Pioneer *sound.vision.soul*

Operation Manual

HDD MULTIMEDIA AV NAVIGATION SERVER

AVIC-Z3

Notice to all users:
This software requires that the navigation system is properly connected to your vehicle's parking brake and depending on your vehicle, additional installation may be required. For more information, please contact your Authorized Pioneer Electronics retailer or call us at (800) 421-1404.

English

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

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Manual Overview

This manual provides 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.

Chapter 12 to Chapter 17 describe how to operate the AV functions. Please read these chapters when you use a disc in the built-in DVD drive or operate the Pioneer audio equipment connected to the navigation system.

How to use this manual

Be sure to read the following descriptions

- **License Agreement (➲ Refer to *License Agreement* on page 11)**
  This provides a license agreement of this software. Be sure to read this before using the software.
- **About the Data for the Map Database (➲ Refer to *About the Data for the Map Database* on page 18)**
  This provides the date when the Map Database was recorded.
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- **About Gracenote® (➲ Refer to *About Gracenote®* on page 19)**
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Finding the operation procedure from what you want to do

When you have decided what you want to do, you can find the page you need from the "**Contents**".

Finding the operation procedure from a menu name

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

Glossary

See the glossary to find the meaning of a term.

Index

The section at the end of this manual provides an index. See each term to find the main pages where it is stated.

Overview for each chapter

② **Before Using the System**
  For safety reasons, it is particularly important that you fully understand your navigation system before using it. Be sure to read this chapter.

③ **Basic Operation**
  Please read this section if you want to operate the navigation system immediately. It will explain the basics of this system.
  This section describes the basic operations for navigation.

④ **How to Read the Map Display**
  This section describes how to read the map screen, and the method of changing map view or map scale.

⑤ **Modifying Map Configurations**
  The behavior of your navigation system depends on the map display and guidance settings. If you need to change any of the current settings, read the relevant section of this chapter.

⑥ **Setting a Route to Your Destination**
This section describes various ways to search for a destination, edit the current route conditions and operate the route during route guidance.

⑦ **Registering and Editing Locations**
You can register and edit the points on the map. This chapter describes how to register a home location, favorite location or other location, and how to edit the entry in "Address Book".

⑧ **Using Traffic Information**
When Pioneer XM satellite radio tuner (GEX-P10XMT) is connected to the navigation system, the system can acquire traffic information and perform navigation using the traffic information. This chapter describes ways of viewing traffic icons that are displayed on the map and operation related traffic information.

⑨ **Using XM Tuner and Other Information**
When Pioneer XM satellite radio tuner (GEX-P10XMT) is connected to the navigation system, variety of information other than traffic can be acquired. The navigation system can also register emergency information. This chapter describes ways of the information acquired with XM satellite radio, registration of emergency information.

⑩ **Using Hands-free Phoning**
When you are using a cellular phone featuring Bluetooth® technology by connecting the Bluetooth unit (sold separately) to the navigation system, you can operate your cellular phone hands-free. This chapter describes the operations related to hands-free phoning.

⑪ **Modifying the General Settings for Navigation Functions**
The behavior of your navigation system depends a number of general settings for navigation functions. If you need to change any

of the initial settings (default settings), read the relevant section of this chapter.

⑫ **Using the AV Source (Built-in DVD Drive and Radio)**
This section describes how to use DVD-Videos, CDs, MP3, discs and the radio.

⑬ **Using the AV Source (Music Library)**
You can record a music CD to the hard disk drive in the navigation system. This chapter describes recording music and playing back the recorded music.

⑭ **Using the AV Source (XM, SIRIUS)**
This chapter describes the audio source operations that can be used when an XM satellite radio tuner or SiriusConnect universal tuner is connected.

⑮ **Using the AV Source (M-CD, iPod®, TV)**
This chapter describes the audio source operations that can be used when Pioneer audio equipment featuring IP-BUS (Multi-CD player, Interface adapter for iPod, TV tuner) is connected.

⑯ **Using the AV Source (AV, EXT, AUX)**
This chapter describes the audio source operations that can be used when connecting AV equipment with an RCA connector (AV input), future Pioneer devices (external unit), or auxiliary equipment (AUX).

⑰ **Customizing the Audio Setting related with Audio Visual**
Using the audio source, various audio-visual settings are available to suit your tastes. This chapter describes how to change the settings.

⑱ **Operating Your Navigation System with Voice**
This section describes navigation operations, such as searching the destination and performing audio operations by voice.

⑲ **Appendix**
Please read the appendix to learn more about your navigation system and information such as the availability of after-care. Please see "*Display Information*" at the end of this manual to check the details for each item on the menu.

Terminology

Before moving on, take a few minutes to read the following information about the conventions used in this manual. They will help you greatly as you learn how to use your new equipment.
- Hardware buttons on your navigation system are described in **ALL CAPITAL**, **BOLD** lettering:
  e.g.)
  MENU button, **MAP** button.
- Items in the different menus or touch panel keys available on the screen are described in brackets [ ] and **bold**:
  e.g.)
  [**Destination**], [**Settings**].
- Extra information, alternative usages and other notes are presented like this:
  e.g.)
  ❒ Touch panel keys which are not available at this time are grayed out.
- References to sections that describe information related to the current topics are indicated like this:
  e.g.)
  ➲ For details, refer to *Modifying the Route Calculation Conditions* on page 34

About the definition of terminology

"Front Display" and "Rear Display"
In this manual, the screen that is attached to the body of this navigation unit will be referred to as the "Front Display". Any additional optional screen that is purchased for use in con-

junction with this navigation unit will be referred to as the "Rear Display".

"Video image"
"Video image" in this manual indicates the moving image from DVD-Video in the built-in DVD drive or from the equipment that is connected to this system with an AV-BUS or RCA cable, such as a TV tuner or general-purpose AV equipment.

Color difference of the map display between day and night

Night display

The examples in this manual are illustrated using the daytime display. When driving at night, the colors you see may differ from those shown. ■

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Introduction

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Other Precautions

- Part of the data cannot be acquired. The contents of the data in the Gracenote® Database included in the hard disk drive are not 100 % guaranteed.
- The Gracenote® Database included in the hard disk drive contains the titles for the 300 000 most frequently accessed albums worldwide as of August 2007. ◼

Before Using the System

Important Safety Information

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

⚠ 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.
- 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.

❒ 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. Stop using any functions relating to the hands-free phone and 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 set 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 hard disk drive 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 or 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.

❐ Never use headphones while driving. ◉

Additional Safety Information

To ensure safe driving

Parking brake interlock

Certain functions (such as viewing of DVD video and certain touch panel key operations) 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 apply the parking brake. 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 "Video image" that is visible to the driver.

• In some countries or states the viewing of "Video image" on a display inside a vehicle even by persons other than the driver may be illegal. Where such regulations apply, they must be obeyed.

• When applying the parking brake in order to view "Video 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.

⚠ 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 (sold separately) be used.

When you attempt to watch "Video image" while driving, the warning "**Viewing of front seat video source while driving is strictly prohibited.**" will appear on the screen. To watch "Video image" on this display, stop the vehicle in a safe place and apply the parking brake. Please keep the brake pedal pushed down before releasing the parking brake.

Rear view camera and [Rear View] mode

With an optional rear view camera, you are able to use the navigation system as an aid to keep an eye on trailers or to back 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. ◉

Features (Characteristics of this software)

Touch panel key operation

It is possible to operate the navigation functions and the Audio functions by using touch panel keys.

Before Using the System

Variety of view modes

Various types of screen display can be selected for navigation guidance.

Wide variety of facility information for Points of Interest (POI) Search

You can search for your destination from all areas.

- Approximately 12 million POIs are included in the database.
- Some POI information may not be accurate or may become inaccurate through the passage of time. Please contact the POI directly to verify the accuracy of the information about the POI that 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.

❒ This function may not work in certain areas.

Auto CD title and MP3 file listing

Title lists are automatically displayed when a CD or MP3 disc is played. This system provides easy-to-operate audio functions that allow playback simply by selecting an item from the list.

Compatible voice recognition system

Connecting the supplied microphone will enable voice operation for both the navigation and AV functions.

Original image assignment

You can store your own pictures on a CD-R in JPEG format and import original images in this navigation system. These imported images can be set as a background or splash screen, or as a picture in an address book or phone book entry.

Data communication function with XM tuner

If you connect the optional XM tuner (GEX-P10XMT) to the navigation system, you can use traffic information as a part of the navigation function. A separate subscription for XM NavTraffic is required.

In addition, if you subscribe to XM Audio services, you can utilize the XM display which features station logos and category icons, improving your XM Audio experience.

❍ For details, refer to *Using XM NavTraffic Information* on page 65

❍ For more details about "Listening to XM Satellite Radio", refer to *Using the AV Source (XM, SIRIUS)* on page 123

❒ The icon of each broadcast station is contained in the hard disk drive based on the data provided by XM Satellite Radio as of October 2007.
  Any changes made by XM Satellite Radio in the lineup or icon of the broadcast station in the future may not be supported by the navigation system, and may cause the unit to display incorrect icons.

⚠ CAUTION

Rear View is to use the navigation system as an aid to keep an eye on the trailers, or while backing up. Do not use this function for entertainment purposes.

Before Using the System

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, or if there is a time lag between the time when 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 display all of the available data.

❒ The information content depends on the information provided by XM NavTraffic Service, including data refreshing 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 updates.

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

Notes for Hard Disk Drive

Recording equipment and copyright

Recording equipment should be used only for lawful copying and you are advised to check carefully what defines lawful copying in the country in which you are making a copy. Copying of copyright material such as films or music is unlawful unless permitted by a legal exception or consented to by the right owners.

Notes when writing data to the hard disk drive at low temperature

Writing to the hard disk drive, such as recording music to the music library, may be disabled when the navigation system detects abnormally low temperatures inside the vehicle. Functionality will become available once the temperature inside the vehicle returns to normal. Additionally, if the low temperature continues for a long time, the system may be booted up with the preliminary mode because the system can not recognize the hard disk drive.

➲ For details, refer to *When the Hard Disk Drive is Disconnected* on page 197

Points about recording

❒ Pioneer does not compensate for the contents that could not be recorded or any loss of recorded data due to a malfunction or failure of the navigation system.

❒ The data recorded on the navigation system is not allowed to be used without permission from its right holder under copyright law, except for personal entertainment.

❒ Make sure to check the recording operation before recording and check the recorded contents after recording.

❒ Recording is not guaranteed for all CDs.

Data saved or recorded by the customer

❒ The data saved or recorded onto this navigation system by the customer cannot be extracted from the navigation system, and those services cannot be accepted.

❒ The data saved or recorded onto this navigation system by the customer cannot be guaranteed during repair or service. Lost data that was saved or recorded by the customer is not guaranteed.

❒ Due to copyrights, the music data recorded into the Music Library cannot be backed up during repair or service.

Failure to operate

Should the navigation system fail to operate properly, contact your dealer or 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 DIVISION
  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
  905-479-4411

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

■

Visit Our Web site

Visit us at the following site:

http://www.pioneerelectronics.com

In Canada

http://www.pioneerelectronics.ca

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. ■

Flow from Startup to Termination

At first, please confirm the positions of the following features using the "Hardware Manual".
• **MAP** button
• **MENU** button
• **AV** button
• **OPEN CLOSE** button

1   Start the engine to boot up the system.
After a short pause, the navigation splash screen comes on for a few seconds.

● ●

■ When you use the navigation system for the first time, [**Regional Settings**] screen appears. On [**Regional Settings**] screen, you can change the language or time. (The settings can also be changed afterward.)
➲ For details, refer to *Customizing the Regional Settings* on page 88

● ●

2   Check the details of the caution message and touch [OK].
You can operate the navigation system by touching keys displayed on the screen. The map of your surroundings is displayed. If the route is already set, the screen changes to route guidance mode.
➲ For details, refer to *Switching the view mode* on page 38
➲ For details, refer to *Setting the time difference* on page 89
    ❒ To protect the LCD screen from damage, be sure to touch the touch panel keys with a finger. (The stylus is supplied for special calibrations. Do not use the stylus for normal operations.)

3   Press MENU button.
This displays the navigation menu.

4   Assign a destination by using the touch panel key and beginning route guidance, or operating the Audio source.

    ❒ Touch panel keys that are not available at this time are inactive.
➲ For more details about "Specifying the address and searching for the destination", refer to *Calculating your destination by using Address Search* on page 28
➲ For more details about "Other search methods", refer to Chapter 6
➲ For more details about "How to use audio source", refer to *Using the AV Source (Built-in DVD Drive and Radio)* on page 97

5   Turn off the vehicle engine to terminate the system.
The navigation system is also turned off.
    ❒ Until your vehicle reaches the vicinity of the destination, the set route will not be deleted even if the engine is turned off. ◢

How to Use Navigation Menu Screens

The basic navigation is performed by using menus.
The navigation menu is divided into four menus: [**Destination**], [**Information**], [**Map**], and [**Settings**].

Displaying the Navigation menu

1   Press MENU button.

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

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

Basic Operation

Navigation menu overview

[Destination] menu

You can search your destination in this menu. You can also check or cancel your set route from this menu.

➲ For more details about "Specifying the address and searching for the destination", refer to *Calculating your destination by using Address Search* on the next page

➲ For more details about "Other search methods", refer to Chapter 6

[Information] menu

Use this menu to check traffic information using the GEX-P10XMT[*1].

If you are using a cellular phone featuring Bluetooth technology by connecting the Bluetooth unit (ND-BT1)[*2] (sold separately) to the navigation system, you can configure Bluetooth settings or check the outgoing/incoming call history. You can also register information for emergencies.

❒ [**Traffic On Route**], [**Traffic Events**], [**Traffic Flow**], [**Stock Info**], [**Set My Favorites**], and [**My Favorites**] can be active only when the GEX-P10XMT[*1] is connected to the navigation system.

❒ [**Phone Menu**] is active only when the Bluetooth unit (ND-BT1)[*2] is connected to the navigation system.

GEX-P10XMT[*1]:

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 is required to receive traffic information on the navigation system.

➲ For details, refer to *Using XM NavTraffic Information* on page 65

➲ For details, refer to **Emergency Info** on page 72

ND-BT1[*2]:

Sold separately. Use for hands-free phoning and business card transfer via Bluetooth technology.

[Map] menu

You can change [**View Mode**], or set the items to be displayed during the navigation function.

❒ [**View Mode**] can be selected only when the vehicle position is at the current position. If you want to select [**View Mode**] while scrolling the map, press **MAP** button to center the current position back on the vehicle position.

[Settings] menu

Customize the navigation functions so they can be used easily.

➲ For details, refer to Chapter 11

Buttons you can use

• •

The availability of a specific button or function is indicated by its appearance. Depending on the status of your vehicle, some buttons will be available, while others will not be.

Active touch panel key: The button is operable.

Inactive touch panel key: The function is not available (e.g., operation is prohibited while driving).

● ●
▪

Basic Navigation

⚠ CAUTION

For safety reasons, you cannot use some of 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 (refer to *To ensure safe driving* on page 22).

Basic flow of operation

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

⬇

2   Press MENU button to display the navigation menu.

⬇

3   Select the method of searching for your destination.

⬇

4   Enter the information about your destination to calculate route.

⬇

5   Confirm the location on the map.

⬇

6   Check and decide the route.

⬇

7   Your navigation system sets the route to your destination, and the map of your surroundings appears.

⬇

8   After releasing the parking brake, drive in accordance with the navigation information, subject to the important safety instructions noted on *Important Safety Information* on page 21 and *Additional Safety Information* on page 22.

Calculating your destination by using Address Search

The most frequently used function is [**Address Search**], in which the address is specified and the destination is searched. This section describes how to use [**Address Search**] and the basics of using the navigation system.

1   Press MENU button to display the navigation menu.

2   Touch [Destination] in the navigation menu.

3   Touch [Address Search].
Select the method for searching the destination.

Basic Operation

4 Touch [State code key] to select the state, province, or territory.
If the destination is in another state, this changes the state setting.

❒ Once the state has been selected, you only have to change states when your destination is outside of the state that you selected.

State code key   Selected state
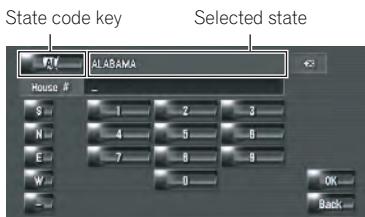
❌:
The input text is deleted one letter at a time from the end of the text. Continuing to touch the button deletes all of the text.
[Back]:
Returns you to the previous screen.

5 Input the house number and touch [OK].
Touch the characters you want to input.

❒ You can also input a prefix to the house number.
❒ Touching [**OK**] with no input allows you to specify and search for the name of the street, city, or area first.

6 Input the street name.
When the options are narrowed down to six or less, a list of the matching streets automatically appears.
When you enter the same characters that were entered previously, the system automatically displays the characters that follow the entered characters. (Auto fill-in function)

❒ When entering the characters, the system will automatically search the database for all possible options. If there is only one letter that could possibly follow your entry, that letter will automatically be entered.
❒ A list appears if multiple options exist. Select the desired one from the list and proceed to the next step. In rare cases, you may need to input the city name to determine the city.

■ **Operation of state selection screen**
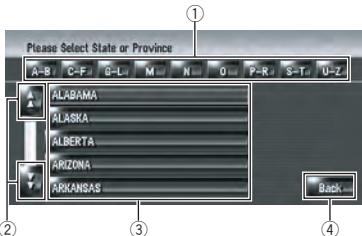
① **[A-B] to [U-Z] :**
Use to jump to the first state, province, or territory that starts with that letter.
② 🔼🔽:
Use to see the next page or previous page of the list.
③ **State list:**
Press one of these items to set it as search area.
④ **[Back]:**
Returns previous screen.

■ **Operation of street name or city name input screen (e.g. QWERTY keyboard)**

① **State code key :**

Jump to the state selection screen. (Selected state code is displayed.)

② **[OK]:**
Confirms the characters displayed in ④, and proceeds to the next step.

③ **[List]:**
Lists candidates based on yellow characters in ④. Touch the desired item item in the list to proceed to the next step.

④ **Text box:**
Displays the characters that are entered.

⑤ **Keyboard:**
Use to enter the text.

⑥ **[Back]:**
Returns previous screen.

⑦ :
Deletes the input text one letter at a time from the end of the text. Continuing to touch the button deletes all of the text.

⑧ **[City]:**
Touch if you want to specify the destination city or area first. (This is available only when ④ is blank.)

⑨ **[Sym.], [0-9]:**
Input text with marks such as [&] or [+] or numbers.
Touch to toggle the selection.

⑩ **[Street]:**
Touch if you want to return the street input mode. (This is available only when ④ is blank.)

⑪ **[Center]:**
This can be selected when you enter a city or area name first. Touch this button to display the central point of the entered city or area. Touching [**OK**] searches the route to the central point.
Proceed to Step 9.

❏ You can customize the keyboard type to be displayed on the screen.
➲ For details, refer to *Customizing the keyboard layout* on page 89

■ **Auto fill-in function**
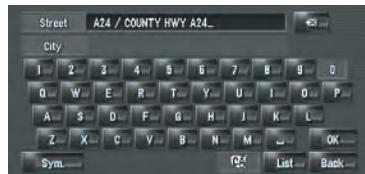
The previously entered characters are stored for each state and each search function. The next time a character is entered, suggested characters will be shown. For example, if [E 220TH ST] has been entered in the past, when you input just the letter [E], [E 220TH ST] will be filled in automatically. The manually input characters are displayed in yellow, and the suggested characters are displayed in white, so you can distinguish them. To confirm the filled-in characters, touch [**OK**].

7   Touch the street from the list.

If the selected street has only one matching location, "Route confirmation screen" appears. Proceed to Step 9.

8   Touch the city or area where your destination is located.

When a route is not set, route calculation starts immediately.
➲ For details, refer to *Checking and modifying the route* on page 32
When a route is already set, "Location confirmation screen" is shown.
➲ For details, refer to **Checking the location on the map** on the next page

Basic Operation

❒ If there is no matching location, the navigation system displays "**The address does not exist. Do you want to continue ?**". When you touch [**Yes**], a place near the specified location appears. In this case, pay attention to the displayed location may not be suitable for your intention. If you want to try again, touch [**No**] to return to the previous screen.

❒ If you did not input the house number in Step 5, the house number input screen appear after this step. You should input the house number now (perform Step 5).

Route calculation starts.

When the route calculation is completed, "Route confirmation screen" appears.

■ **Operation of street list screen**
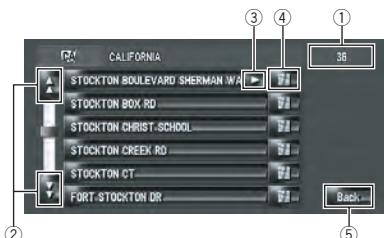
① **Number of possible choices**
② ▲▼ :

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

③ ▶ :
If all of characters cannot be displayed within the displayed area, touching ▶ to the right of the item allows you to see remaining characters.

④ ⧈ :
Touching ⧈ displays a map of the place you have selected. (Possibilities for place names may appear with the list screen.) You can also set a destination by touching ⧈ to the right of the list. Touch [**OK**] to set the location indicated by the scroll cursor as your destination.

⑤ **[Back]:**
Returns previous screen.

■ **Checking the location on the map**

Location confirmation screen

① **Calculating the route to the destination**
Route calculation starts. When the route calculation is completed, "Route confirmation screen" appears.

