations”

Route highlighting
• Once set, the route is highlighted in bright green or light blue 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.

Roads not used in calculations
Even though displayed onscreen, the following roads are not included in route calculations.
• Stubble Road
• Walk Way
• Public vehicle only
• Non routable road

Intersection enlargement
• When “Close-up of Junction” is on, the map scale increases to show more detail as you approach an intersection.
• If the intersection is approached in a gentle curve, the map displayed may differ from the actual road layout.

Tracking
• Your Navigation System marks your course on the map in certain increments. This is called tracking. It is handy when you want to check a route traveled without guidance or if returning along a complex route.
• A maximum of about 145 miles (230 km) is marked and, as you travel beyond this limit, tracking marks are erased in order from the most distant. Tracking display shows about 100 miles tracking of your vehicle with white dots.

➲ Tracking can also be set for automatic erasing whenever the Navigation System is switched off ➞ Page 65
Types of the Road Stored in the Disc

There are three types of roads in the map of this disc.

Roads included in the route guidance and roads not included

**Turn by Turn Routable Roads** contain full attribute data and can be used for full Route Guidance. Pioneer Navigation will display full route guidance, including turn-by-turn voice directions and arrow icons.

**Routable roads (The route displayed and highlighted in purple color)** have only basic data and can only be used to plot a navigable route. Pioneer Navigation will only display a navigable route on the map (only the arrival guidance for the destination or a way point is available). Please review and obey all local traffic rules along the highlighted route. (For your safety.) No turn-by-turn directions or arrow icons will be displayed on these roads.

When your vehicle reaches to the entrance of this road, the icon will be displayed, indicating that the guidance is not available with this type of road. The icon will be indicated for the road with which the guidance is available.

The Close-up of intersection function, Auto Reroute function, Changing the view to Guide View, or Route View are not available.

**Non routable roads (pink color road)**

Map display is possible, but it cannot be used for the route calculation. Please review and obey all local traffic rules along this route. (For your safety.)

Glossary

This glossary explains some of the terms used in the manual.

**3D Hybrid sensor**
The built-in sensor which enables the system to estimate your vehicle’s position. A learning function increases its accuracy and its learning data can be stored in memory.

**Address Book**
A list of previously searched destinations, way points and locations registered manually.

**Aspect ratio**
This is the width-to-height ratio of a TV screen. A regular display has an aspect ratio of 4:3. Wide screen displays have an aspect ratio of 16:9, providing a bigger picture for exceptional presence and atmosphere.

**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.

**Current location**
The present location of your vehicle; your current location is shown on the map by a red triangle mark.

**Default setting**
A factory setting which applies when you first switch on the system; you can change default settings to suit your own needs in the Route Options menu or the Settings menu.

**Destination**
A location you choose as the end point of your journey.

**DVD Map Disc**
This DVD-ROM disc contains Pioneer navigation software. Map data is also recorded on the disc.

**Favorite location**
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 a 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 to 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 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 and 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.

m3u
Playlists created using the “WINAMP” software have a playlist file extension (.m3u).

Menu
A list of options shown on the display; choices are selected touching the display.

MP3
MP3 is short for MPEG Audio Layer 3. It is an audio compression standard set by a working group (MPEG) of the ISO (International Standards Organization). MP3 is able to compress audio data to about 1/10th the level of a conventional disc.

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 on CD-R, etc. at the time required for a file, just as is done with files on floppy or hard discs.

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 green on the map.

Tracking
Marks on the map indicating the route you have traveled.

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 a recorded voice while in guidance mode.

WAV
WAV is short for waveform. It is a standard audio file format for Windows®.

Way Point
A location that you choose to visit before your destination; a journey can be built up from multiple way points and the destination.

WMA
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. Microsoft, Windows Media, and the Windows logo are trademarks, or registered trademarks of Microsoft Corporation in the United States and/or other countries.
Appendix

Display Information

*1: If you touch "Restore Factory Settings", the registered POI Shortcuts return to the default or factory settings.
*2: If you touch "Restore Factory Settings", the setting value return to the default or factory settings.

Main menu

Destination

- Address Search ➔ P. 20
- Return Home ➔ P. 37, 47
- Go to ➔ P. 37, 47
- POI Search ➔ P. 35
- Vicinity Search*1 ➔ P. 36
- Address Book ➔ P. 38, 48
- Destination History ➔ P. 38, 48
- Freeway Search ➔ P. 37
- Telephone Search ➔ P. 37
- Cancel Route ➔ P. 38

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- View Current Route ➔ P. 38, 44
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- Traffic On Route ➔ P. 51
- Traffic Events ➔ P. 50
- Traffic Flow ➔ P. 52
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- My Favorites ➔ P. 56
- Emergency Info ➔ P. 57
- Overlay POI*1 ➔ P. 36
Shortcut menu

- The shortcuts displayed onscreen can be changed. The shortcuts described here are those that can be selected with the system as default setting.
- Items marked with an asterisk (*3) cannot be removed from the shortcut menu.

Changing a shortcut ➔ Page 64
Menu in the Audio Screen

**AUDIO menu**

- **FAD/BAL (BALANCE)**  P. 97
- **EQ**  P. 98
- **EQ MENU**  P. 98
- **EQ-EX**  P. 99
- **LOUDNESS**  P. 99
- **SUB WOOFER (NON FADING)**  P. 99
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- **REAR SP**  P. 100
- **TEL/GUIDE**  P. 101
- **GUIDE VOICE**  P. 102
- **AUTO ANTENNA**  P. 102

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- **AV INPUT**  P. 102
- **CAMERA**  P. 102
- **REAR DISP**  P. 103
- **DIMMER**  P. 103
### NAVI/AV

#### FUNCTION menu

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  - RANDOM [P. 75]
  - SCAN [P. 75]
  - COMP [P. 75]
  - SEARCH MODE [P. 75]

**RADIO**
- **FUNCTION RADIO**
  - BSM [P. 77]
  - LOCAL [P. 77]

**XM (GEX-P10XMT)**
- **FUNCTION XM**
  - MEMO [P. 86]

**SIRIUS**
- **FUNCTION SIRIUS**
  - FUNCTION 1 [P. 89]
  - FUNCTION 2 [P. 89]

**TV**
- **FUNCTION TV**
  - BSSM [P. 91]

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- **FUNCTION S-DVD, M-DVD**
  - REPEAT [P. 93]
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  - SCAN [P. 93]
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- **FUNCTION M-CD**
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