❒ If you press **MAP** button or **MENU** button during route calculation, the calculation is canceled and the map screen appears.

② **Scrolling the map**
The map display changes to the scroll mode. You can fine-tune the location in the scroll mode, and then you can set the location as your destination or do various operations by using the shortcut menu.
➲ For details, refer to *Shortcut menu* on page 45

③ **Setting the location as a waypoint**
The location indicated by the scroll cursor will be set as a waypoint.

Basic Operation

➲ For details, refer to *Editing Waypoints* on page 36

9   Touch [OK] to decide your route.

Checking and modifying the route

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

Route confirmation screen

① **Route calculation condition**

Shows the route has been calculated under those conditions.

- 🔘 shows that fastest route is prioritized.
- 🔘 shows that shortest route is prioritized.
- 🔘 shows that using highways and main roads are prioritized.
- 🔘🔘 shows whether the suggested route includes freeways.
- 🔘🔘 shows whether the suggested route includes toll roads. The current setting appears.
- 🔘🔘 shows whether the suggested route includes ferries. The current setting appears.
- 🔘🔘 shows whether the suggested route includes learning routes. The current setting appears.

In addition, if the calculated route has unintended results, the following icons will be shown.

- 🔘 shows that freeways could not be avoided.
- 🔘 shows that toll roads could not be avoided when the setting [**Avoid Toll Road**] is [**On**].
- 🔘 shows that ferries could not be avoided when the setting [**Avoid Ferry**] is [**On**].
- 🔘 shows for routes that contain streets or bridges that are subject to traffic regulations during a certain time when the setting [**Time restrictions**] is [**On**].

② **Distance to the destination**

③ **Travel time to destination**

④ **Set the displayed route**

Sets the displayed route as your route, and starts the route guidance.

➲ For details, refer to *When the route guidance starts* on the next page

⑤ **Display multiple routes**

You can select a desired route from multiple route options. Calculated routes are shown in different colors.

Touching 🔘🔘 to 🔘🔘 switch to another route. Touching [**OK**] returns to the previous display. If you set waypoints, you cannot use the multiple route option.

❒ There can be cases that the same route is displayed even when multiple routes are searched.

❒ In multiple route calculations, both routes that use and avoid the freeways are calculated independently of the setting for [**Avoid Freeway**].

⑥ **Change the route calculation condition**

Modify each calculation condition, and recalculate the route.

➲ For details, refer to *Modifying the Route Calculation Conditions* on page 34

⑦ **View the route profile**

You can check the streets that you will travel to reach the destination.
➲ For details, refer to *Checking the passing streets with a list* on page 35

⑧ **Check the shape of route**
You can check the overall shape of your route and the location of destination on the map.
➲ For details, refer to *Checking the entire route overview on the map* on page 36

⑨ **Adding and edit waypoint**
You can add, remove, or sort waypoints.
➲ For details, refer to *Editing Waypoints* on page 36

When the route guidance starts

Touching [**OK**] in "Route confirmation screen" starts the route guidance on the displayed route. 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
— Arrival of waypoint (If waypoints are set)
— Arrival of your destination

❒ Touching 🔊 or 🔇 allows you to turn the voice guidance on or off.

❒ Touching ▶︎0.4m allows you to hear the information again.

❒ 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 you deviate from the route with guidance set to [**Route View**] or [**Guide Mode**] and enter a street not recorded on the hard disk drive, the screen changes to [**Map Mode**]. When you return to the route, the screen returns to the original view and resumes route guidance.

Basic items on the screen

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

➲ For more details about "Details of the map screen", refer to *How to Use the Map* on page 38

① **Current location**
② **Distance to the destination**
③ **Estimated time of arrival (default)**
④ **ON/OFF key for voice guidance** ■

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 navigation menu, then touch [Cancel Route].
A message confirming whether to cancel the current route appears.

2 Touch [Yes].

The current route is deleted, and a map of your surroundings reappears.
On this screen, you can also select the following items:

[Skip]:
Skip the route to the selected waypoint, and recalculate the route. (The skipped waypoint will not be deleted.)

[No]:
Returns to the previous display without deleting the route. ■

Modifying the Route Calculation Conditions

You can modify the conditions for route calcu-
lation and recalculate the current route.

**1   Touch [Destination] in the navigation
menu, and then touch [Route Overview].**
❒ [**Route Overview**] is displayed only when
the route is set.

2   Touch [Options].

**3   Touch the desired items to change the
route calculation conditions and then
touch [OK].**

The route is recalculated, and "Route confir-
mation screen" appears.
When a single route is calculated, the system
searches for the route that meets these condi-
tions as closely as possible.
❒ A single route is calculated in the following
cases:
— When a waypoint is set
— When a route is set through voice recogni-
tion
— When auto reroute is carried out

Items that users can operate

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

Route Condition
This setting controls how the route should be
calculated by taking into account the time or
the distance or the main road.
Determine which condition takes priority for
route calculation.
 [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.
 [Main Road]:
Calculate a route that passes major arterial
road as a priority.

Avoid Toll Road
This setting controls whether toll roads (in-
cluding toll areas) should be taken into ac-
count.
 [Off]*:
Calculate a route that may include toll roads
(including toll areas).
 [On]:
Calculate a route that avoids toll roads (includ-
ing toll areas).
❒ The system may calculate a route that in-
cludes toll road even if [**On**] is selected.

Avoid Ferry
This setting controls whether ferry crossings
should be taken into account.
 [Off]*:
Calculate a route that may include ferries.
 [On]:
Calculate a route that avoids ferries.
❒ The system may calculate a route that in-
cludes ferry way even if [**On**] is selected.

Avoid Freeway
This setting controls whether freeways may be
included in the route calculation.
 [Off]*:

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

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

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

⚠ CAUTION
If the time difference is not set correctly, the navigation system cannot consider traffic regulations correctly. Set the time difference correctly (➲ Refer to *Setting the time difference* on page 89).

Learning Route
The system learns the travel history of your vehicle for each road.
This setting controls whether or not the travel history should be taken into account.
[On]*:
Calculate the route with the travel history taken into account.
[Off]:
Calculate the route without the travel history taken into account.
[Clear]:
Clear the current travel history. ◼

Checking the Current Route
You can check information about the route between your current location and your destination.
You can select two methods:
• Checking the passing streets with a list
• Checking the entire route overview on the map

Checking the passing streets with a list
You can check the route details.
❒ This function is not available if your vehicle has deviated from the route.

1 Touch [Destination] in the navigation menu, and then touch [Route Overview].
"Route confirmation screen" appears.
❒ [**Route Overview**] is displayed only when the route is set.

2 Touch [Profile].

3 Touch ▲ or ▼ to scroll the list.
Scroll the list as necessary.

Names of the streets you are driving through

Turning direction   Driving distance

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 roads. (In this case, the remaining roads will be shown in the list as you drive on.)

Checking the entire route overview on the map

You can check the entire shape of the current route.

1   Touch [Destination] in the navigation menu, and then touch [Route Overview].
"Route confirmation screen" appears.

❒ [**Route Overview**] is displayed only when the route is set.

2   Touch [Detail].

3   Touch the screen and place the scroll cursor on the point where you want to view the detail or the entire picture. Or zoom in or zoom out the map scale.

The map around the scroll cursor is zoomed in or out so you can view the detail or the entire picture.

4   Touch [Back].
The screen returns to the previous display.

❒ You can also check the overview by using the shortcut menu if [**Whole Route Over-**

view] is selected on [**Short-Cut Selection**]. ◼

Editing Waypoints

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

Adding a waypoint

Up to 5 waypoints can be selected, and selected points can be sorted automatically or manually.

1   Touch [Destination] in the navigation menu, and then touch [Route Overview].

2   Touch [Waypoints].
The waypoint menu screen appears.

3   Touch [Add].

The "Select Search Method" screen appears. After searching for a point, display it on a map, then touch [**OK**] to add to the waypoints. (You can add up to 5 waypoints in total.)

4   Touch [OK].
A route is recalculated, and "Route confirmation screen" appears.

➲ For details, refer to *Checking and modifying the route* on page 32

❒ If you set waypoints in the route to your destination, the route up to the next waypoint will appear in light green. The rest of the route will appear in light blue.

Basic Operation

Deleting a waypoint

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

1   Touch [Destination] in the navigation menu, and then touch [Route Overview].

2   Touch [Waypoints].
The waypoint menu screen appears.

3   Touch [Delete], then touch the waypoint you want to delete.
The touched waypoint will be deleted from the list.

4   Touch [OK].
The route is recalculated, and "Route confirmation screen" appears.
➲ For details, refer to *Checking and modifying the route* on page 32

Sorting waypoints

You can sort waypoints and recalculate the route.

1   Touch [Destination] in the navigation menu, and then touch [Route Overview].

2   Touch [Waypoints].
The waypoint menu screen appears.

3   Touch [Sort], then touch [Automatic] or [Manual].

[Automatic]:
You can sort the destination and waypoints automatically. The system will show the nearest waypoint (distance in a straight line) from the current location as waypoint 1, and sort

the other points (including your destination) in order of distance from the waypoint 1.
[Manual]:
You can manually sort destination and waypoints. Touch the destination and waypoints on the left side of the screen in the order you want to visit. The touched destination and waypoints are displayed on the right side of the screen. Touch [**OK**] to complete the sorting and the previous screen appears.

4   Touch [OK].
The route is calculated again, and "Route confirmation screen" appears.
➲ For details, refer to *Checking and modifying the route* on page 32

Skipping a waypoint

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

1   Touch [Destination] in the navigation menu, and then touch [Cancel Route].

2   Touch [Skip].
A new route to your destination through all remaining waypoints, except for the skipped waypoint, is calculated.
"Route confirmation screen" appears.
➲ For details, refer to *Checking and modifying the route* on page 32 ■

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 view mode

There are six types of map display and two additional view modes.

- **Map Mode**
- **Guide Mode** (during route guidance only)
- **Route View** (during route guidance only)
- **Driver's View**
- **2D Twin Map View**
- **3D Twin Map View**
- **Vehicle Dynamics**
- **Rear View** (Only possible when [**Camera Input**] is set to [**On**].)

1   Press MAP button to display a map of the area around your current position.

2   Press MAP button again.

3   Touch the mode name to select the mode you want to display.

❐ You can display the view mode screen by touching [**Map**] in the navigation menu, and touching [**View Mode**].

How to view the map of the current location

❐ This example shows a case where [**Second Maneuver Arrow**] is set to [**View**].

Map Mode
Displays the standard map.
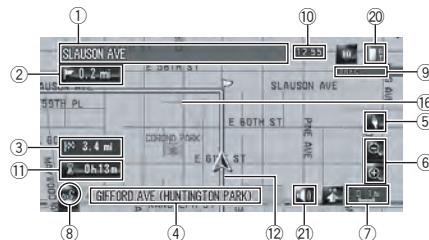
Guide Mode
Overlays two arrows onto the standard map ([**Map Mode**]).
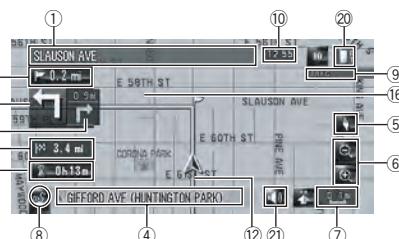
Route View
Displays the name of the street you will travel along next and an arrow indicating the direction of travel.
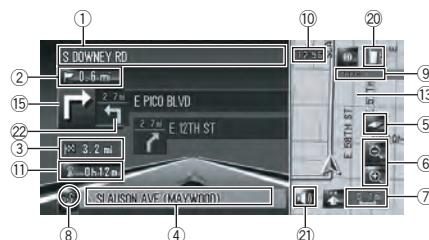
How to Read the Map Display

Driver's View
Shows a map from the driver's viewpoint.
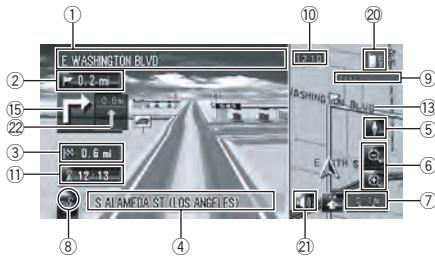
About the 3D POI
Depending on the data, the POI may appear in graphical 3D or plate format with POI mark in the left screen of [**Driver's View**].
❒ The displayed POI in the left screen has no relation with the setting of [**Overlay POI**].

2D Twin Map View
You can split the screen in half. The right screen and the left screen can display a map in different scales. The **2D** map appears on the left screen.
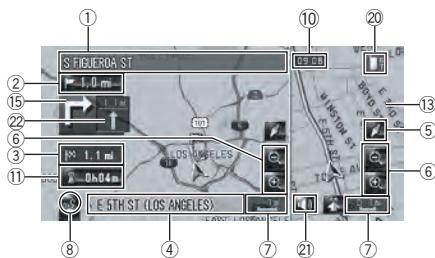
3D Twin Map View
You can split the screen in half. The right screen and the left screen can display a map in different scales. The **3D** map appears on the left screen.
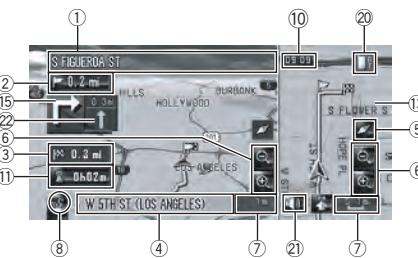
❒ Selects whether to display or hide the 3D Landmark on the map.
➲ For details, refer to **3D Landmark** on page 47

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

⚠ CAUTION
In **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.

❒ You can change the items indicated on the left and right meters.
➲ For details, refer to *Setting the* **Vehicle Dynamics** *Display* on page 76

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.
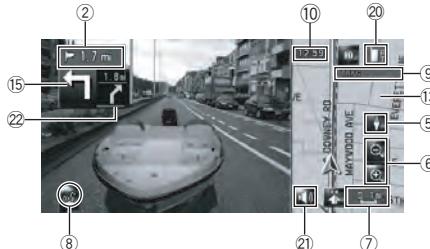
❒ If [**Camera Input**] is set to [**Off**], the rear view image is not displayed. Please set it to [**On**].
➲ For details, refer to *Setting for rear view camera* on page 149

❒ When using a camera set to turn On/Off in conjunction with the reverse 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 lifetime would be affected.

❒ **Rear View** can be displayed at all times (e.g. when monitoring an attached trailer) 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 camera image may not be viewable.

Enlarged map of the intersection

This screen is displayed only when [**Close Up View**] in [**Map**] menu is [**2D**] or [**3D**].

Enlarged map of the intersection (2D)
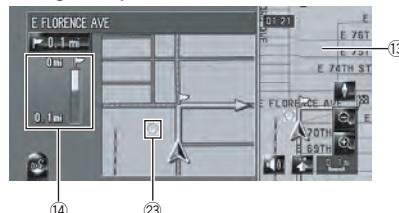
Enlarged map of the intersection (3D)

Display during freeway driving

In certain locations of the freeway, lane information is available, indicating the recommended lane to be in to easily maneuver the next guidance.

While driving on the freeway, freeway exit numbers and freeway signs may be displayed when in the vicinity of interchanges and exits.
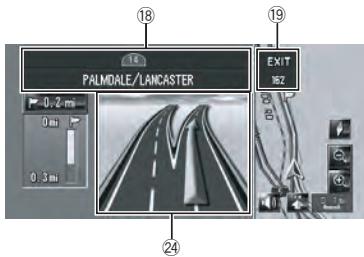
❒ If the data for these items is not contained in the hard disk drive, the information is not available even if there are the signs on the actual road.

City Map

When [**City Map**] in [**Map**] menu is [**On**], in certain metropolitan city areas, a more detailed [**City Map**] is available at the 0.05 mile (50 m) map scale or lower. (The screen changes automatically when you enter certain metropolitan city area.)

❒ The detailed city map may not appear for the following reasons:
— The data for that city area is not contained in the hard disk drive.
— When you are driving on a freeway.

Display items

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

▲ 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.
❒ The head of the triangular mark is the current vehicle position.

Destination*

The checkered flag indicates your destination.

Guidance point*

The next guidance point (next turning point, etc.) is shown by a yellow flag.
Up to the next three guidance points are displayed.

Waypoint*

The checkered flag and number (1 to 5) indicates your waypoint.

① **Name of the street to be used (or next guidance point)***

② **Distance to the guidance point***
Touching ▣▣▣▣ allows you to hear the information again.

③ **Distance to the destination (or distance to waypoint)***
The distance on this button shows the distance to the destination or to each waypoint. If waypoints are set, the distance to the destination and the next waypoint change with each touch.
❒ When the vehicle position is on the route, the distance to the destination (or waypoint) appears. When the vehicle position is not on the route, the linear distance to the destination (or waypoint) appears.

④ **Street name (or city name) that your vehicle is traveling along**

⑤ **Compass**
The red arrow indicates north. If the scale is less than 25 mile (50 km), touching the map changes the direction that it is displayed in (north up/ heading up). When the scale of the map is greater than 25 mile (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.

⑥ **Zoom in/Zoom out**
Touch to change the map's scale.
➲ For details, refer to *Changing the scale of the map* on the next page

⑦ **Map scale**
The scale of the map is indicated by distance.

⑧ **VOICE icon**
Touch to change to the voice recognition mode.
❒ This is displayed only when the microphone for voice recognition is connected.
➲ For details, refer to Chapter 18

⑨ **Traffic status**
This appears when an XM satellite radio tuner (GEX-P10XMT, sold separately) is connected and traffic information is received.
TRFC — No problem.
ANTENNA — Improper antenna connection.
UPDATING — Updating encryption code.
➲ For details, refer to *Checking the Reception Status of the XM Tuner* on page 72

⑩ **Current time**

⑪ **Estimated time of arrival (or travel time to your destination)***
The display alternates by pressing it.
❒ The estimated time of arrival is an ideal value calculated based on the value set for [**Average Speed**] and the actual driving speed. The estimated time of arrival is only a reference value, and does not guarantee arrival at that time.
➲ For details, refer to *Changing the virtual speed of the vehicle* on page 90

⑫ **Tracking dot**
The tracking dot shows the route your vehicle has traveled by white dots.
➲ For more details about "Select the tracking setting", refer to *Setting the Item on the Map Screen* on page 46

⑬ **Map of your surroundings (Side map)**
Touching the screen changes the map to the Scroll mode.

➲ For details, refer to *Scroll the map to the location you want to see* on the next page

⑭ **Distance to a turning point***
Displayed on the enlarged intersection map. The green bar gets shorter as your vehicle approaches a turning point.

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

⑯ **Direction line***
The direction towards your destination (or scroll cursor) is indicated with a straight line.

⑰ **Lane information***
Lane information is displayed the first time there is a voice guidance on your route. The white arrow on the green background indicates the recommended lane. If the next traveling direction screen is displayed when you approach a interchange, junction, or exit, the lane information disappears.

⑱ **Freeway signs***
Show the road number and give directional information.

⑲ **Freeway exit information***
Displays the freeway exit.

⑳ **Bluetooth Connected icon**
This icon shows whether the cellular phone featuring Bluetooth technology is connected or not. You can select between display and non-display.
▯: Connected
▯: Disconnected
❒ This is available only when the Bluetooth unit (sold separately) is connected.
➲ For more details about "Selecting display or non-display for the **Bluetooth Connected** icon", refer to *Setting the Item on the Map Screen* on page 46

㉑ **Mute Voice Guidance icon**
Touch to turn on or off the mute setting of Voice Guidance. You can select between display and non-display.

⮢ For more details about "Selecting display or non-display for the Mute Voice Guidance icon", refer to *Setting the Item on the Map Screen* on page 46

㉒ **Second Maneuver Arrow***
Indicates the turning direction after next. You can select between display and non-display.
⮢ For more details about "Selecting display or non-display for **Second Maneuver Arrow**", refer to *Setting the Item on the Map Screen* on page 46

㉓ **POI icon**
The POI icon may appear on the enlarged map of the intersection (when available data exists).

㉔ **Suggested lane information***
The traveling direction screen is displayed when you approach a interchange, junction, or exit. The suggested lane is indicated with a green arrow.

Roads without turn-by-turn instructions

• •

Routable roads (the route displayed and highlighted in purple) 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 waypoint is available). Please review and obey all local traffic rules along the highlighted route. (For your safety.)

No turn-by-turn directions will be displayed on these roads.

When your vehicle reaches to the entrance of this road, the icon ✕ will be displayed beside the direction arrow, indicating that the guidance is not available with this type of road. The icon ◁ will be indicated for roads that have available guidance.

The Close-up of intersection function, Auto Reroute function, Changing the view to [**Guide Mode**], or [**Route View**] are not available.

• •

Changing the scale of the map
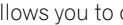
Touching 🔍 or 🔍 allows you to change the map scale. Touch and holding 🔍 or 🔍 allows you to change the scale in smaller step within a range of 25 yards to 1000 miles (25 meters to 2000 kilometers). When the view mode is set to **Map Mode** or **Guide Mode**, "Direct scale key" is displayed. Touching "Direct scale key" changes the map to the selected scale directly.
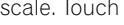
Direct scale key

❑ The icon of the entry in "Address Book" and the traffic information icon are displayed when the map scale is 10 miles (20 km) or lower.

❑ Traffic lines are displayed when the map scale is 2.5 miles (5 km) or lower.

❑ POI icons are displayed when the map scale is 0.75 mile (1 km) or lower.

Scroll the map to the location you want to see

Touching anywhere on the map 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. Pressing **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 quickly.

① **Scroll cursor**
The position of scroll cursor shows the location selected on the current map.
❒ When the scale is 0.25 mile (200 m) or lower, the road appears light blue in the vicinity of the scroll cursor.

② **Direction line**
This is the line connecting between the current location and the scroll cursor.
The direction towards the scroll cursor is indicated with a straight line.

③ **Distance from the current location**
This shows the distance in a straight line between the location indicated by the scroll cursor and your current location.

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

⑤ **Current location key**
Touching ▲ returns you to the map of your current location.

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.)
➲ For more details about "Registering places", refer to *Registering Locations Overview* on page 58
➲ For more details about "Displaying facilities (POI) icon on the map", refer to *Displaying POI on the Map* on page 49
➲ For more details about "Icons for traffic information", refer to *Traffic event icon and line* on page 66
❒ 📞 appears when the Bluetooth unit (sold separately) is connected to the navigation system together with the cellular phone. By touching 📞, you can make a phone call to the displayed phone number.
➲ For details, refer to *Dialing from the map* on page 83

3 Touch [Back].
Returns to the previous display.

4 Touch ▲.
Returns to the map of your surroundings.
❒ You can also return to the map of your surroundings by pressing **MAP** button.

How to Read the Map Display

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 [**Address Book**], faster than using the navigation menu.

You can customize the shortcuts displayed on screen. The shortcuts described here are prepared as the default setting.

➲ For more details about "Changing a shortcut", refer to *Selecting the Shortcut* on page 48

❐ When the Bluetooth unit (sold separately) is connected to the navigation system, you can use shortcuts related to phone functions.

❐ Items marked with an asterisk (*) cannot be removed from Shortcut menu.

● **When the map is displayed, touch .**

Shortcut menu

 : **Route Options***
Displayed when the map is not scrolled. This item can be selected only during route guidance.

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

➲ For details, refer to *Modifying the Route Calculation Conditions* on page 34

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

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

➲ For details, refer to *Registering a Location into "**Address Book**"* on page 59

 : **Vicinity Search**

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

➲ For details, refer to *Finding a POI in the Vicinity* on page 53

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

➲ For details, refer to *Displaying POI on the Map* on page 49

 : **Volume**
Displays [**Volume**].

➲ For more details about "**Volume**", refer to *Setting the Volume for Guidance and Phone* on page 88

 : **Phone Book**
Displays [**Phone Book**].

➲ For details, refer to *Calling a number in the phone book* on page 82

➲ For details, refer to *Editing the entry in "Phone Book"* on page 84

 : **Menu Close**
Hides the Shortcut menu. ■

⚠️ CAUTION

For safety reasons, you cannot use some of these navigation functions while your vehicle is in motion. To enable these functions, you must stop in a safe place and apply the parking brake (refer to *To ensure safe driving* on page 22).

Entering the Map Menu

1   Press MENU button to display the navigation menu.

2   Touch [Map] to display the Map menu.

3   Change the setting.
➲ For more details about "Adjusting each item", refer to Chapter 5
   ❐ This section describes the details of the setting for each item. Settings marked with an asterisk (*) show that these are default or factory settings. ▣

Setting the Item on the Map Screen

1   Touch [Map] in the navigation menu, then touch [Displayed Info].
The Displayed Info screen appears.

On this screen, you can operate the following items.

2   To finish the setting, touch [OK].

Close Up View
You can select the method to display the close up view of the intersection.
   • [**2D**]*:

Displays the close up view with the 2D map.
   • [**3D**]:
Displays the close up view with [**Driver's View**].
   • [**Off**]:
Does not display the close up view.

City Map
You can select whether to display the city map when in certain metropolitan city areas.
   • [**On**]*:
Automatically switches to the city map when in a city map area.
   • [**Off**]:
Does not show the city map.
      ❐ Even if you switch [**City Map**] to [**On**], city map cannot display in areas where there is no city map data.

Tracking Display
You can trace locations that you have already passed with white dots on the route.
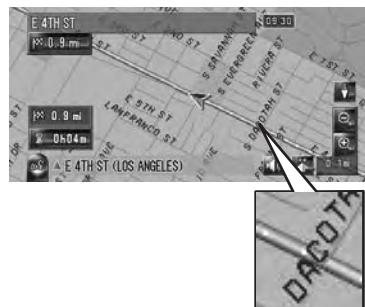
   • [**On (Always)**]:
Displays tracking for all journeys.
   • [**On (This journey)**]:
Displays tracking dots but erases them when the navigation system is turned off (when turning off the engine of your vehicle).
   • [**Off**]*:
Does not display tracking dots.

Show Mute Button
Selects whether to display or hide the voice guidance mute key on the map.

- [**View**]*:
  Displays the voice guidance mute key on the map.
- [**Hide**]:
  Hides the voice guidance mute key on the map.

Show Traffic Incident

Selects whether to display or hide the traffic notification icons on the map when incidents occur on your route.

➲ For details, refer to *Checking traffic information manually* on page 68

- [**View**]*:
  Displays the icons on the map.
- [**Hide**]:
  Hides the icons on the map.
  ❒ The notification icons will not be available when your vehicle deviates from the route.

Second Maneuver Arrow

Selects whether to display or hide the second turn ahead of the vehicle on the map (except for [**Route View**]).

➲ For details, refer to *How to view the map of the current location* on page 38

- [**View**]*:
  Displays the second turn ahead of the vehicle on the map.
- [**Hide**]:
  Hides the second turn ahead of the vehicle on the map.

Bluetooth Connected

Selects whether to display or hide the icon for current status of the phone connection via Bluetooth wireless technology.

- [**View**]*:
  Displays the Bluetooth Connected icon on the map.
- [**Hide**]:

Hides the **Bluetooth Connected** icon on the map.

➲ For more details about "**Bluetooth Connected** icon", refer to *How to view the map of the current location* on page 38

Address Book Icon

You can select whether to display the Address Book Icon on the map.

- [**On**]*:
  Displays the Address Book Icon on the map.
- [**Off**]:
  Hides the Address Book Icon on the map.
  ❒ Even if [**Address Book Icon**] is set to [**Off**], the alarm sounds when you approach the registered location and the set image pops up. To turn off the sound output and image pop up, select [**No Sound**] and [**No Picture**] for the entry.
  ➲ For details, refer to *Editing the entry in "**Address Book**"* on page 60

3D Landmark

You can select whether to display the 3D Landmark on the map.

❒ 3D Landmark only appears when the view mode is [**3D Twin Map View**] and the map scale is set to 0.25 mile (200 m) or lower.

- [**On**]*:
  Displays the 3D Landmark on the map.
- [**Off**]:
  Hides the 3D Landmark on the map. ▪

Modifying Map Configurations

Selecting the Shortcut

Select shortcuts to display on the map screen.
In the list displayed on screen, the items with
red checks are displayed on the map screen.
Touch the shortcut you want to display and
then touch [**OK**] when a red check appears.
You can select up to five shortcuts.

**1   Touch [Map] in the navigation menu,
then touch [Short-Cut Selection].**
The Short-Cut Selection screen appears.

On this screen, you can operate the following
items.

**2   Touch the item that you want to set in
the shortcut menu.**
An item with a red check mark is displayed in
the shortcut menu.
: **Registration***
Register the information on the location indi-
cated by the scroll cursor to the Address book.
➲ For details, refer to *Registering a Location
into "***Address Book***" on page 59*
: **Vicinity Search***
Find POIs (Points Of Interest) in the vicinity of
the scroll cursor.
➲ For details, refer to *Finding a POI in the Vici-
nity on page 53*
: **Overlay POI***
Displays icon for surrounding facilities (POI)
on the map.
➲ For details, refer to *Displaying POI on the
Map on the next page*
: **Volume***
Displays [**Volume**].
➲ For more details about "**Volume**", refer to
Setting the Volume for Guidance and Phone on
page 88
: **Phone Book***

Displays [**Phone Book**].
➲ For details, refer to *Calling a number in the
phone book on page 82*
➲ For details, refer to *Editing the entry in
"Phone Book" on page 84*
: **Dial Favorite 1** to **Dial Favorite 5**
Make a call to the phone number registered in
[**Dial Favorites**].
➲ For details, refer to *Registering a phone
number in "Dial Favorites" on page 84*
: **Whole Route Overview**
Displays the entire route (currently set).
➲ For details, refer to *Checking the entire route
overview on the map on page 36*
: **Stock Info**
Displays stock prices.
➲ For details, refer to *Displaying stock prices
on page 70*
: **Set My Favorites**
Displays the screen of storing browsable item
for XM tuner.
➲ For details, refer to *Storing browsable infor-
mation on page 70*
: **My Favorites**
Displays information on your favorite browsa-
ble item for XM tuner.
➲ For details, refer to *Displaying favorite brow-
sable Information on page 71*
: **Traffic On Route**
Displays a list of traffic information on the
route.
➲ For details, refer to *Confirming traffic infor-
mation on the map on page 66*
: **Traffic Events**
Displays a list of traffic events information.
➲ For details, refer to *Checking all traffic infor-
mation on page 65*
: **Day/Night Display**
Switches **Day/Night Display** setting.
➲ For details, refer to *Setting the Map Color
Change between Day and Night on page 50*
: **Address Book Icon Display**
Switches **Address Book Icon** setting.
➲ For details, refer to *Setting the Item on the
Map Screen on page 46*

3   To finish the setting, touch [OK].

Modifying Map Configurations

Displaying POI on the Map

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

1   Touch [Map] in the navigation menu, then touch [Overlay POI].

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

3   Touch the category you want to display.

4   Touch [Select Detail].

[**Select All**]:
Selects all detailed categories that are included in that category. (E.g. all categories of restaurants including Japanese and fast food.)
[**Deselect All**]:
Deselects the selected category.

5   Touch the desired detailed category.
❐ You can select up to 100 items from the detailed category.

Categories that are already set will have a red check mark.

6   Touch [OK].
Returns previous screen.

7   To finish the selection, touch [OK].
➲ For details, refer to *Viewing the information of a specified location* on page 44 ◨

Viewing the Map Color Legend

You can browse the type of the roads and areas displayed on the map.

1   Touch [Map] in the navigation menu, then touch [Map Legend].

2   Touch the type which you want to see.

3   Touch ▲ or ▼ to switch to the next page or previous page.

On this screen, you can operate the following items.
[**Day**]:
You can check the color of the Day screen.
[**Night**]:
You can check the color of the Night screen.
❐ To return the previous screen, touch [**Back**]. ◨

Changing the View Mode for the Navigation Map

You can change the map display mode.
❐ You cannot perform this operation in "Scroll mode".

1   Touch [Map] in the navigation menu, then touch [View Mode].

2   Touch the type that you want to set.
➲ For details, refer to *How to Use the Map* on page 38◼

Setting the Map Color Change between Day and Night

To improve the visibility of the map during the evening, you can set the timing for changing the combination of the map color.

1   Touch [Map] in the navigation menu.

2   Touch [Day/Night Display] to change the setting.
Each time you touch the key changes that setting.
[**Automatic**]*:
You can change the colors of a map between daytime and nighttime according to whether the vehicle lights are On or Off.
[**Day**]:
The map is always displayed with daytime colors.
❒ To use this function with [**Automatic**], the Orange/white lead of the navigation system must be connected correctly.
❒ You can also change the brightness of the screen between daytime and nighttime with [**Dimmer**].
➲ For details, refer to *Operating the picture adjustment* on page 153◼

Changing the Setting of Navigation Interruption Screen

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

1   Touch [Map] in the navigation menu.

2   Touch [AV Guide Mode] to change the setting.
Each time you touch the key changes that setting.
[**On**]*:
Switches from the audio operation screen to the navigation screen.
[**Off**]:
Does not switch the screen.◼

Changing the Map Color

You can set the map color to bluish or reddish.

1   Touch [Map] in the navigation menu.

2   Touch [Road Color] to change the setting.
Each time you touch the key changes that setting.
[**Blue**]:
Changes to blue based map colors.
[**Red**]*:
Changes to red based map colors.
❒ Check the color change with [**Map Legend**].◼

Setting a Route to Your Destination

⚠ 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 (refer to *To ensure safe driving* on page 22).

❒ Some information on traffic regulations depends on the time when the route calculation is performed. Thus, the information may not correspond with a certain traffic regulation when your vehicle actually passes 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.

Searching for Points of Interest (POI) Statewide

Information about various facilities (Points Of Interest - POI), such as gas stations, amusement parks, or restaurants, is available. By 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 where your destination is located and also by initially specifying the category.

❒ Use the functions [**POI Search**] and [**Vicinity Search**] in different situations. In [**POI Search**], the distance is not limited within the selected state or province, but in [**Vicinity Search**], the distance for the search is limited to within a 16 km (10 miles) radius.

The following three methods are available for searching facilities by POI:

- *Searching for POIs by specifying a category first*
- *Searching for POIs by specifying a city name first*
- *Searching for a POI directly from the name of the facilities*

Searching for a POI directly from the name of the facilities

1   Touch [Destination] in the navigation menu, and then touch [POI Search].

2   Touch the state code key of the destination and select the state or province (or territory).
➲ For more details about "Selecting the state or province where you want to search", refer to *Calculating your destination by using Address Search* on page 28

3   Input the name of the facilities.

[**City**]:
Touch to specify the destination city or area, and then input the city name. (This is available only when [**Name**] is blank.)
[**Category**]:
Touch to specify the POI category. (This is available only when [**Name**] and [**City**] are blank.)
[**List**]:
Lists candidates based on the yellow characters in the text box (suggested characters in white are invalid). Touch the desired facility in the list to proceed to the next step.

❒ When the options are narrowed down to six or less, a list of the matching facilities automatically appears. When you enter the same characters that were entered previously, the system automatically displays the character string that follows the entered characters. (Auto fill-in function)
➲ For details, refer to **Auto fill-in function** on page 30

❒ If less than six POIs in a detailed category are available, the screen for inputting the POI name is skipped.

Please proceed to Step 4.

4   Touch ![Dist.] **.**
Touching ![Dist.] sorts the items in the list in
the order of distance.

![A–Z] :
Sorts the items in the list in the alphabetical
order.
   ❐ You can use this sort function only when
      there are 2 000 or less candidates.

**5   Touch the desired POI for your destina-
tion.**

   ❐ Icons are helpful for quickly telling the cate-
      gory of facilities with the same name.
When the route is not set, route calculation
starts immediately.
➲ For details, refer to *Checking and modifying
the route* on page 32
When the route is already set, "Location confir-
mation screen" is shown.
➲ For details, refer to **Checking the location
on the map** on page 31
   ❐ Touching ![icon] displays a map of the sur-
      roundings of the selected POI.
   ❐ 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 with city

name and street name, touch to set the POI
as your destination.

Searching for POIs by specifying a category first

**1   Touch [Destination] in the navigation
menu, and then touch [POI Search].**

**2   Touch the state code key of the destina-
tion and select the state or province (or ter-
ritory).**
➲ For more details about "Selecting the state
or province where you want to search", refer to
*Calculating your destination by using Address
Search* on page 28

3   Touch [Category].

Category

4   Touch the desired category.

[**Name**]:
Touch if you want to first specify the POI
name.
[**City**]:
Touch if you want to first specify the destina-
tion city or area.
[**Back**]:
Return the **Destination** menu.

5   Touch the detailed category.
If the category is not sub-divided into more de-
tailed categories, the list will not be displayed.

Setting a Route to Your Destination

Proceed to Step 6.

6   Input the name of the facilities.
You can also narrow down the candidates by
specifying the city before the name input.
➲ For more details about "Subsequent Opera-
tions", refer to *Searching for POIs by specifying
a category first* on the previous page

Searching for POIs by specifying a city name first

**1   Touch [Destination] in the navigation
menu, and then touch [POI Search].**

**2   Touch the state code key of the destina-
tion and select the state or province (or ter-
ritory).**
➲ For more details about "Selecting the state
or province where you want to search", refer to
*Calculating your destination by using Address
Search* on page 28

3   Touch [City].

**4   Input the name of the city that has the
facility you want to search for.**

❐ Auto fill-in function is available.
➲ For details, refer to **Auto fill-in function**
on page 30

A list of cities that include the entered charac-
ters appear.
[**List**]:
Lists candidates based on the yellow charac-
ters in the text box (suggested characters in
white are invalid). Touch the desired city in the
list to proceed to the next step.

5   Input the name of the facilities.
You can also narrow down the candidates by
specifying the category before the name input.
➲ For more details about "Subsequent Opera-
tions", refer to *Searching for POIs by specifying
a category first* on the previous page ■

Finding a POI in the Vicinity

Searching for the facilities around the current position

You can search for Points Of Interest in your
surroundings. Use this function to find a POI
to visit during a journey. Searching range is
approximately 10 miles (16 km) square from
the current location.

**1   Touch [Destination] in the navigation
menu, and then touch [Vicinity Search].**
The list of POI categories appears.

2   Touch the desired category.

Category

Previously set categories will have a red check
mark. When only a few types of the detailed
categories are selected, blue check marks will
appear.
[**OK**]:
Start search with the selected category.
[**Back**]:
Returns to the previous screen.
[**Set**]:
Displays the screen for registering POI short-
cuts.
➲ For details, refer to *Registering/deleting POI
Shortcuts* on page 56

❒ If you touch one of the POI shortcuts (e.g.
[$]) before selecting a category on the
list, you can start searching for facilities di-
rectly by the category registered on the POI
shortcut.

❒ If you want to search for facilities by using
both marked category and POI shortcuts,
select some categories in the list and then
touch the POI shortcut to start searching.

3   Touch [Select Detail].

[**Select All**]:
Selects all detailed categories that are in-
cluded in that category. (E.g. all categories of
restaurants including Japanese and fast food.)
[**Deselect All**]:
Deselects the selected categories.

4   Touch the desired detailed category.

Previously set categories will have a red check
mark.

5   Touch [Back].
Returns to the previous screen.

6   Repeat Step 2 to 5 to select a category.
You can select up to 100 items from the de-
tailed categories.

7   Touch [OK].
The POI in the selected category and subcate-
gory are searched.

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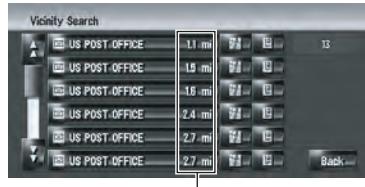
Distance to the facility

**8   Touch the desired POI to set your desti-
nation.**
When the route is not set, route calculation
starts immediately.
➲ For details, refer to *Checking and modifying
the route* on page 32
When the route is already set, "Location confir-
mation screen" is shown.
➲ For details, refer to *Calculating your destina-
tion by using Address Search* on page 28

❒ When you touch [🛰], the POIs around the
specified location are shown on a map.

Searching for the facilities around the scroll cursor

Searching range is approximately 10 miles
(16 km) square from the scroll cursor.
❒ This can be used when **Vicinity Search** is
selected in **Short-Cut Selection**.
➲ For more details about "Changing a
shortcut", refer to *Selecting the Shortcut* on
page 48

**1   Scroll the map and move the scroll cur-
sor to the place where you want to search
for POI.**

2   Touch [🛰].
The shortcut menu appears.

Setting a Route to Your Destination

3   Touch [icon].
For more details about "following operations",
refer to Step 2 of *Searching for the facilities
around the current position* on page 53

❒ The distance indicated in the search result
is the distance from the scroll cursor to the
facility.

❒ The bottom icon is for shortcuts to your fa-
vorite categories. Touching the shortcuts
icon displays a list of the facilities in a cate-
gory.
➲ For details, refer to *Registering/deleting
POI Shortcuts* on the next page

❒ [**Vicinity Search**] in the navigation menu
searches your surroundings. On the other
hand, in the case of [icon] in the Shortcut
menu (➲ Refer to *Shortcut menu* on page
45), the area around the scroll cursor after
the map is scrolled will be searched. ▣

Searching for Your Destination by Specifying the Telephone Number

If you know the telephone number of your des-
tination, you can quickly search for your desti-
nation by specifying the telephone number.

❒ You can also search for the phone number
[**Phone #**] on [**Address Book**].

**1   Touch [Destination] in the navigation
menu, and then touch [Telephone Search].**
The telephone number entry screen appears.

2   Input a telephone number.

When the route is not set, route calculation
starts immediately.

➲ For details, refer to *Checking and modifying
the route* on page 32
When the route is already set, "Location confir-
mation screen" is shown.
➲ For details, refer to *Calculating your destina-
tion by using Address Search* on page 28

❒ If there is more than one place for the num-
ber input, a list of those places is displayed.
Touch the item you want in the list. ▣

Route Calculation to Your Home Location or to Your Favorite Location

If your home location is registered, the route
home can be calculated by touching a single
key from the navigation menu. Also, you can
register one location, such as your workplace,
as your favorite location, and the route is cal-
culated in a similar way.
➲ For details, refer to *Registering your home
and your favorite location* on page 58

● **Touch [Destination] in the navigation
menu, and then touch [Return Home] or
[Go to].**
When the route is not set, route calculation
starts immediately.
➲ For details, refer to *Checking and modifying
the route* on page 32
When the route is already set, "Location confir-
mation screen" is shown.
➲ For details, refer to *Calculating your destina-
tion by using Address Search* on page 28 ▣

Selecting Destination from "Destination History" and "Address Book"

Any place that has been searched before is stored in **Destination History**. Places that you have registered manually, such as your home, are stored in **Address Book**. Simply select the place you want to go to from the list and a route to that place will be calculated.
⊃ For more details about "Operation of the **Address Book**", refer to *Viewing "**Address Book**" on page 60*
⊃ For more details about "Information on **Destination History**", refer to *Operating "**Destination History**" on page 64*

1   Touch [Destination] in the navigation menu, and then touch [Address Book] or [Destination History].

2   Touch your destination name.

When a route is not set, route calculation starts immediately.
⊃ For details, refer to *Checking and modifying the route* on page 32
When a route is already set, "Location confirmation screen" is shown.
⊃ For details, refer to ***Checking the location on the map*** on page 31
   ❒ You can also see the destination by touching 🏠 on the right of the list. ∎

Registering/deleting POI Shortcuts

You can register up to six shortcuts as your favorite POI. You can also change or delete the registered shortcuts.
   ❒ You can register a POI shortcut by touching 🔧 on the Shortcut menu. The steps for re-

gistration and deletion are almost the same as described below.

Registering a POI shortcut

1   Touch [Destination] in the navigation 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 a category.

5   Touch the POI selection method.

[**Select All**]:

Setting a Route to Your Destination

Selects all detailed categories that are in-
cluded in that category. (E.g. all categories of
restaurants including Japanese and fast food.)
[**Select Detail**]:
Selects one of the detailed categories. Touch-
ing a category adds that category to the short-
cuts.

Deleting a POI shortcut

**1   Touch [Destination] in the navigation
menu, and then touch [Vicinity Search].**

2   Touch [Set].

3   Touch [Delete].
Displays a list of already registered POI short-
cuts.

4   Touch the category to be deleted.
A red check appears on the selected shortcut.
[**All**], [**None**]:
A red check will appear or disappear on all re-
gistered categories.

5   Touch [Delete].
Deletes the selected shortcut from the list. ▣

⚠ CAUTION

For safety reasons, you cannot use some of these navigation functions while your vehicle is in motion. To enable these functions, you must stop in a safe place and apply the parking brake (refer to *To ensure safe driving* on page 22).

Registering Locations Overview

Registering places you visit frequently saves time and effort. Also, routes to registered locations can be calculated easily by touching the corresponding touch panel key. This registered location information can also be modified. The registered location appears on the map as an icon.

The registered locations are categorized into the following three types:

- ⬛ : **Home location**:
  Register your home location here. Once your home location is registered, the route to your home can be set by simply touching [**Return Home**] in **Destination** menu. Only one location can be registered.
- ⭐ : **Favorite location**:
  Register a point that you frequently visit (for example, your office) here. Once your favorite location is registered, a route to your favorite location can be set by simply touching [**Go to**] in **Destination** menu. Only one location can be registered.
- 🔍 : (default): **Address Book entry**:
  Register other points you often visit here. Once locations are registered, you can set the route by selecting an item from **Address Book**.

- ❒ The items in **Address Book** are automatically updated in alphabetic order. However, "**Home location**" and "**Favorite location**" always appear at the top (if you registered them).
- ❒ Selects whether to display or hide all of the registered location icons on the map.
  ➲ For details, refer to *Setting the Item on the Map Screen* on page 46 ◼

Registering your home and your favorite location

You can register one home location and one favorite location. 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.

1   Touch [Settings] in the navigation menu, then touch [Defined Locations].

2   Touch [Go to].
When registering your home location, touch [**Home**].

3   Search for a location to register.
You can select a method of location search.

➲ For more details about "Address Search", refer to *Calculating your destination by using Address Search* on page 28
➲ For more details about "Information on searching locations to register", refer to Chapter 6

> ❒ If you select [**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].
The location is registered, and the Edit registered information screen appears.
➲ For details, refer to *Editing the entry in "Address Book"* on page 60

5   Touch [OK].
Completes the registration. ◼

Registering a Location into "Address Book"

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

Registering a location by scroll mode

You can perform the following operation when [**Registration**] is selected in [**Short-Cut Selection**].

1   Scroll to the location you want to register.

2   Display the shortcut menu, and touch ⚏.

The location is registered, and the Edit registered information screen appears.
➲ For details, refer to *Editing the entry in "Address Book"* on the next page

3   Touch [OK].
Completes the registration.

Registering a location by "Address Book"

1   Touch [Destination] in the navigation menu, then touch [Address Book].

2   Touch [Add].

3   Select the search method, search the location, and display the map.

4   When the map of the location you want to register is displayed, touch [OK].

The location is registered, and the Edit registered information screen appears.
➲ For details, refer to *Editing the entry in "Address Book"* on the next page

5   Touch [OK].
Completes the registration.

Viewing "Address Book"

● **Touch [Destination] in the navigation menu, then touch [Address Book].**

① **Home location**:
The item displayed with the 🏠 icon is the home location. Touch to calculate the route.
➲ For details, refer to *Registering your home and your favorite location* on page 58

② **Favorite location**:
The item displayed with the ⭐ icon is the favorite location. Touch to calculate the route.
➲ For details, refer to *Registering your home and your favorite location* on page 58

③ **Address Book entry**:
Touch to calculate the route.

④ 🔲 :
A map of that location can be displayed.
➲ For details, refer to **Checking the location on the map** on page 31

⑤ 🔲 :
The information related to that place can be edited.
➲ For details, refer to *Editing the entry in* "**Address Book**" on this page

⑥ ↓A–Z :
Sorts the items in the list alphabetically.
This is the default sorting order.
❒ Active if there are items in the list and current sort is not alphabetically.

⑦ ↓Dist. :
Sorts the items in the list in order of the distance from the vehicle position.
❒ Active if there are items in the list and current sort is not by distance form current position.

⑧ ↓🕐 :

Sorts the items in the list in order of the recently used items.
❒ Active if there are items in the list and current sort is not by last used.

⑨ [**Add**]:
The screen for selecting the method for registering the location in **Address Book** appears.
➲ For details, refer to *Registering a Location into* "**Address Book**" on the previous page

⑩ [**Delete**]:
Deletes the registered locations.
➲ For details, refer to *Deleting the entry in* "**Address Book**" on page 63

⑪ [**Back**]:
Returns previous screen.

Editing the entry in "Address Book"

In the Address Book menu, touching 🔲 on the right-hand side of the location displays the Edit registered information screen.

1 Touch [Destination] in the navigation menu, then touch [Address Book].

2 Touch 🔲 on the right-hand side of the location that you want to edit the information for.
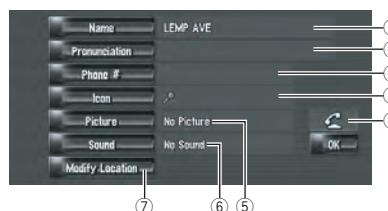
① **Name**
You can enter the desired name.

② **Pronunciation**
You can enter the desired pronunciation independently from the name. The registered pronunciation is used for voice recognition.
❒ If nothing is entered in the text box, you cannot use that item as a voice command.

Registering and Editing Locations

❒ Depending on which language is being switched to, you may not be able to use the registered pronunciation without modification.
➲ For details, refer to *Available Voice Commands* on page 159

③ **Phone #**
The phone number of the registered location. You can dial this number by using ⑧.
❒ You can search by registered telephone number.

④ **Icon**
The symbol displayed on the map and Address Book.
❒ Selects whether to display or hide all of the registered location icons on the map.
➲ For details, refer to *Setting the Item on the Map Screen* on page 46

⑤ **Picture**
As you approach the location, the registered image appears.
You can register the picture stored in the navigation system. You can also import and register a picture shot from a digital camera by using a CD-ROM.

⑥ **Sound**
The selected sound is played when you approach the location.

⑦ **Modify Location**
You can change the registered location by scrolling the map.

⑧ 📞
Only when the Bluetooth unit (sold separately) is connected to the navigation system and a cellular phone featuring Bluetooth technology is also connected, you can make a phone call to the registered phone number ③ by touching 📞.
➲ For details, refer to *Dialing the entry in the Address Book* on page 82

●●●●●●●●●●●●●●●●●●●●●●●●●

When you approach a registered location while traveling

When a location with a registered sound effect and image comes within an approx. 0.19 mile

(300 m) radius from the vehicle position, the sound effect plays and the image appears.

●●●●●●●●●●●●●●●●●●●●●●●●●
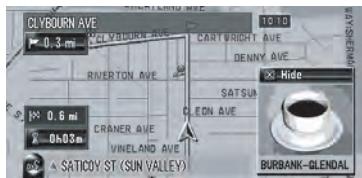
Changing a name

No sounds can be output during 🚗.

1 Touch [Name], then touch [Yes].
The message confirming whether or not to register the entered name as voice command is displayed.
When not registering a name as a voice command, select [**No**].

2 Enter a new name, then touch [OK].

The current name appears in the text box. Delete the current name, and enter a new name between 1 and 23 characters long.
❒ Touch [**Small**] to enter lowercase letters. Touch [**Caps.**] to enter uppercase letters. Touch to toggle the selection.

3 If the pronunciation is suitable, touch [Yes].
The details you set are registered, and the Address Book menu appears.
Alternative options:
[**No**]:
Completes the registration without editing the pronunciation.
[**Repeat**]:

You can reconfirm the pronunciation of the name you entered.

❏ If the pronunciation is not the desired one, edit the characters so that the pronunciation matches your desired pronunciation.

❏ When you confirm the pronunciation, is shown on the left side of the location name displayed in "Address Book menu". This icon indicates that this name can be used as a voice command during voice operation.

❏ You cannot change the name of your home.

Changing a pronunciation

No sounds can be output during.

1   Touch [Pronunciation].

2   Enter a new pronunciation, then touch [OK].
The current pronunciation appears in the text box (if already set). Delete the current pronunciation, and enter a new pronunciation between 1 and 23 characters long.

3   If the pronunciation is suitable, touch [Yes].
The details you set are registered, and the Address Book menu appears.
Alternative options:
[**No**]:
Cancels the editing.
[**Repeat**]:
You can reconfirm the pronunciation of the name you entered.

❏ If the pronunciation is not the desired one, edit the characters so that the pronunciation matches your desired pronunciation.

❏ When you confirm the pronunciation, is shown on the left side of the location name displayed in the Address Book menu. This mark indicates that this name can be used as a voice command during voice operation.

❏ You cannot change the pronunciation of your home.

❏ If nothing is entered in the text box, you cannot use that item as the voice commands.

Entering or changing a phone number

1   Touch [Phone #].

2   Input a phone number, then touch [OK].
The Address Information menu appears.

❏ To change a registered phone number, delete the existing number and then enter a new one.

Selecting an icon to appear on the map

❏ Selects whether to display or hide all of the registered location icons on the map.
➲ For details, refer to *Setting the Item on the Map Screen* on page 46

1   Touch [Icon].

2   Touch the icon that you want to appear on the map.

The Address Information menu appears.

❏ You cannot change the icon of your home and your favorite location.

❏ If you set (dot), the registered name of that entry can be displayed on the map. The registered name does not appear if [**Address Book Icon**] is set to [**Off**].

Registering and Editing Locations

Customizing the picture

Be sure to read "*Limitations for importing pictures*" before creating a CD-R (-RW).
➲ For details, refer to *Limitations for importing pictures* on page 94

You can customize a picture for the Address Book entry. Some pictures are already stored in the hard disk drive, and you can also import JPEG format pictures, such as a picture from your digital camera, by using a CD-R (-RW). You can use pictures by burning them onto a CD-R (-RW) with your PC and inserting it into the navigation system.

Here, a method for changing the picture is described with an example of loading a picture stored on a CD-R (-RW) onto the navigation system.

1   Check that no disc is inserted, and insert your CD-R (-RW) to the disc loading slot.

2   Touch [Picture], and then touch [Import from Disc].
The list of the pictures stored in the CD-R (-RW) is displayed.
❒ Touching an option other than [**Import from Disc**] allows you to select an image stored on the hard disk drive.

3   Touch a picture you want to set.
❒ To cancel displaying the picture, select [**No Picture**].

4   Touch [Yes].
On this screen, you can select the following items:
[**No**]:
Select when you want to change to another picture.
Return to Step 3.

Selecting sound

No sounds can be output during 🖼️.

1   Touch [Sound].

2   Select the desired sound.
❒ To turn off the sound, select [**No Sound**].

3   Touch [Sound] to hear the sound.

4   Touch [Set].

Changing the position of locations

1   Touch [Modify Location].
The map of the selected area and its surroundings appears.

2   Touch the screen to change its position, then touch [OK].

Deleting the entry in "Address Book"

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

1   Touch [Destination] in the navigation menu, then touch [Address Book].

2   Touch [Delete].
"Delete from Address Book" screen appears.

3   Select the location you want to delete.
A check mark appears by the selected location.

On this screen, you can select the following items:

[**All**]:

Selects all entries.

[**None**]:

Displayed when all locations are selected.
Cancels all selected locations.

4   Touch [Delete].

5   Select [Yes].

The data you selected is deleted.
Alternative option:

[**No**]:

Cancels the deletion and returns to Step 4.

❒ Because deleted data cannot be restored, take extra care not to delete by mistake. ◼

Operating "Destination History"

The points to which a route has been calculated in the past are automatically saved in **Destination History**.

❒ If no location is stored in Destination History, you cannot select [**Destination History**]. (If you perform a route calculation, you can select [**Destination History**].)

● **Touch [Destination] in the navigation menu, then touch [Destination History].**

① **Destination history**:
   Touch to calculate the route.
② [**Delete**]:
   Deletes the selected history.
③ [**Back**]:
   Returns to the previous screen.

Deleting the entry in "Destination History"

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

1   Touch [Destination] in the navigation menu, then touch [Destination History].

2   Touch [Delete].

"Delete from History" screen appears.

3   Select the location you want to delete.

A check mark appears by the selected location.

On this screen, you can select the following items:

[**All**]:

Selects all entries.

[**None**]:

Displayed when all locations are selected.
Cancels all selected locations.

4   Touch [Delete].

5   Select [Yes].

The data you selected is deleted.
Alternative option:

[**No**]:

Cancels the deletion and returns to Step 4.

❒ Because deleted data cannot be restored, take extra care not to delete by mistake. ◼

Using Traffic Information

For the list displayed when you touch [**Traffic On Route**], the list will be sorted according to the distance from the vehicle position to the traffic information.

[icon]:
You can sort the traffic information according to the incident.
The list will be sorted in the order of closed/blocked roads, traffic congestion, accidents, road works and others.

Refresh:
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.

⑦ [icon]
Touching [icon] allows you to check the location on a map. (Traffic information without positional information cannot be checked on a map.)

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 [icon] or [icon] 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

All traffic information on the current route (including traffic flow information) is displayed onscreen in a list.

● **Touch [Information] in the navigation 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 traffic flow information on the list

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

● **Touch [Information] in the navigation menu, then touch [Traffic Flow].**
The list with the traffic flow information is shown.

[icon] (mph):
You can sort the traffic information by the average speed.

❒ The other methods for checking the traffic flow information displayed on screen is the same for "*Checking all traffic information*".

Confirming traffic information on the map

❒ A line displayed only when the map scale is 2.5 miles (5 km) or lower.
❒ Icon appears only when the scale on the map is 10 miles (20 km) or lower. If the scale is changed, the icons are resized according to the selected scale.

Traffic event icon and line

The traffic event information displayed on the map is as follows.

Traffic event icon

[icon] [icon] with yellow line:
Stop and go traffic
[icon] with red line:
Stopped traffic

Using Traffic Information

◌ with black line:
Closed/blocked roads
◈ etc.:
For the meaning of the icon, see [**Traffic Settings**] in the Information menu.
➲ For details, refer to *Selecting traffic information to display* on page 69
If you want to check the traffic information details on the map, move the scroll cursor onto an icon such as ◈ and touch ▤. This allows you to view place names and other detail information.

Traffic flow information icon and line

Red, yellow, or green blinking lines may appear on either side of a road. 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. 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:

Traffic flow icon

Red: average speed in this area is between 5 mph to 15 mph (8 km/h to 24 km/h)
Yellow: average speed in this area is between 20 mph to 40 mph (32 km/h to 64 km/h)
Green: average speed in this area is 45 mph (72 km/h) or faster (An icon without a number indicates the average speed of the road is more than 45 mph (72 km/h))
❐ The traffic flow line can be used only when [**Traffic Settings**] is selected.
➲ For details, refer to *Selecting traffic information to display* on page 69
If you want to check the traffic information details at the map, move the scroll cursor onto

an icon such as ⑩ and touch ▤. This allows you to view place names and other detail information.

Setting an alternative route to avoid traffic congestion

The navigation system checks at certain time intervals whether or not there is the traffic information on your route. If the navigation system detects any traffic congestion on your current route, the system tries to find a better route in the background.
❐ Following types of traffic incidents on the route will be checked: stop and go, stopped traffic, and closed/blocked roads.
❐ Traffic flow information is taken into account only when [**Traffic Flow**] in [**Traffic Settings**] is checked.

Checking for traffic congestion automatically

If there is information about traffic congestion on your current route and if an alternative route can be found, the navigation system will recommend a new alternative route automatically. In such a case, the following screen will appear.
❐ There is no action if the system cannot find any traffic congestion information on your route or the system cannot find an alternative.

Difference in distance and travel time between the existing route and new route.

Distance from the current position of your vehicle to the point of entry into the new route.

On this screen, you can select the following items:

New:

The recommended route is displayed on the screen.

Current:

The current route is displayed on the screen.

OK:

The displayed route is set.

❒ When no selection is made, the screen returns to previous screen.

Checking traffic information manually

Touching notification icon on the map screen allows you to check traffic information on your route while icon is displayed. Only if there is any traffic information on your route, notification icon is displayed on the navigation map screen.

❒ The notification icon will not be available when your vehicle deviate from the route.

❒ Traffic flow information is taken into account only when [**Traffic Flow**] in [**Traffic Settings**] is checked.

1   Set [Show Traffic Incident] to [View].

➲ For details, refer to *Setting the Item on the Map Screen* on page 46

2   Press MAP button to display the current location.

The icon appears when the system acquires traffic information on the current route.

3   Touch the icon while the icon is displayed.

Notification icon
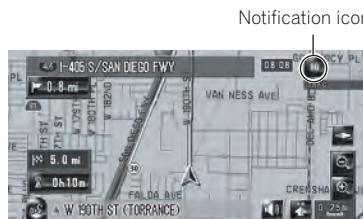
The displayed icon indicates the type of the traffic information.

4   Touch [Detour] to search for an alternative route.

❒ [**Detour**] will be enable only when the system can find "traffic congestion".
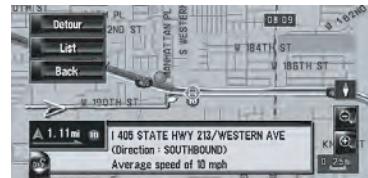
After touching [**Detour**], the route is recalculated taking all traffic congestion on your current route into account.

❒ "Notification icon" shows the nearest traffic information on the route. However, if you touch [**Detour**], the route is recalculated by taking into account not only this information, but also all traffic congestion information on the route.

On this screen, you can select the following items:

[**List**]:

Only three proximate traffic events on your route are listed in this traffic list.

[**Back**]:

The message disappears, and the map display reappears.

For the subsequent operations, see "*Checking for traffic congestion automatically*".

➲ For details, refer to *Checking for traffic congestion automatically* on the previous page

Using Traffic Information

Selecting traffic information to display

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

1   Touch [Information] in the navigation menu, and then touch [Traffic Settings].

2   Touch [Displayed Traffic information].
The names of the displayed traffic information items and a 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.

❒ [**Traffic Flow**] includes not only whether or not to display the icon on the map, but also whether or not to take the flow information into account when rerouting.
❒ Touching [**All** (**None**)] selects or deselects all traffic information.

4   Touch [OK].
The selected traffic information icon is added to the screen.
❒ The following types of traffic congestion cannot be deselected and are always displayed and taken into consideration: stop

and go, stopped traffic, and closed/blocked roads.

5   Touch [OK].▣

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

When an XM tuner (GEX-P10XMT) is connected, you can receive stock prices, sports, and other information, and display it onscreen. You may also register favorite information on the navigation system.

Displaying stock prices

Can display the prices of up to 12 stocks.

● **Touch [Information] in the navigation 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 prices are not real-time values.

Registering stocks to be displayed

1   Touch [Information] in the navigation menu, and then touch [Stock Info].

2   Touch [Add].

3   Input the Ticker text for the stocks you want to display, then touch [OK].

[**0-9**], [**Punc.**], [**Oper.**], [**Sym.**]:

You can switch the upper line to input the number and marks.
Touch to toggle the selection.
   ❒ The method for inputting the text is almost same as for inputting street names.
      ➲ For more details about "Text input method", refer to *Operation of state selection screen* on page 29
   ❒ 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 [Information] in the navigation menu, and then touch [Stock Info].

2   Touch [Delete].

3   Touch the ticker of the stock you want to delete.
A red check appears next to the ticker you touched.
   ❒ To delete all registered stocks, touch [**All**]. Red checks will appear next to all tickers.

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

5   Touch [Yes].

Storing browsable information

XM special contents can be stored as [**My Favorites**] so that it can be accessed without searching every time an update is needed.
   ❒ The displayed items depend on the information that is sent from each station.
   ❒ [**My Favorites**] can store up to 50 items.

Using XM Tuner and Other Information

1 Touch [Information] in the navigation menu, then touch [Set My Favorites].
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.
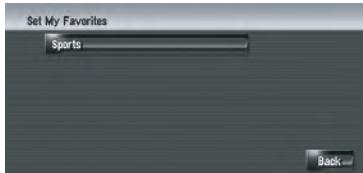
3 Touch an item you wish to store.

If an item is divided into more detail categories, select the one from the list to narrow down the category. After narrowing down, the message confirming whether or not to register the item.

4 Touch [OK].

If the storing step is successful, the confirmation screen will appear.
Touch [**OK**] to complete the storing and return to the previous screen.

Displaying favorite browsable Information

You can check and delete the browsable information you registered.

1 Store the desired item (topic).
➲ For details, refer to *Storing browsable information* on the previous page

2 Touch [Information] in the navigation menu, and then touch [My Favorites].
A list of registered items (topics) appears on the screen.

3 Touch an item to display the contents.

Deleting favorite browsable information

1 Touch [Information] in the navigation menu, and then touch [My Favorites].

2 Touch [Delete].

3 Touch the items you want 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 items.

4   Touch [Delete].

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

Checking the Reception Status of the XM Tuner

The current XM tuner's (GEX-P10XMT) reception status and signal strength appear on screen. (The information that is transmitted via XM DATA cable is displayed in this screen.)

● **Touch [Information] in the navigation menu, and then touch [XM Status].**

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.

❒ If you have subscribed to either XM audio only or XM NavTraffic stand alone, you will see [**Updating**] in [**Status**]. This is because the GEX-P10XMT is constantly checking to see if you have decided to add the other service while your navigation system is turned on. If you subscribe to both services, the appropriate status will be shown in [**Status**]. ▣

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.

Using XM Tuner and Other Information

Checking the information registered as Emergency Info

● Touch [Information] in the navigation menu, and then touch [Emergency Info].
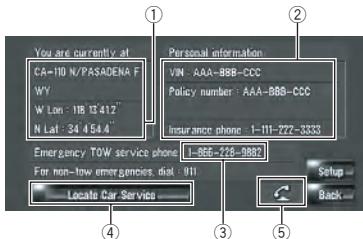
The information registered as **Emergency Info** appears on the screen.

① **You are currently at**:
Your current position is indicated by the street name, 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**:
The phone number of the subscribing Emergency TOW service can be displayed once entered by the user. The default or factory setting is the phone number of the Emergency Roadside Assistance service provided by Signature's Nationwide Auto Club, Inc.

● ●

1 year of free Emergency Roadside Assistance service

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 Signature's Nationwide Auto Club, Inc. at the time you register your navigation system with Pioneer. If you have not signed up for this service with Signature's

Nationwide Auto Club, Inc., or if your free one-year period has expired, you are subject to charges by Signature's Nationwide Auto Club, Inc. You are also subject to charges by Signature's 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 Signature's Nationwide Auto Club, Inc. are determined solely and exclusively by Signature's Nationwide Auto Club, Inc. Please contact Signature's 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.

● ●

❒ The police number is shown as 911 and cannot be changed.

④ **Locate Car Service**
➲ For details, refer to *Searching for car service in an emergency* on the next page

⑤ **Dial each number**
➲ For details, refer to *Dialing the corresponding number in emergency* on the next page

Dialing the corresponding number in emergency

⚠ CAUTION

This function can be valid only when all following conditions are satisfied:

- The Bluetooth unit (sold separately) is connected with navigation system.
- The communication for Hands-free phoning is activate between the cellular phone featuring Bluetooth technology and the navigation system.

1   Touch [Information] in the navigation menu, and then touch [Emergency Info].

2   Touch [📞].
A list of telephone numbers appears onscreen.

3   Touch the phone number you want to dial.
The signal is transmitted to the selected phone number.

Touching [📞] terminates the call.
- ❒ Touch [**Back**] to return to the previous screen.

Searching for car service in an emergency

In an 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 [Information] in the navigation menu, and then touch [Emergency Info].

2   Touch [Locate Car Service].
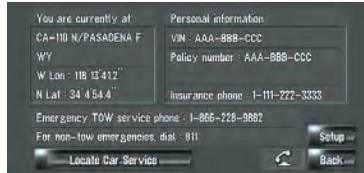
A list of auto services appears onscreen.

3   Touch the Category of the auto service you want to use.

- ❒ The Auto Service categories that can be selected in the **Emergency Info** are: [**Automotive**] and [**Car Dealer**].

4   Touch the selection method.

[**Select All**]:
Selects all detailed categories included in that category. A red check appears next to the selected category.
[**Deselect All**]:
Cancels the selected detailed categories.
[**Select Detail**]:
Selects a detailed category from the list.

❒ If you want to search with more detailed categories, touch [**Select Detail**]. When the subcategory list appears, touch the item and touch [**Back**]. When only a few types of the detailed categories are selected, blue check marks will appear.

5 Repeat Step 3 and 4, select a category, and touch [OK].
The POI in the selected category and detailed category is searched.

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

When the route is not set, route calculation starts immediately.
➲ For details, refer to *Checking and modifying the route* on page 32
When the route is already set, "Location confirmation screen" is shown.
➲ For details, refer to **Checking the location on the map** on page 31

Registering user information

Enter the information written on the vehicle inspection certificate or insurance certificate.

1 Touch [Information] in the navigation menu, and then touch [Emergency Info].

2 Touch [Setup].

3 Touch the desired item to register your information.
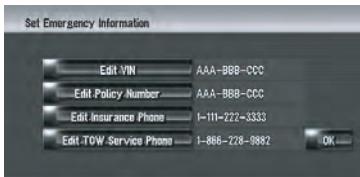
❒ If information is already registered, that information will appear.

4 Input the number you wish to register, then touch [OK].
Completes the registration.

[**Edit VIN**]
Register your Vehicle's Identification Number. (You can enter between 1 and 17 digits.)
[**Edit Policy Number**]
Register your insurance policy number.

[**Edit Insurance Phone**]
Register your insurance company's phone number.
[**Edit TOW Service Phone**]
Register a towing company's phone number.
❒ Touch [**Default**] to restore the default TOW service phone number. ■

Setting the Vehicle Dynamics Display

You can change the contents of the meters 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.

❐ The speed displayed is a guideline and may not correspond to the actual speed.

1 Switch to Vehicle Dynamics Display.
➲ For more details about "Changing the map display mode", refer to *Switching the view mode* on page 38

2 Touch the left or right meter.
Touch panel 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. **+** side represents the rising angle, and **-** side the falling angle.
[**Direction**]:

Displays the direction your vehicle is traveling in.
[**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 on screen 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.■

Using Hands-free Phoning

Hands-free Phoning Overview

⚠ CAUTION

For your safety, avoid talking on the phone as much as possible while driving.

If your cellular phone features Bluetooth® technology, this navigation system can be connected to your cellular phone wirelessly. Using this hands-free function, you can operate the navigation system to make or receive phone calls. You can also transfer the phone book data stored in your cellular phone to the navigation system. This section describes how to set up a Bluetooth connection and how to operate a cellular phone featuring Bluetooth technology on the navigation system.
The following description assumes that the device name of the cellular phone to be connected using Bluetooth wireless technology is set to [**My mobile phone**].

Preparing communication devices

To use the cellular phone featuring Bluetooth wireless technology on the navigation system, the Bluetooth unit (ND-BT1) (sold separately) is required.

Precautions for using a cellular phone featuring Bluetooth technology

By connecting the Bluetooth unit (sold separately), you can use the functions described in this manual, including hands-free phoning or phone book transfer. To use these functions, the cellular phone featuring Bluetooth wireless technology that you want to connect must have a supported profile that is the same as the profile for the Bluetooth unit. For the supported profile, refer to the owner's manual of the Bluetooth unit.

❒ Please read "*Notes for hands-free phoning*" for your reference.

➲ For details, refer to *Notes for hands-free phoning* on page 86

❒ When the power of the navigation system turns off, the Bluetooth connection is also disconnected. When the system restarts, the system automatically attempts to re-connect the Previously connected cellular phone. Even when the connection is cut for some reason, the system automatically re-connects the specified cellular phone (except when the connection is cut by the cellular phone operation).

You can open [**Phone Menu**] directly by pressing and holding **MENU** button.

❒ You can check the signal strength for connection between your cellular phone and Bluetooth unit (sold separately) with [**Connection Status**] in [**Hardware**] Menu.
➲ For more details about "[**Connection Status**]", refer to *Checking the connections of leads and installation positions* on page 90

❒ You can set the voice volume and ring volume with [**Volume**] in [**Settings**] Menu.
➲ For more details about "**Volume**", refer to *Setting the Volume for Guidance and Phone* on page 88
➲ For more details about "[**Volume**]", refer to *Setting the Volume for Guidance and Phone* on page 88

❒ You can set to mute peripheral sounds during hands-free phoning.
➲ For more details about "[**Mute Set**]", refer to *Switching the muting/attenuation timing* on page 150

While your cellular phone featuring Bluetooth wireless technology is connected, ⯑ is displayed on the map.

Using Hands-free Phoning

❒ If you operate using "CD-SR1" Steering Re-
mote Control (sold separately), the follow-
ing buttons can be used for operation:
VR ACTIVATION / OFF HOOK button:
Same function as 📞 on the screen.
(Except for [**Received Calls**] and [**Emergency
Info**].)
VR CANCEL / ON HOOK button:
Same function as 📴 or 📵 on the screen.
PHONE MENU button:
Open [**Phone Menu**] directly.

Setting up for hands-free phoning

Before you can use the hands-free phoning
function, you will need to set up the navigation
system for using that function. This entails re-
gistering your cellular phone with the naviga-
tion system and establishing a Bluetooth
wireless connection between the navigation
system and your cellular phone.

Registering your cellular phone

You need to register your cellular phone featur-
ing Bluetooth wireless technology when you
connect it for the first time. A total of five
phones can be registered. Two registration
methods are available:
• Registration from the navigation system
• Registration from the cellular phone
❒ Once you have registered a phone, you can
select that cellular phone from the list to
connect it without registration.
❒ If you try to register more than five cellular
phones, the system will ask you to select
one of the registered cellular phones to
overwrite.
➲ For details, refer to *Connecting a regis-
tered cellular phone* on the next page
❒ The default device name displayed on the
cellular phone is [**PIONEER HDD NAVI**].
The default password is [**1111**].

Operating from the navigation system

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

**2 Touch [Information] in the navigation
menu, and then touch [Phone Menu].**

3 Touch [Phone Settings].
The phone settings screen appears.

4 Touch [Registration].

5 Touch [Navi].
The system searches for cellular phones with
Bluetooth technology that are waiting for the
connection and displays them in the list.

**6 Wait until your cellular phone appears
in the list.**
❒ If you cannot find the cellular phone you
want to connect, check that the cellular
phone is waiting for the Bluetooth wireless
technology connection.

**7 Select the cellular phone you want to
register from the list.**

**8 Enter the password of the navigation
system to register it using your cellular
phone.**
After the registration is completed, the follow-
ing screen appears.

Using Hands-free Phoning
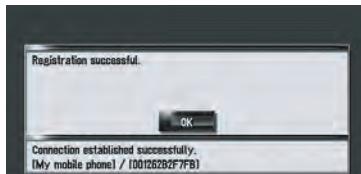
❐ If registration fails, repeat the procedure from the beginning. If a connection still cannot be established, try connecting using your cellular phone.

Operating from your cellular phone

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

2   Touch [Information] in the navigation menu, and then touch [Phone Menu].

3   Touch [Phone Settings].
The phone settings screen appears.

4   Touch [Registration].

5   Touch [Mobile].
The navigation system waits for a Bluetooth wireless technology connection.

6   Operate your cellular phone to register the navigation system.
If your cellular phone asks you to enter a password, enter the password of the navigation system.
After the registration is completed, the following screen appears.

❐ If registration fails repeat the procedure from the beginning.

Connecting a registered cellular phone

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

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

❐ Unregistered cellular phones cannot be connected.

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

2   Touch [Information] in the navigation menu, and then touch [Phone Menu].

3   Touch [Phone Settings].
The phone settings screen appears.

Phone name currently connected or selected as a target of connection

4 Touch [Connection].

5 Touch the name of the cellular phone that you want to connect.
When a connection is successfully established, a connection complete message appears, and the system returns to the phone menu screen.

❐ To cancel the connection to your cellular phone, touch [**Cancel**].

❐ If connection fails, check whether your cellular phone is waiting for a connection. Then repeat the procedure from step 4.

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

1 Touch [Information] in the navigation menu, and then touch [Phone Menu].

2 Touch [Phone Settings].
The phone settings screen appears.

3 Touch [Device Name].

4 Touch any key to enter the name you want to set and then touch [OK].
➲ For details, refer to *Calculating your destination by using Address Search* on page 28

❐ Up to 20 characters can be entered for a device name.

Editing the password
You can change the password to be used for authentication on your cellular phone. (Default is [**1111**].)

1 Touch [Information] in the navigation menu, and then touch [Phone Menu].

2 Touch [Phone Settings].
The phone settings screen appears.

3 Touch [Password].

4 Touch any key to enter the password you want to set and then touch [OK].
➲ For details, refer to *Calculating your destination by using Address Search* on page 28

❐ Four to eight characters can be entered for a password.

Receiving a phone call
You can use the navigation system to receive a call hands-free.
The map screen shows the icon while your cellular phone featuring Bluetooth wireless technology is connected. You can receive a hands-free call only when the cellular phone is connected.

Connecting icon

Answering an incoming call
The system informs you that it is receiving a call by displaying a message and producing a ring sound once.

1 When there is an incoming call, touch ▱.

When there is an incoming call, you can reject the call by touching ▱.

❐ During a call, the ▱ is displayed at the right-hand side of the screen.

Using Hands-free Phoning

2 To end the call, touch ![icon] at the top right of the screen.
The call ends.

❒ If the received voice is too quiet to hear, you can adjust the volume of the received voice.
➲ For more details about "**Volume**", refer to *Setting the Volume for Guidance and Phone* on page 88

❒ Depending on the caller ID service, the phone number of the received call may not be displayed. [**Unknown**] appears instead.

❒ You may hear a noise when you hang up the phone.

Making a phone call

You can make a phone call in many different ways.

Direct dialing

1 Touch [Information] in the navigation menu, and then touch [Phone Menu].

2 Touch [Dial].

3 Input the phone number, and then touch ![icon] to make a call.

To cancel the call after the system starts dialing, touch ![icon].

4 To end the call, touch ![icon] at the top right of the screen.

Dialing from the dialed number history or the received call history

1 Touch [Information] in the navigation menu, and then touch [Phone Menu].

2 Touch [Dialed Numbers] or [Received Calls].
The list of either one appears.

3 Touch a name or telephone number from the list to make a call.

Date and time of the call dialed or received

To cancel the call after the system starts dialing, touch ![icon].

● ●

When you make a call to the phone number in [**Received Calls**] without "**+**", you can add "**+**" in front of that number by touching [**+**]. To delete "**+**", touch [**+**] again in that time.

Touch ![icon] to make a call.

● ●

4 To end the call, touch ![icon] at the top right of the screen.

❒ Up to 30 entries for each of the dialed number and received call histories are recorded automatically. When the number of entries exceeds 30, the entries will be deleted from the oldest one.

❒ You can clear the dialed number or received call history.
➲ For details, refer to *Editing the received call or dialed number history* on page 86

Using Hands-free Phoning

Calling a number in the phone book

After finding the list in the Phone Book you
want to call, you can select the number and
make the call.

❒ Before using this function, you need to
transfer the phone book stored in your cel-
lular phone to the navigation system.

➲ For details, refer to *Transferring the phone
book* on the next page

**1   Touch [Information] in the navigation
menu, and then touch [Phone Menu].**

2   Touch [Phone Book].
The phone book screen appears.

**3   Touch a name from the list to make a
call.**
If you touch an alphabet tab, you can jump to
the first page of the contacts whose names
start with that letter.

Touch the entry in the list to make a call. To
cancel the call after the system starts dialing,
touch ![icon].

**4   To end the call, touch ![icon] at the top
right of the screen.**

Calling a number in "Dial Favorites"

After finding the list in "**Dial Favorites**" you
want to call, you can select the number and
make the call.

❒ Before using this function, you need to set
the phone number from the phone book to
"**Dial Favorites**".

➲ For details, refer to *Registering a phone
number in "Dial Favorites"* on page 84

**1   Touch [Information] in the navigation
menu, and then touch [Phone Menu].**

2   Touch [Dial Favorites].
The "**Dial Favorites**" screen appears.

**3   Touch one of [Favorite 1] to [Favorite 5]
to make a call.**
Touch the entry to make a call.
To cancel the call after the system starts dial-
ing, touch ![icon].

**4   To end the call, touch ![icon] at the top
right of the screen.**

Dialing the entry in the Address Book

You can make a call to the entry registered in
the address book.

❒ You cannot make a call to locations if the
phone number is not registered.

1   Display "Address Book".
➲ For more details about "Operation of the
Address Book", refer to *Viewing "**Address
Book**"* on page 60

2   Touch ![icon] of the entry you want to call.
The detail screen appears.

3   Touch ![icon] to make a call.

To cancel the call after the system starts dial-
ing, touch ![icon].

**4   To end the call, touch ![icon] at the top
right of the screen.**

Dialing a facility's phone number

You can make a call to facilities with phone
number data.

1 Perform [POI Search] or [Vicinity Search] and display the detail information.
➲ For more details about "Operation of [**POI Search**]", refer to *Searching for Points of Interest (POI) Statewide* on page 51
➲ For more details about "Operation of [**Vicinity Search**]", refer to *Finding a POI in the Vicinity* on page 53

2 Touch ▣ of the entry you want to call.
The detail screen appears.

3 Touch ☎ to make a call.

```
Detailed POI Information
PIONEER ELECTRONICS
LONG BEACH,CA
2265 EAST 220TH STREET
310-952-2000
                              ☎
                            Back
```

To cancel the call after the system starts dialing, touch ☎.

4 To end the call, touch ▣ at the top right of the screen.

Dialing from the map

· ·

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

1 Scroll the map, and place the cursor on an icon on the map.

2 Touch ▣.

The detail screen appears.

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

4 To end the call, touch ▣ at the top right of the screen.

· ·

Transferring the phone book

You can transfer the data from the phone book stored in your cellular phone to the phone book stored in the navigation system.
By transferring the phone book to the navigation system, you can browse the data in the transferred phone book on the screen of the navigation system. You can also select the entries in the phone book to make a call from the navigation system or edit the data on the navigation system.
❒ Depending on the cellular phone, "Phone Book" may be called a name such as "Contacts", "Business card" or something else.
❒ The Phone Book can hold a total of 400 entries.
❒ The Hands-free phoning connection is disconnected to establish the connection for phone book transfer. When the phone book is transferred, hands-free phoning is reconnected automatically.
❒ The phone book of this navigation system cannot assign the multiple telephone numbers for one person's name.

1 Connect your cellular phone featuring Bluetooth wireless technology.
➲ For details, refer to *Registering your cellular phone* on page 78

2 Touch [Information] in the navigation menu, and then touch [Phone Menu].

3 Touch [Read Bus. Card].
If there is a phone book already transferred, the following screen appears.
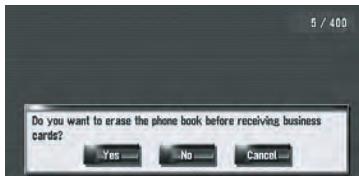
[**Yes**]:
Deletes all phone numbers stored in the
phone book, and then transfers the data.
[**No**]:
Keeps the current entries and then adds new
data to the phone book. (Duplicate data can-
not be consolidated.)
❒ If you want to keep the existing phone book,
select [**No**].

**4   Check that the following screen is dis-
played, and operate your cellular phone to
transfer the phone book entries.**
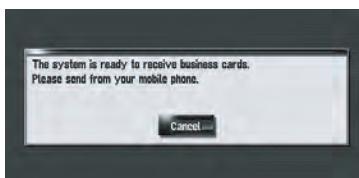
The phone book entries in your cellular phone
are transferred to the navigation system. To
cancel the transfer, touch [**Cancel**].
❒ Only the names and telephone numbers
can be transferred.
❒ The transferred data can be edited on the
navigation system.
➲ For details, refer to *Editing the entry in
"Phone Book"* on this page

Registering a phone number in
"Dial Favorites"

You can register up to five entries into "Dial Fa-
vorites" from the phone book. Registering the
phone numbers that you frequently use in
"Dial Favorites" will ease the dialing operation.
The entries registered in "Dial Favorites" can
be operated from the shortcut menu. You can

also operate them with Voice Recognition to
make a call.

**1   Touch [Information] in the navigation
menu, and then touch [Phone Menu].**

2   Touch [Dial Favorites].

**3   Touch [Set] on any of [Favorite 1] — [Fa-
vorite 5].**

4   Touch the entry you want to register.
The Phone Book Record screen appears.

5   Touch [OK].
The selected entry is registered in the corre-
sponding "Dial Favorites".

Editing the entry in "Phone Book"
You can edit the imported phone book data or
add new data. You can edit [**Name**], [**Pronun-
ciation**], [**Phone #**], or [**Picture**]. You can also
delete unnecessary data.
❒ The data cannot be transferred back to the
cellular phone.

Editing data or adding new data

**1   Touch [Information] in the navigation
menu, and then touch [Phone Menu].**

2   Touch [Phone Book].

3   Touch   or [Add].
The edit screen appears.
❒ To add data by entering it as desired, touch
[**Add**].

4 Select the entry you want to edit.
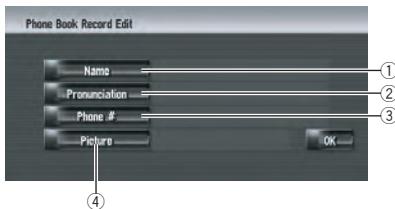
① **Name**

Enter the name to be displayed in the phone book.

For more details about operations, please read the following page.

➲ For details, refer to *Changing a name* on page 61

❒ Up to 40 characters can be input for the name.

② **Pronunciation**

You can enter the desired pronunciation independently from the name. The registered pronunciation is used for voice recognition. For more details about operations, please read the following page.

➲ For details, refer to *Changing a pronunciation* on page 62

❒ Up to 40 characters can be input for the pronunciation.

❒ If nothing is entered in a text box, you cannot use that item as a voice command.

❒ Depending on which language is being switched to, you may not be able to use the registered pronunciation without modification.

➲ For details, refer to *Available Voice Commands* on page 159

③ **Phone #**

Enter the phone number to be displayed in the phone book. Touch [**OK**] to complete the input and return to the previous screen.

❒ Up to 32 characters can be input for the phone number.

❒ The edited names and phone numbers are reflected to the dialed number history and the received call history. How-

ever, they are not reflected to the data registered in [**Dial Favorites**].

④ **Picture**

Sets the image to be displayed when a call is received.

➲ For details, refer to *Customizing the incoming call picture for a phone book entry* on this page

Customizing the incoming call picture for a phone book entry

Be sure to read "*Limitations for importing pictures*" before creating a CD-R (-RW).

➲ For details, refer to *Limitations for importing pictures* on page 94

You can customize a picture for the phone book record. Some pictures are already stored in the hard disk drive, and you can also import JPEG format pictures, such as a picture from your digital camera, by using a CD-R (-RW). You can use pictures by burning them onto a CD-R (-RW) with your PC and insert that into the navigation system.

Here, a method for changing the picture is described with an example of loading a picture stored on a CD-R (-RW) onto the navigation system.

1 Check that no disc is inserted, and insert your CD-R (-RW) to the disc loading slot.

2 Touch [Picture], and then touch [Import from Disc].

The list of the pictures stored in the CD-R (-RW) is displayed.

On this screen, you can select the following item:

[**Back to Original**]:

The picture originally used when the system was purchased is selected.

❒ Touching an option other than [**Import from Disc**] allows you to select a background image stored on the hard disk drive.

3   Touch a picture you want to set.

4   Touch [Yes].
On this screen, you can select the following
items:
[**No**]:
Select when you want to change to another
picture.
Return to Step 3.

Deleting data

**1   Touch [Information] in the navigation
menu, and then touch [Phone Menu].**

2   Touch [Phone Book].

3   Touch [Delete].
The "Delete from Phone Book" screen ap-
pears.

4   Touch the entry you want to delete.
A red check mark appears next to the selected
entry. To cancel the selection, touch the entry
again.

5   Touch [Delete].

6   Touch [Yes].
The data is deleted, and the current location
screen appears.

❐ To cancel the deletion, touch [**No**].

Editing the received call or dialed number history

You can edit the data in the dialed number his-
tory or the received call history. You can edit
them and the edited entries are registered in
the phone book. You can also delete the his-
tory data.

Editing data

**1   Touch [Information] in the navigation
menu, and then touch [Phone Menu].**

**2   Touch [Dialed Numbers] or [Received
Calls].**

3   Touch 🖉.
The edit screen appears. Steps after this are
the same as for editing the phone book.
➲ For details, refer to *Editing the entry in
"Phone Book"* on page 84

❐ The phone number cannot be edited if it is
already registered in the phone book.

Deleting data

**1   Touch [Information] in the navigation
menu, and then touch [Phone Menu].**

**2   Touch [Dialed Numbers] or [Received
Calls].**

3   Touch [Delete].

4   Touch [Yes].
All history data is deleted, and the current lo-
cation screen appears.

❐ To cancel the deletion, touch [**No**].

Notes for hands-free phoning

• •

General notes
• Connection to all cellular phones featuring
Bluetooth wireless technology is not guar-
anteed.
• The line-of-sight distance between this na-
vigation system and your cellular phone
must be 10 meters or less when sending
and receiving voice and data via Bluetooth
technology. However, the transmission dis-
tance may become shorter than the esti-
mated distance, depending on the
environment in use.

Using Hands-free Phoning

- You cannot delete a registered cellular phone. If you need to delete it, refer to "*Returning the Navigation System to the Default or Factory Settings* on page 187" clear [**Phone Settings**] , and delete it together with other functions.
- With some cellular phones, the speakers of the system may not produce a ring sound.
- If private mode is selected on the cellular phone, hands-free phoning may not be performed.

About registration and connection
- Cellular phone operations varies depending on the type of your cellular phone. Refer to the instruction manual that came with your cellular phone for detailed instructions.

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

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

About phone book transfer
- With some cellular phones, it may not be possible to transfer all items in the phone book at one time. In this case, transfer items one at a time from your cellular phone.
- Depending on the cellular phone that is connected to this navigation system via Bluetooth technology, this navigation system cannot display the phone book correctly. (Some characters may be garbled or first name and last name is put in reverse order.)
- If the phone book in the cellular phone contains image data, the phone book may not be transferred correctly. (Image data cannot be transferred from the cellular phone.)
- Depending on the cellular phone, phone book transfer may not be available.

■

Using Hands-free Phoning

⚠ **CAUTION**
For safety reasons, you cannot use some of these navigation functions while your vehicle is in motion. To enable these functions, you must stop in a safe place and apply the parking brake (refer to *To ensure safe driving* on page 22).

Entering Settings Menu

1 Press MENU button to display the navigation menu.

2 Touch [Settings] to display Settings menu.

3 Change the setting.
➲ For more details about "Adjusting each item", refer to Chapter 11 ▣

Setting the Volume for Guidance and Phone

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

1 Touch [Settings] in the navigation menu, then touch [Volume].

2 Touch [+] or [-] to set their volume.
On this screen, you can operate the following items.

[**Guidance**]
This setting controls the guidance volume of navigation.
When set to 🔊, guidance is output. When set to 🔇, no guidance is output.
[**Beep**]

This setting controls the beep tone volume for navigation.
[**Phone Ringtone**]
This setting controls the incoming ring tone volume.
[**Phone Voice**]
This setting controls the incoming voice volume.

❒ **Phone Ringtone** and **Phone Voice** adjustments are related to the cellular phone featuring Bluetooth technology. No adjustment is needed when the cellular phone featuring Bluetooth technology is not connected.
❒ Volume of the audio source is adjusted by **VOL** (▲/▼) button of the navigation system.

3 To finish the setting, touch [OK]. ▣

Customizing the Regional Settings

Changing the language for navigation guidance and menu

You can select the language to be used for the navigation function. (Once you change the language, the system restarts.)

1 Touch [Settings] in the navigation menu, then touch [Regional Settings].

2 Touch [Language].

3 Touch the language that you want to use.
Once you change the language, the system restarts.

❒ Touching [**Back**] returns you to the previous display.

Modifying the General Settings for Navigation Functions

❐ If you select [**English with TTS**], the name of the next street you will pass is announced. If you select [**English without TTS**], the name of the next street you will pass is not announced.

Setting the time difference

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

1   Touch [Settings] in the navigation menu, then touch [Regional Settings].

2   Touch [Time].

3   To set the time difference, touch [+] or [-].
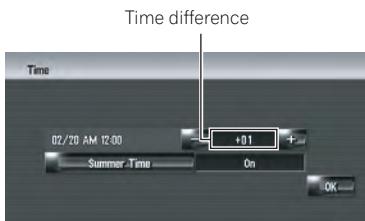
Time difference

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

4   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**].

5   To finish the setting, touch [OK].

Customizing the keyboard layout

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

1   Touch [Settings] in the navigation menu, then touch [Regional Settings].

2   Touch [Keyboard] to select the layout that you want to use.
Each time you touch the key changes that setting.
[**QWERTY**] (default):

[**QWERTZ**]:

[**ABC**]:

[**AZERTY**]:

Changing the unit between km and miles

This setting controls the unit of distance and speed displayed on your navigation system.

1   Touch [Settings] in the navigation menu, then touch [Regional Settings].

2   Touch [km / mile] to change the setting.
Each time you touch the key changes that setting.
[**mile**] (default):
Show distance in miles.
[**Mile&Yard**]:
Show distance in miles and yards.
[**km**]:
Show distance in kilometers.

Changing the virtual speed of the vehicle

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

1   Touch [Settings] in the navigation menu, then touch [Regional Settings].

2   Touch [Average Speed].

3   Touch [+] or [-] to set the speed.

❒ The estimated time of arrival is not necessarily estimated based on this speed value. ■

Checking the Setting Related with Hardware

The hardware 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 the connections of leads and installation positions

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

1   Touch [Settings] in the navigation menu, then touch [Hardware].

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. In such case, please change the installation position of the GPS antenna.

③ **Phone Connection Status**
Indicates the connection status of the Bluetooth unit (sold separately) and the signal strength between the Bluetooth unit and the cellular phone. If the Bluetooth unit is connected correctly, [**OK**] is displayed. [**NOK**] appears when the Bluetooth unit is not connected or incorrectly connected.

④ **Installation Position**

Modifying the General Settings for Navigation Functions

The installation position of the navigation system is shown. That indicates whether the installation position of the navigation system is correct or not. If installed correctly, [**OK**] appears. When the navigation system is installed at an extreme angle exceeding the limitation of the installing angle, [**Incorrect angle**] will be displayed. When the angle of the navigation system has been changed, [**Excessive vibration**] will be displayed.

⑤ **Parking Brake**
When the parking brake is applied, [**On**] is displayed. When the parking brake is released, [**Off**] is displayed.

⑥ **Power Voltage**
The power voltage (reference value) provided from the vehicle battery to the navigation system is shown. If the voltage goes out of the range from 11 V to 15 V, check that power cable connection is correct.

⑦ **Illumination**
When the headlights or small lamps of a vehicle are on, [**On**] is displayed. When the small lamps of a vehicle are off, [**Off**] is displayed. (If the orange/white lead is not connected, [**Off**] appears.)

⑧ **Back Signal**
When the gear lever is shifted to "**R**", the signal switches to [**High**] or [**Low**]. (One of these is displayed depending on the vehicle.)

Checking sensor learning status and driving status

1   Touch [Settings] in the navigation menu, then touch [Hardware].

2   Touch [3D Calibration Status].
The 3D Calibration Status screen appears.

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 for distance (**Distance**), right turn (**Right Turn**), left turn (**Left Turn**) and 3D detection (**3D**) are indicated by the length of bars.
   ❒ When tires have been changed or chains fitted, turning on the Speed Pulse allows the system to detect the fact that the tire diameter has changed, and automatically replaces the value for calculating distance.
   ❒ If ND-PG1 is connected, the distance calculation value cannot be replaced automatically.

⑤ **Speed**
The 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.)

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 that you are currently running 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 [**Yes**].

❒ If you select [**Learning Status**], you can select [**Reset All**] or [**Reset Distance Study**]. To clear all learning statuses, touch [**Reset All**]. To clear only the Distance study, touch [**Reset Distance Study**].

❒ Touch [**Reset All**] for the following cases:
— After changing the installation position of the navigation system
— After changing the installation angle of the navigation system
— After moving the navigation system to another vehicle

❒ When the distance accuracy is low, touch [**Reset Distance Study**].

❒ Touching [**Reset All**] returns the installation angle setting also to the default or factory setting. Reconfigure the setting.

➲ For details, refer to *Correcting the installation angle* on this page

. . . .

❒ The navigation system can automatically use its sensor memory based on the outer dimensions of the tires.

Correcting the installation angle

You can correct the installation angle of the navigation system. Correcting the installation angle improves the accuracy of sensor learning, even if the unit is not facing center. Select the orientation of the LCD panel from the left, center, and right.

1 Touch [Settings] in the navigation menu, then touch [Hardware].

2 Touch [Installation Angle Setup].

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

[**Left**]:
Select this when the angle is 5° or more to the left from the center.
[**Center**] (default):
Select this when the angle is less than 5° to the left and right from the center.
[**Right**]:
Select this when the angle is 5° or more to the right from the center.

❒ If [**Learning Status**] in [**3D Calibration Status**] is [**Simple Hybrid**], the installation angle can be corrected.

Checking the device and version information

1 Touch [Settings] in the navigation menu, then touch [Hardware].

2 Touch [Service Info Screen].

3 Check the device and version information.

Checking the hard disk information

You can check the volume of the hard disk, current used space and remaining space.

❒ The hard disk space (%) means free space of the music library. In some cases, even when about 10 % of free space is left, no more music tracks may be recorded due to system restriction.

1 Touch [Settings] in the navigation menu, then touch [Hardware].

2 Touch [Hard Disk Info].

Hard disk space (%)

■
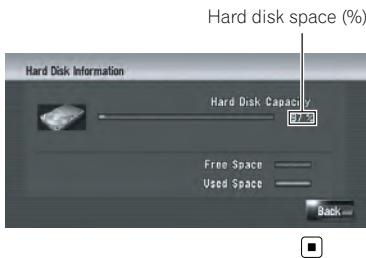
Registering the Home Location and Favorite Location

You can register one home location and one favorite location. 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.

1 Touch [Settings] in the navigation menu, then touch [Defined Locations].

2 Touch [Go to].
When registering your home location, touch [**Home**].

3 Search for a location to register.
You can select a method of location search.

➲ For more details about "Address Search", refer to *Calculating your destination by using Address Search* on page 28

➲ For more details about "Information on searching for locations to register", refer to Chapter 6

❒ If you select [**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].
The location is registered, and the Edit registered information screen appears.
➲ For details, refer to *Editing the entry in "Address Book"* on page 60

5 Touch [OK].
Completes the registration. ■

Changing the Background Picture

Be sure to read "*Limitations for importing pictures*" before creating a CD-R (-RW) and "*Precautions when changing the Splash Screen*".
➲ For details, refer to *Limitations for importing pictures* on the next page
➲ For details, refer to *Precautions when changing the Splash Screen* on page 95

In the menu operation screen, you can customize a picture for the background. Some pictures are already stored in the hard disk drive, and you can also import JPEG format pictures, such as a picture from your digital camera, by using a CD-R (-RW). You can use pictures as background pictures by burning them onto a CD-R (-RW) with your PC and inserting it into the navigation system.
The following types of background pictures can be changed:
• **Splash Screen**: The screen that appears when the Navigation system starts up.
• **Navigation Background**: Background picture of the navigation menu screen.
• **AV Background**: Background picture during the operation of audio source screen.

Modifying the General Settings for Navigation Functions

Here, a method for changing the background picture is described with an example of loading a picture stored on a CD-R (-RW) onto the navigation system as the background picture.

1   Check that no disc is inserted, and insert your CD-R (-RW) to the disc loading slot.

2   Touch [Settings] in the navigation menu, then touch [Background Picture Setting].
The picture selected for each screen is indicated on the right side of [**Splash Screen**], [**Navigation Background**] and [**AV Background**] items.

3   Touch [Splash Screen], [Navigation Background] or [AV Background].

Background Picture
Splash Screen	PIONEER Original
Navigation Background	Original
AV Background	Original

OK

4   Touch [Import from Disc].

Select Picture
Back to Original
Import from Disc
AURORA
CARBON
CITY
DOLPHIN

Back

The list of the pictures stored in the CD-R (-RW) is displayed.
On this screen, you can select the following item:
[**Back to Original**], [**Back to PIONEER Original**]:
The picture originally used when the system was purchased is selected.
❒ Touching an option other than [**Import from Disc**] allows you to select a background image stored on the hard disk drive.

5   Touch a picture you want to set.

6   Touch [OK].

If you touch [**OK**], the background image starts changing. After a short while, the confirmation screen appears.
❒ When the image has a large file size, it takes more time to change the Background Picture. Do not perform other operations until the message "**Updating. Please do not turn off the power.**" disappears.
❒ If you want to change to another picture, touch [**Back**] to return to Step 4.
❒ When the picture starts to change, do not turn off the vehicle engine until the message appears to indicate that the picture has finished changing.

Limitations for importing pictures

When you burn a CD-R (-RW), make sure the total data size of the CD-R (-RW) is greater than 100 MB by storing dummy data or other filler information. Otherwise, the disc may not be recognized by the built-in DVD drive.

❒ You cannot use a CD-R (-RW) containing MP3 files or Audio data (CD-DA part) for importing pictures.
❒ When storing pictures on a CD-R (-RW), create a folder named "**Pictures**" in the CD-R (-RW), and store the picture files in this folder. (Up to 200 picture files can be used in total, including pictures that are already stored in the hard disk drive and pictures in the CD-R (-RW).)

❒ When you burn a CD-R (-RW), limit the number of folder hierarchy levels to eight.

❒ You can only use a CD-R (-RW) finalized with single-session for importing pictures.

❒ You can only use a CD-R (-RW) finalized with "Mode1" for importing pictures.

❒ Only JPEG format (".jpg" or ".JPG") pictures can be used. Progressive format JPEG pictures cannot be used.

❒ Using only the standard Latin characters (alphabets of both cases: A-Z, a-z) and numbers (0-9) is recommended for the file name. If you want to use letters with diacritical marks (such as ä or è) for file name, finalize the CD-R(-RW) with Joliet (Unicode) format.

❒ Pictures up to a maximum of 2 592 x 1 944 pixels can be used. We cannot guarantee proper operation for a picture bigger than this size.

❒ After changing a set image that was imported from a CD-R (-RW), you must use the CD-R (-RW) where the image is recorded to restore the previous Splash Screen.

● ●

Precautions when changing the Splash Screen

● ●

The following is the default Splash Screen for the Navigation System.
[**PIONEER Original**]

If an image other than the one shown above is previously set (such as an image from the dealer or other source) and you change the Splash Screen once, you must use the CD-R (-RW) where the image is recorded to restore the previous Splash Screen.

● ●

■

Using the Demonstration Guidance

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**].

1   Touch [Settings] in the navigation menu.

2   Touch [Demo Mode] to change the setting.
Each time you touch the key changes that setting.
[**On**]:
Repeat demo drive.
[**Off**] (default):
Demo Mode is set off. ■

Correcting the Current Location

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

1   Touch [Settings] in the navigation menu, then touch [Modify Current Location].

2   Scroll to the position where you want to set, then touch [OK].

3   Touch the arrow key on the screen to set the direction, then touch [OK]. ■

Restoring the Default Setting

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

1 Touch [Settings] in the navigation menu, then touch [Restore Factory Settings].

2 Touch [Yes] to clear the current setting.
❐ Touch [**No**] to cancel clear the current setting.
⮕ For details, refer to *Returning the Navigation System to the Default or Factory Settings* on page 187 ▣

Using the AV Source (Built-in DVD Drive and Radio)

You can play or use the following sources with the navigation system.
• DVD-Video
• CD
• MP3 disc
• Radio (FM)
• Radio (AM)
• Music Library
➲ For more details about "music library", refer to Chapter 13
This chapter describes how to use the AV source and the basic operation of the AV source.

Basic Operation

Switching the Audio operation screen

● **Press AV button to switch Audio operation screen.**

① **Touch panel keys**
❒ Touch [**Hide**] to hide the touch panel keys. If you touch the screen, the touch panel keys are displayed again.

Selecting a source

Select a source on "AV Source Menu"

1 Press AV button to switch Audio operation screen.

2 Touch the source icon.

Source icon

3 Touch the desired source.

❒ Touch [**OFF**] to turn the source off.
❒ Touch [**REAR SCREEN**] to select the source for "Rear display".
➲ For details, refer to *Selecting the video for "Rear display"* on page 153

Select a source by using AV button

You can press **AV** button to switch the source.

1 Press AV button to switch Audio operation screen.

2 Press AV button to select the desired source.
Press **AV** button repeatedly to switch between the following sources:

Using the AV Source (Built-in DVD Drive and Radio)

Using the AV Source (Built-in DVD Drive and Radio)

[**CD**/**ROM** (MP3)/**DVD**] (built-in DVD drive) — [**LIBRARY**] (Music library) — [**FM**] (FM tuner) — [**AM**] (AM tuner) — [**XM**] (XM tuner) — [**SIRIUS**] (SIRIUS tuner) — [**iPod**] (iPod) — [**M-CD**] (multi-CD) — [**TV**] (television) — [**AV INPUT**] (video input) — [**AUX**] (auxiliary equipment) — [**EXT 1**] (external unit 1) — [**EXT 2**] (external unit 2)

❒ 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 navigation system.
— When no magazine is set in the multi-CD player.
— When [**AUX Input**] is set to [**Off**].
➲ For details, refer to *Switching the auxiliary setting* on page 150
— When [**AV Input**] is not set to [**Video**].
➲ For details, refer to *Setting the video input* on page 150

❒ The term "external unit" refers to future Pioneer devices that are not currently planned for, or devices that allow control of basic functions although they are not fully controlled by the navigation system. Two external units can be controlled by this navigation system. When two external units are connected, the navigation system allocates them to external unit 1 or external unit 2.

❒ When [**Auto ANT**] mode is set to[**Radio**], the vehicle's antenna can be stowed or turned off by following the instructions below.
— Change the source from radio (AM or FM) to another source.
— Turn the source off.
— Turn off the ignition switch (ACC OFF).
If [**Auto ANT**] mode is set to [**Power**], the vehicle's antenna can be stowed or turned off only when the ACC is set to "OFF".
➲ For more details about "[**Auto ANT**]", refer to *Switching the auto antenna setting* on page 151

About Steering Remote Control

• •

❒ When using "CD-SR1" Steering Remote Control (sold separately), the following buttons can be used for operation:

PHONE MENU **button**
Switches to Phone menu when Bluetooth unit (sold separately) is connected.

VR ACTIVATION / OFF HOOK **button**
Press to accept the call when there is an incoming call.
In other situations, press to start the voice operation.

VR CANCEL / ON HOOK **button**
Press to reject a call when there is an incoming call.
Press to hang up the phone during talking on the phone.
In voice operation, return to the previous screen.

▲ ▼ **button:**
Same function as **P.LIST** (▲/▼) button.

◄ ► **button:**
Same function as **TRK** (◄/►) button.

+, – **button:**
Same function as **VOL** (▼/▲) button.

BAND **button:**
Same function as [**Band**] touch panel key.

SOURCE **button:**
Same function as **AV** button.

• •

Viewing the audio operation screen and displaying the Audio Settings menu

Normal screen (e.g. CD)
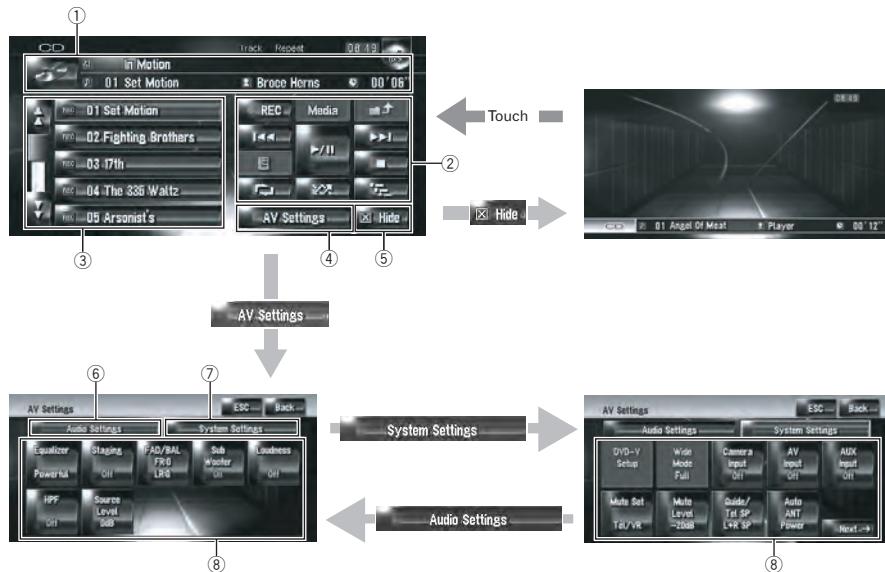
① **Information plate**
Displays the information (e.g. track title) about the source being played.
② **Touch panel keys**
Touch to operate the source being played.
③ **Detailed information**
Displays the detailed information about the source being played.
④ **AV Settings key**
Displays the **AV Settings** menu.
⑤ **Hide key**
Touch [**Hide**] to hide the touch panel keys and detailed information. If you touch the screen, they are displayed again.
⑥ **Audio Settings tab**
Switches the setting items to those for **Audio Settings**.
⑦ **System Settings tab**
Switches the setting items to those for **System Settings**.
⑧ **Setting Items**
➲ For details, refer to *Customizing the Audio Setting related with Audio Visual* on page 142 ◘

Operating a Music CD

You can play a normal music CD using the built-in DVD drive of the navigation unit. This section describes that operations.

Selecting [CD] as the source

● **Press OPEN CLOSE button and insert a disc you want to play to disc loading slot.**
The source changes and then playback will start.

❒ If the disc is already set, touch the source icon and then touch [**CD**].
➲ For details, refer to *Selecting a source* on page 97

❒ When being read in, **Checking disc** is displayed.

About auto hard disk recording

The Navigation system can record the tracks from a music CD into the hard disk drive. In default setting, the system starts recording automatically when an unrecorded music CD is inserted.

If you want to cancel the recording, touch [**Stop**].

Stop
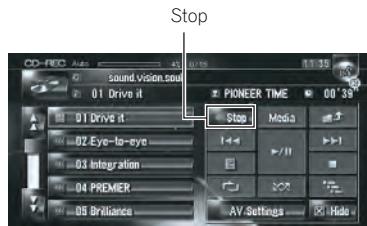
➲ For more details about "Setting the hard disk recording mode", refer to *Setting the CD recording mode* on page 152
➲ For details, refer to *Music Library Recording* on page 110
➲ For details, refer to *Music Library Play* on page 112
❒ Also see at "Handling and Care of the Disc" in the hardware manual and "*Detail Information for Playable Media* on page 199" for more cautions about handling each type of media.

Screen configuration
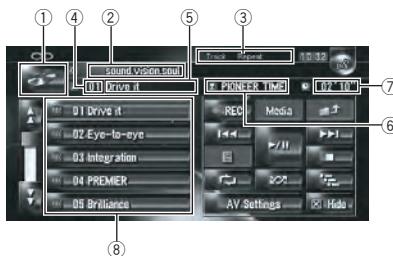
① **Source icon**
   Shows which source has been selected.
② **Disc title indicator**
   Shows the title of the disc currently playing. (when available.)
③ **Playback method indicator**

Shows which playback method has been selected.
④ **Track number indicator**
   Shows the number of the track currently playing.
⑤ **Track title indicator**
   Shows the title of the track currently playing. (when available.)
⑥ **Artist name indicator**
   Shows the name of the artist currently playing. (when available.)
⑦ **Play time indicator**
   Shows the elapsed playing time of the current track.
⑧ **Track list**
   Shows tracks of the CD currently playing.

Title display

Music recognition technology and related data are provided by Gracenote®. Gracenote is the industry standard in music recognition technology and related content delivery. For more information visit www.gracenote.com.
❒ Title information will be displayed when the information is found in the Gracenote® Database on the built-in hard disk drive. If you insert a CD-TEXT disc*, the system prioritizes the title information encoded in CD-TEXT disc.
   *: Some discs have text information encoded on the disc during manufacture. These discs may contain such information as the CD title, track title, and artist's name. These discs are called CD-TEXT discs.
❒ When multiple options for the title information are found or no title information exists, [–] is displayed.
❒ The title information displayed on the CD playback screen and the recording screen is synchronized with the one edited in the music library. Once you edit the title information in the music library, the title displayed on each screen will change accordingly.
   ➲ For details, refer to *Editing a playlist or tracks* on page 117
❒ Up to 32 characters can be entered. But the navigation system incorporates proportional font. Therefore, the number of the characters that you can display varies according to the type of character.

❐ If the built-in DVD drive does not operate properly, an error message may be displayed.
➲ For details, refer to *Messages for Audio Functions* on page 184

Touch panel key operation

Touch panel keys
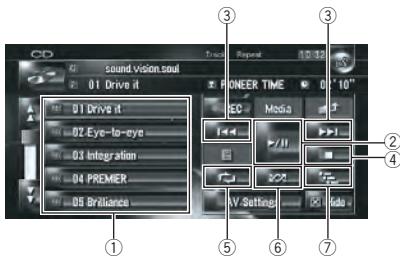
① **Select a desired track from the list**
Touch a desired track to play.

② **Playback and Pause**
Touching ▶/Ⅱ switches between "playback" and "pause".

③ **Touch: Skip the track forward or backward**
Touching ▶▶Ⅰ skips to the start of the next track.
Touching Ⅰ◀◀ once skips to the start of the current track. Touching again will skip to the previous track.
Touch and hold: Fast rewind or forward
Keep touching Ⅰ◀◀ or ▶▶Ⅰ to perform fast rewind or forward.
❐ You can also perform these operations by using **TRK** (◀/▶) button.
❐ Fast rewind is canceled when it reaches the beginning of the first track on the disc.

④ **Stop playback**
When you stop playback by touching ■, that track number on the disc is memorized, enabling playback from that track when you play the disc again.
❐ To play the disc again, touch ▶/Ⅱ.

⑤ **Repeat the current track**
Each touch of 🔁 turns the repeat play on or off.
"**Track Repeat**" is displayed on the playback method indicator during track repeat.

❐ If you perform track search or fast forward or rewind, repeat play is automatically canceled.

⑥ **Play tracks in a random order**
Touching 🔀 turns the random play on or off.

⑦ **Scan tracks of a CD**
Touching 🔂 turns the scan play on or off. Scan play lets you hear the first 10 seconds of each track on the CD. When you find the desired track touch 🔂 to turn scan play off.
❐ After scanning of a CD is finished, normal playback of the tracks will begin again.▣

Operating the CD-ROM (MP3 disc)

You can play an MP3 disc using the built-in DVD drive of the navigation unit. This section describes those operations.

Using the AV Source (Built-in DVD Drive and Radio)

Selecting [ROM] as the source

● **Press OPEN CLOSE button and insert the disc that you want to play into disc loading slot.**
The source changes and then playback will start.

❒ If the disc is already set, touch the source icon and then touch [**ROM**].

➲ For details, refer to *Selecting a source* on page 97

❒ While loading, **Checking disc** is displayed.
❒ Also see "Handling and Care of the Disc" in the hardware manual and "*Detail Information for Playable Media* on page 199" in this manual for more cautions about handling each media.

Screen configuration
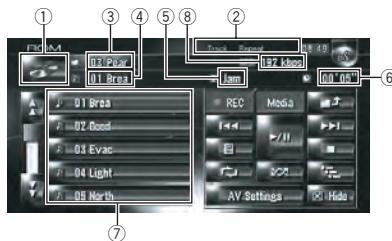
① **Source icon**
Shows which source has been selected.
② **Playback method indicator**
Shows which playback method has been selected.
③ **Folder indicator**
Shows the folder number and folder name currently playing. When an ID3 tag has been encoded on the file, the disc title will be shown instead of the folder name.
④ **Track indicator**
Shows the track number and file name of the track currently playing. When an ID3 tag has been encoded on the file, the track title will be shown instead of the file name.
⑤ **Artist name indicator**

Shows the artist name currently playing only when an ID3 tag has been encoded on the MP3 file.
⑥ **Play time indicator**
Shows the elapsed playing time of the current track.
⑦ **Folder and track list**
Shows contents of the folder currently playing or temporarily displayed.
⑧ **Bit rate**
Shows the bit rate of the file currently playing.

Touch panel key operation

Touch panel keys
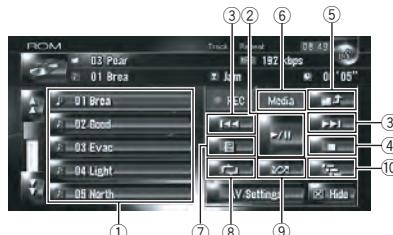
① **Select tracks from the list or viewing contents of the folders**
The list lets you see the list of track titles or folder names on a disc. If you touch a folder on the list, you can view its contents. If you touch a track on the list, you can play the selected track.

❒ Touching █ or █ switches to the next or previous page in the list.
❒ If the selected folder does not contain any track that can be played, the track list is not displayed.
② **Playback and Pause**
Touching ▶/II switches between "playback" and "pause".
③ **Touch: Skip forward or backward**
Touching ▶▶I skips to the start of the next track. Touching I◀◀ once skips to the start of the current track. Touching again will skip to the previous track.
Touch and hold: Fast rewind or forward

Keep touching ◄◄ or ►►I to perform fast rewind or forward.

❒ You can also perform these operations by using **TRK** (◄/►) button.

❒ Fast rewind is canceled when it reaches the beginning of the first track on the disc.

❒ In the case of MP3, there is no sound on fast rewind or forward.

④ **Stop playback**

When you stop playback by touching ■, that track number on the disc is memorized, enabling playback from that track when you play the disc again.

❒ To play the disc again, touch ►/II.

⑤ **Select upper folder**

Touch 📁 to move to the upper folder and play back the first track on that folder. If the folder contain no MP3 files, the contents of that folder are shown.

❒ If the current folder is the ROOT folder, 📁 can not be used.

⑥ **Switch mode between MP3 and music CD (CD-DA)**

When playing discs with MP3 files and audio data (CD-DA) such as CD-EXTRA and MIXED-MODE CDs, both types can be played only by switching mode between MP3 and CD-DA. Touching [**Media**] switches between CD-DA part and MP3 part.

⑦ **Display text information on MP3 disc**

Text information recorded on an MP3 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)*

• **Genre** (genre)*

• **Release Year** (release year)*

❒ The information marked with an asterisk (*) is displayed only when an ID3 tag has been encoded on MP3 files on the disc. If specific information of the ID3 tag has not been encoded on MP3 files

on disc, the corresponding item may be blank.

⑧ **Repeat play**

Each touch of 🔁 changes the settings as follows:

• **Track Repeat** — Repeat just the current track

• **Folder Repeat** — Repeat the folder currently playing

❒ If you select another track or perform fast forward/rewind during **Track Repeat**, the repeat play is canceled.

❒ If you select another folder or perform fast forward/rewind during **Folder Repeat**, the repeat play is canceled. (You can perform track search within that folder with Folder repeat.)

❒ When **Folder Repeat** is selected, it is not possible to play back a subfolder of that folder.

⑨ **Play tracks in random order**

Touching 🔀 switches between playing tracks randomly or sequentially within a selected repeat range.

⑩ **Scan folders and tracks**

Touching 🔍 turns the scan play on or off. Scan play will be performed for the selected repeat range.

❒ In default, the beginning of the first track of each folder will be played for about 10 seconds. When "**Folder Repeat**" is selected for repeat play, the beginning of each track in the selected folder will play for about 10 seconds. When you find the desired track, touch 🔍 to turn scan play off.

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

Notes on playing MP3 disc

❒ When playing discs with MP3 files and audio data (CD-DA) such as CD-EXTRA and MIXED-MODE CDs, both types can be played only by switching mode between MP3 and CD-DA. When playing back the CD-DA part, the operation is the same as for normal music CDs. Likewise, when playing back the MP3 part, the operation is the same as for MP3. Refer to the instructions for each type of media.

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

❒ Playback is carried out in order of file number. Folders are skipped if they contain no MP3 files. (For example, if folder 01 (ROOT) contains no MP3 files, playback commences with folder 02.)

❒ 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 the built-in DVD drive does not operate properly, an error message may be displayed.
➲ For details, refer to *Messages for Audio Functions* on page 184 ◾

Operating the DVD

⚠ CAUTION

For safety reasons, video images cannot be viewed while your vehicle is in motion. To view video images, you must stop in a safe place and put on the parking brake before setting your route (refer to *To ensure safe driving* on page 22).

You can play a DVD-Video using the built-in DVD drive of the navigation system. This section describes operations for DVD-Video.

Selecting [DVD] as the source

● **Press OPEN CLOSE button and insert a disc you want to play to disc loading slot.**
The source changes and then playback will start.

❒ If the disc is already set, touch the source icon and then touch [**DVD**].
➲ For details, refer to *Selecting a source* on page 97

❒ Also see "Handling and Care of the Disc" in the hardware manual and "*Detail Information for Playable Media* on page 199" in this manual for more cautions about handling DVD-Video.

Screen configuration
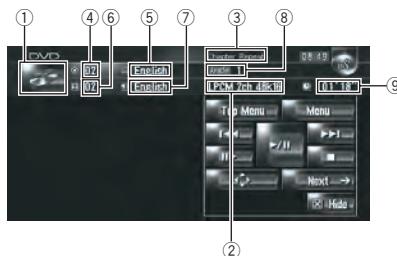
① **Source icon**
Shows which source has been selected.
② **Sound output indicator**
Shows which sound output setting has been selected.
③ **Repeat range indicator**
Shows which repeat range has been selected.
④ **Title number indicator**
Shows the title number currently playing.
⑤ **Subtitle language indicator**
Shows what subtitle language has been selected.
⑥ **Chapter number indicator**
Shows the chapter currently playing.
⑦ **Audio language indicator**
Shows what audio language has been selected.
⑧ **Viewing angle indicator**
Shows what viewing angle has been selected.
⑨ **Play time indicator**
Shows the elapsed playing time of the current chapter.

Using the AV Source (Built-in DVD Drive and Radio)

Touch panel key operation

Playback screen (page1)
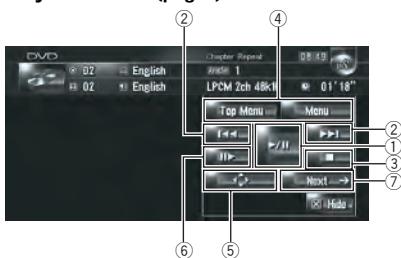
Playback screen (page2)

Menu screen
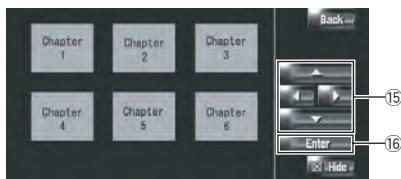
❒ With some discs, the icon ⊘ may be displayed, meaning that the operation is not valid.

① **Playback and Pause**
Touching ▶/Ⅱ switches between "playback" and "pause".

② **Touch: Skip forward or backward**
Touching ▶▶Ⅰ skips to the start of the next chapter. Touching Ⅰ◀◀ once skips to the start of the current chapter. Touching again will skip to the previous chapter.
Touch and hold: Fast rewind or forward
Keep touching Ⅰ◀◀ or ▶▶Ⅰ to perform fast rewind or forward. If you keep touching Ⅰ◀◀ or ▶▶Ⅰ for five seconds, the icon ◀◀ or ▶▶ changes into ◁◁ or ▷▷. When this hap-

pens, fast rewind/ fast forward continues even if you release Ⅰ◀◀ or ▶▶Ⅰ. To resume playback at a desired point, touch ▶/Ⅱ, Ⅰ◀◀ or ▶▶Ⅰ.
❒ You can also perform these operations by using **TRK** (◀/▶) button.

③ **Stop playback**

④ **Display the DVD menu**
You can display the menu by touching [**Menu**] or [**Top Menu**] while a disc is playing. Touching either of these keys again lets you start playback from the location selected from the menu. For details, refer to the instructions provided with the disc.

⑤ **Display the DVD menu keypad**

⑥ **Frame-by-frame playback (or slow-motion playback)**
Touch and hold to start slow-motion playback. Touching this during playback pauses the image and each touch forwards a frame.
To return to normal playback, touch ▶/Ⅱ.
❒ With some discs, images may be unclear during frame-by-frame playback or slow motion playback.
❒ There is no sound during slow motion playback.
❒ Reverse slow motion playback is not possible.

⑦ **Switch next page of touch panel keys**

⑧ **Repeat play**
Each touch of 🔁 the changes the settings as follows:
• **Chapter Repeat** — Repeat just the current chapter
• **Title Repeat** — Repeat just the current title
❒ If you perform chapter (title) search, fast forward/rewind, or slow motion playback, the repeat play range changes to off.

⑨ **Change the subtitle language (Multi-subtitle)**
Each time you touch [**Subtitle**], the DVD switches between subtitle language.

⑩ **Change the viewing angle (Multi-angle)**
Each time you touch [**Angle**], the DVD switches between viewing angles.

❒ During playback of a scene shot from multiple angles, the angle icon 📹 is displayed. Turn the angle icon display on or off using "**DVD-V Setup**" menu.
➲ For details, refer to *Setting angle icon display* on page 147

⑪ **Change audio language and audio systems (Multi-audio)**
Each time you touch [**Audio**], the DVD switches between audio language and audio system.

❒ Only digital output of DTS audio is possible. If navigation system's optical digital outputs are not connected, DTS audio can not be output, so select an audio setting other than DTS.

❒ Display indications such as Dolby D and 5.1ch indicate the audio system recorded on the DVD. Depending on the setting, playback may not be with the same audio system as that indicated.

⑫ **Specify the chapter you want to play back or the time to start playback by entering a number**
➲ For details, refer to *Searching for a desired scene, starting playback from a specified time* on this page

⑬ **Perform the operation (such as resuming) stored in the disc**
When using a DVD that has a point recorded that indicates where to return to, the DVD returns to the specified point and begins play back from that point.

⑭ **Switch to the previous page of touch panel keys**

⑮ **Select the DVD menu item**

⑯ **Decide the item**
When you select a certain video item, playback starts from the selected item. When you select an item with a submenu, the next menu screen will appear.

❒ The way to display the menu differs depending on the disc. For details, refer to the instructions provided with disc.

Searching for a desired scene, starting playback from a specified time

You can search for a desired scene by specifying a title or a chapter, and the time.

❒ Chapter search and time search are not possible when disc playback has been stopped.

1 Touch [10Key Search] and then touch [Title] (title), [Chapter] (chapter), [Time] (time).

2 Touch the keys to input the desired number.

For titles, chapters
- To select 3, touch [**3**].
- To select 10, touch [**1**] and [**0**] in order.
- To select 23, touch [**2**] and [**3**] in order.

For time (time search)
- To select 21 minutes 03 seconds, touch [**2**], [**1**], [**Min**], and [**3**], [**Sec**] in order.
- To select 71 minutes 00 seconds, touch [**7**], [**1**], [**Min**] in order.

❒ To cancel the input numbers, touch [**Clear**].

3 While the input number is displayed, touch [Enter].
This starts playback from the selected scene.

❒ With discs featuring a menu, you can also touch [**Menu**] or [**Top Menu**] and then make selections from the displayed menu.

Entering the numerical commands

You can use this function when you need to enter a numerical command during DVD playback.

1 Touch [10Key Search] and then touch [10key Mode] (10key mode).

2   Touch 0 — 9 to input the desired number.

3   While the input number is displayed, touch [Enter]. ▣

Operating the Radio (FM)

You can listen to the radio by using the navigation system. This section describes operations for Radio (FM).

Selecting [FM] as the source

● **Touch the source icon and touch [FM].**
➲ For details, refer to *Selecting a source* on page 97

Screen configuration
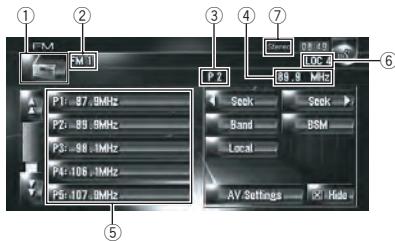
① **Source icon**
   Shows which source has been selected.
② **Band indicator**
   Shows which band the radio is tuned to: FM1 to FM3.
③ **Preset number indicator**
   Shows the program type of the current station (when available).
④ **Frequency indicator**
   Shows to which frequency the tuner is tuned.
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. ▣

Touch panel key operation

● **Touch the source icon and then touch [FM] to select the radio (FM).**
When the source icon is not displayed, you can display it by touching the screen.

Touch panel keys

① **Touch: Recall the preset station**
   Touch and hold: Store the broadcast station
   You can register the frequency currently being received to the preset list. You can easily store up to six broadcast frequencies for later recall with the touch of a key.
   ❒ Touch to recall the preset frequency.
   ❒ Up to 18 stations, 6 for each of three FM bands can be stored in memory.
② **Touch: Perform manual tuning**
   To perform manual tuning, touch ◀ Seek or Seek ▶ briefly. The frequencies move up or down one step.
   Touch and hold: Perform seek tuning
   To perform seek tuning, keep touching ◀ Seek or 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 or Seek ▶ briefly.
   ❒ If you keep touching ◀ Seek or Seek ▶, you can skip broadcasting frequencies. Seek tuning starts as soon as you release the keys.
   ❒ You can also perform these operations by using **TRK** (◀/▶) button.
③ **Tune in strong signals**
   ➲ For details, refer to *Tuning in strong signals* on page 109
④ **Store the strongest broadcast frequencies**

⊃ For details, refer to *Storing the strongest broadcast frequencies* on the next page

⑤ **Select a FM band**
Touch [**Band**] repeatedly until the desired FM band is displayed, **FM 1**, **FM 2** or **FM 3**.
❒ This function is convenient to prepare different preset lists for each band. ▣

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 a touch of the key.

● **Touch and hold [BSM].**
"**BSM**" starts. The six strongest broadcast frequencies will be stored under preset tuning keys [**P1**] — [**P6**] in order of their signal strength.
❒ To cancel the storage process, touch [**Cancel**].
❒ 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].

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.
Level: **1** — **2** — **3** — **4**
The level "**4**" setting allows reception of only the strongest stations, while lower settings let you receive weaker stations. ▣

Operating the Radio (AM)

You can listen to the radio by using the navigation system. This section describes operations for Radio (AM).

Selecting [AM] as the source

● **Touch the source icon and touch [AM].**
⊃ For details, refer to *Selecting a source* on page 97

Screen configuration
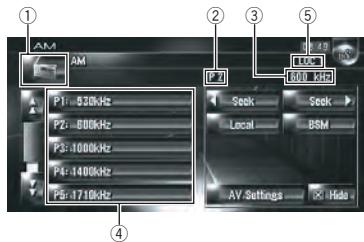
① **Source icon**
Shows which source has been selected.
② **Preset number indicator**
Shows what preset has been selected.
③ **Frequency indicator**
Shows to which frequency the tuner is tuned.
④ **Preset list display**
Shows the preset list.
⑤ **LOCAL indicator**
Shows when local seek tuning is on.

Touch panel key operation

● **Touch the source icon and then touch [AM] to select the radio (AM).**
When the source icon is not displayed, you can display it by touching the screen.

Touch panel keys
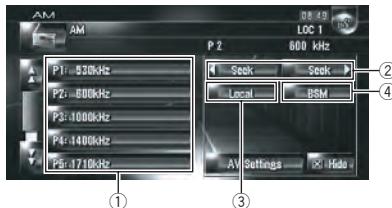
① **Select a desired frequency from the list**
Touch to recall the preset frequency.
❒ To register the frequency currently being received to the preset list, touch and hold the preset list.
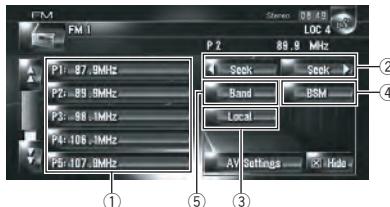
Touch and hold: Store broadcast stations
You can register the frequency currently being received to the preset list. You can easily store up to six broadcast frequencies for later recall with the touch of a key.
❒ Touch to recall the preset frequency.
❒ Up to 6 stations can be stored in memory.

② **Touch: Perform manual tuning**
To perform manual tuning, touch ◄ Seek or Seek ► briefly. The frequencies move up or down one step.

Touch and hold: Perform seek tuning
To perform seek tuning, keep touching ◄ Seek or 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 or Seek ► briefly.
❒ If you keep touching ◄ Seek or Seek ►, you can skip broadcasting frequencies. Seek tuning starts as soon as you release the keys.
❒ You can also perform these operations by using **TRK** (◄/►) button.

③ **Tune in strong signals**
➲ For details, refer to *Tuning in strong signals* on the previous page

④ **Store the strongest broadcast frequencies**
➲ For details, refer to *Storing the strongest broadcast frequencies* on this page

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.

● **Touch and hold [BSM].**
"**BSM**" starts. The six strongest broadcast frequencies will be stored under preset tuning keys **P1** — **P6** in order of their signal strength.
❒ To cancel the storage process, touch [**Cancel**].
❒ 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].**

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 two levels of sensitivity for AM.
Level: **1** — **2**
The level "**2**" setting allows reception of only the strongest stations, while lower settings let you receive weaker stations. ◘

You can record tracks from a music CD to the hard disk in the navigation system. The music library function enables you to record music CDs on the hard disk in the navigation system and play them back with various methods. To use the music library, start by recording sound sources from the CD.

Music Library Recording

When you play back a music CD that is not recorded on the navigation system, the system automatically begins recording that CD to the music library. This section describes cautions and recording procedure.

❒ The music library can record up to 200 general music CDs worth of music data. (This is just an average number and varies depending on the size of music data contained in the CDs.)

Screen configuration
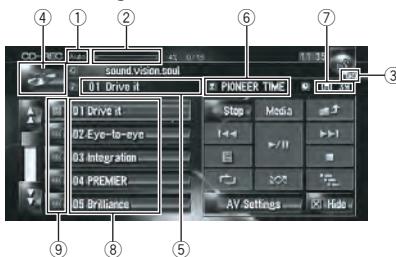
"100%" appears to indicate that the recording has completed. You can touch [**Stop**] to switch the screen and perform another operation.

① **Recording mode indicator**
Shows the current recording mode.
➲ For details, refer to *Setting the CD recording mode* on page 152

② **Recording progress indicator**
Shows the progress of the recording. Fractions show number of recorded tracks total number of tracks in the CD.

③ **Recording indicator**

Shows the recording status. ⓡ (Red) indicates that recording is in progress. ⓡ (Blue) indicates preparing recording.

④ **Source icon**
Shows which source has been selected.

⑤ **Track indicator**
Shows the number and title of the track currently playing.

⑥ **Artist name indicator**
Shows the name of the artist currently playing. (when available.)

⑦ **Play time indicator**
Shows the elapsed playing time of the current track.

⑧ **Track list**
Shows tracks in the CD.

⑨ **Record status of tracks**
♪: Recorded track
ᴿᴱᶜ (Red): Track being recorded
ᴿᴱᶜ (Blue): Track is not recorded yet
❒ Track selection operation or special playback functions such as random play are disabled until recording finishes. To select tracks or perform special playback functions, touch [**Stop**] to stop recording.

Title display

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

❒ Title information will be displayed when the information is found in the Gracenote**®** Database on the built-in hard disk drive. If you insert a CD-TEXT disc, the system prioritized a title information encoded in CD-TEXT disc.

❒ When multiple options for the title information are found or no title information exists, [–] is displayed. A title may be displayed if you update the title information manually after recording has finished.
➲ For details, refer to *Assigning another candidate for title information* on page 122

Using the AV Source (Music Library)

❒ If no title information exists in the Grace-note® Database on the built-in hard disk drive, the date when the track was recorded is entered automatically. If you want to display the title information, enter the title manually after recording has finished.
➲ For more details about "Changing the title of the playlist or track", refer to *Editing a playlist or tracks* on page 117

❒ The title information displayed on the CD playback screen and the recording screen is synchronized with the one edited in the music library. If you edit the title information in the music library, the title displayed on each screen will change accordingly.
➲ For details, refer to *Editing a playlist or tracks* on page 117

❒ Title information can only be edited when one or more tracks are recorded in the music library.

❒ Once you record a CD-TEXT disc, the title information encoded in CD-TEXT disc is also stored into the hard disk drive. (If you edit the title information with the Music library, the edited title will be shown.)

Recording all tracks in a CD

When you play back a CD that is not recorded, it is automatically recorded in the music library (hard disk drive).

❒ All tracks are automatically recorded (**Auto**) in the default setting.
➲ For details, refer to *Setting the CD recording mode* on page 152

● **Insert the CD that you want to record.**
Recording automatically starts.
  ❒ To cancel the recording, touch [**Stop**].
When recording finishes, the system returns to the normal playback screen of the CD in the blank between current track and next track.
  ❒ If the CD is scratched or damaged, no data can be recorded on that part. In such a case, the track that falls on that part may be skipped.

Recording a CD manually

You can record only your favorite tracks in the CD.

1   [REC Mode] is set to [Manual].
➲ For details, refer to *Setting the CD recording mode* on page 152
  ❒ **REC Mode** cannot be changed during recording.

2   Play back the track you want to record.

3   Touch [REC].
The track being played is recorded.
When recording finishes, the system returns to the normal playback screen of the CD in the end of the track.
  ❒ To cancel the recording, touch [**Stop**].

Recording only the first track of a CD

You can record only the first track of the CD. This mode is useful when you want to record only the first tracks from multiple CD singles (or EPs) consecutively.

1   [REC Mode] is set to [Single].
➲ For details, refer to *Setting the CD recording mode* on page 152
  ❒ **REC Mode** cannot be changed during recording.

2   Insert the CD you want to record.
Recording automatically starts for the first track.
When recording finishes, the system returns to the normal playback screen of the CD in the end of the track.
  ❒ To cancel the recording, touch [**Stop**].

Stopping CD recording

You can stop recording while recording a CD. (Recording can resume depending on the recording mode.)

● **Touch [Stop].**
When REC Mode is [Auto] or [Single]:

Recording is paused, and the system starts normal CD playback. To resume recording, touch [**REC**]. Recording also resumes in the following cases:

- When you switch to another source, and then return to the CD source.
- When you turn off the ignition switch of the vehicle, and then restart the engine.

When REC Mode is [Manual]:
Recording is stopped. Touch [**REC**] to record the track being played.

Notes on CD recording

❐ Operations on the navigation system may take more time during recording than normal.

❐ Tracks from a CD are recorded in 4 times speed. You can listen to that sound during recording.

❐ The data is recorded using a highly efficient compression method, so the sound may slightly differ from the original depending on the sound source. Noise may be heard in some cases, but this is not an malfunction.

❐ Recording is possible only with a CD that contains 44.1 kHz, 16-bit-stereo PCM digital audio data.

❐ Recording (or copying) to the music library is not possible from recording media (such as CD-Rs) in which a CD or other data is digitally stored. This is due to the Serial Copy Management System (SCMS) that was developed to prevent second-generation or serial copies.

❐ Recording to the music library is not possible from media (such as CD-Rs) in which MP3 files are stored.

❐ When you are recording a CD with no track intervals (such as a live concert CD), if the engine stops and the power turns off, the sound may break in a track when the music data is played back.

Also see "*Notes for Hard Disk Drive*" for more cautions about handling hard disk drive.
➲ For details, refer to *Notes for Hard Disk Drive* on page 24

■

Music Library Play

You can play back or edit the tracks recorded in the hard disk drive in the source named music library (**LIBRARY**).

Selecting [LIBRARY] as the source

● **Touch the source icon and touch [LIBRARY].**
➲ For details, refer to *Selecting a source* on page 97

Screen configuration

Music Library (LIBRARY)
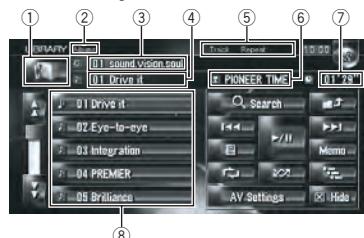
① **Source icon**
   Shows which source has been selected.
② **Group name indicator**
   Shows the group currently playing.
③ **Playlist name indicator**
   Shows the playlist currently playing.
④ **Track indicator**
   Shows the number and title of the track currently playing.
⑤ **Playback method indicator**
   Shows which playback method has been selected.
⑥ **Artist name indicator**
   Shows the name of the artist currently playing. (when available.)
⑦ **Play time indicator**

Using the AV Source (Music Library)

Shows the elapsed playing time of the current track.

⑧ **Track list and playlist**

Shows the track list or the playlist currently playing or temporary displayed.

The 🎵 icon on the left indicates that the item is a "Playlist", and the ♪ icon indicates that the item is a "Track".

Title display

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

❒ If no title information exists in the Gracenote® Database on the built-in hard disk drive, the date when the track was recorded is entered automatically. If you want to display the title information, enter the title manually after recording has finished.

➲ For details, refer to *Changing the title of the playlist or track* on page 119

Relationship of groups, playlists, and tracks

The music library is organized as follows with three levels: groups, playlists, and tracks.

Group	Playlist	Track 1
Group	Playlist	Track 2
Group	Playlist	Track 3
	Playlist	Track 4
		Track 5
		Track 6
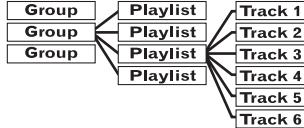
There are four types of groups:

• **Album group ([Albums]):**
Stores the recorded track data in its original order. One playlist is automatically created when a CD is recorded.

• **Artist group ([Artists]):**
Stores playlists in which tracks are sorted by artist names.

• **Genre group ([Genres]):**
Stores playlists in which tracks are sorted by genres.

• **My Favorite group ([My Favorites]):**
Stores playlists registered with your favorite selection.

• **Maximum number you can register**

Group	Playlist	Tracks for a playlist
[**Albums**]	400	99
[**Artists**]	400	400
[**Genres**]	13	400
[**My Favorites**]	5	99

If you try to record one playlist more than the number listed above, the oldest playlist will be deleted.

Touch panel key operation

Listening to a track recorded in the Music Library

● **Touch the source icon and then touch [LIBRARY].**

When the source icon is not displayed, you can display it by touching the screen.

Touch panel keys
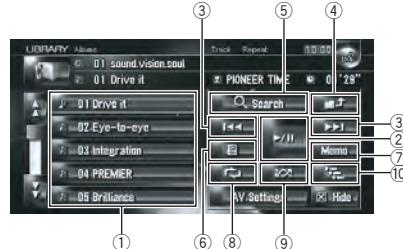
① **Select a desired track from the list**

Touch a desired track to play.

❒ Touching 🔽 or 🔼 switches to the next or previous page in the list.

② **Playback and Pause**

Touching ▶/❚❚ switches between "playback" and "pause".

③ **Touch: Skip the track forward or backward**

Touching ▶▶❙ 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.

Touch and hold: fast backward or forward

❐ You can also perform these operations by using **TRK** (◀/▶) button.

④ **View upper contents**

Touching 🔲 displays the contents of the upper playlist or group.

❐ You cannot touch 🔲 on the group selection screen.

➲ For more details about "Relationship of groups, playlists, and tracks", refer to *Screen configuration* on page 112

⑤ **Display group selection screen**

You can search a track from categories.

➲ For more details about "Search for a playlist", refer to *Searching a track from the playlist* on this page

⑥ **Display the details information screen**

Displays the information about the track or playlist displayed in blue on the track list. On the details information, you can delete the track or edit the track information.

➲ For details, refer to *Editing a playlist or tracks* on page 117

⑦ **Touch and hold: Register the track in My Mix.**

➲ For details, refer to *Registering a track to "My Mix" playlist in one action* on page 116

⑧ **Repeat play**

Each touch of 🔲 changes the repeat range as follows:

- **Track Repeat** — Repeat just the current track
- **Playlist Repeat** — Repeat just the current playlist
- **No display** — Repeat the currently selected group

❐ Repeat play may stop if you perform an operation that affects a track outside the repeating range during track repeat play.

❐ If you perform random play or scan play during track repeat play, the repeating range changes to **Playlist Repeat**.

⑨ **Play tracks in random order**

The selected tracks in the repeated range are randomly played.

❐ Random play may stop if you perform an operation that affects a track outside the repeating range or perform repeat

play or scan play during track repeat play.

❐ When the range of repeat play is **Track Repeat**, if you perform random play, the repeating range changes to **Playlist Repeat**.

Indicator	Implication
[**Random**] only	Tracks of all playlists in the group are played in random order.
[**Playlist Repeat**] and [**Random**]	Tracks in the selected playlist are played in random order.

⑩ **Scan play**

Scan play will be performed for the selected repeat range.

❐ When the range of repeat play is **Track Repeat**, if you perform scan play, the repeating range changes to **Playlist Repeat**.

❐ When you find the desired track, touch 🔲 to turn scan play off.

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

Indicator	Implication
[**Scan**] only	The beginning of the first tracks of each playlist in the group is played for about 10 seconds.
[**Playlist Repeat**] and [**Scan**]	The beginning of each track in the selected playlist is played for about 10 seconds.

Searching a track from the playlist

Once tracks are recorded, the navigation system categorizes them in a "Group", and several types of playlists are automatically created. A playlist is a list that shows the playback order of tracks.

➲ For more details about "Relationship of groups, playlists, and tracks", refer to *Screen configuration* on page 112

Using the AV Source (Music Library)

Searching for an album

Select a playlist formed by an album, and play it back.

1   Touch [Search].
The group selection screen appears.

2   Touch [Albums].

3   Touch the album name ("Album" playlist) you want to play back.

The first track in the selected playlist is played back.

Searching the playlist by artist

Select a playlist formed by an artist, and play it back.

1   Touch [Search].
The group selection screen appears.

2   Touch [Artists].
"**Artist**" playlist appears.

3   Touch the artist name ("Artist" playlist) you want to play back.

The first track in the selected playlist is played back.

Search a playlist by genre

Select a playlist formed by a genre, and play it back.
❒ Only the genre of a recorded track is displayed in a genre playlist.

1   Touch [Search].
The group selection screen appears.

2   Touch [Genres].
"**Genre**" playlist appears.

3   Touch the genre ("Genre" playlist) you want to play back.

The first track in the selected playlist is played back.

Creating a playlist with a customized order

You can register your favorite tracks as a play-list, and play them back in desired order.
[**My Favorites**] group has two types of play-lists.

"My Mix" playlist:
You can register the track being played in one action.
"My Favorite 1-4" playlist:
You can register tracks from the detailed screen information.

Registering a track to "My Mix" playlist in one action

You can register the track being played to the favorite playlist called "**My Mix**".

● **Touch and hold [Memo] while playing back the track you want to register.**
The track being played is registered in "**My Mix**" playlist.

Register tracks one by one

1 Play back the track you want to register.

2 Touch [▣], then touch [Add to My Favorites].

3 Touch the playlist ([My Favorite 1] to [My Favorite 4] or [My Mix]) in which you want to register the track.

4 Touch [Yes].
The track is registered in the selected My Favorite playlist.

Registering multiple tracks at a time

1 Play back the playlist that contains the tracks you want to register.

2 Touch [▣] to display the list of playlists.

3 Touch [▣], then touch [Add to My Favorites].
The item displayed in blue is the selected playlist.

4 Touch the playlist ([My Favorite 1] to [My Favorite 4] or [My Mix]) in which you want to register the tracks.

5 Touch the tracks you want to register.
When you touch a track, a check mark appears indicating that it is selected. To deselect it, touch the track again.
Touch ▶ to proceed to the next operation.

Select All:
Selects all tracks in the playlist.
All Off:
Cancels selection of all tracks in the playlist.

6   Touch [Back].

7   Touch [Yes].
The tracks are registered in the selected
"**My Favorite**" playlist.
❐ Up to 99 tracks can be registered in one
"**My Favorite**" playlist.

Editing a playlist or tracks

You can edit the tracks or playlist recorded in
the Music library.
Only the playlists and tracks in [**Albums**]
group and [**My Favorites**] group can be edi-
ted. In [**Artist**] group, only the pronunciation
of the artist playlist can be edited.

Switching to the edit mode

**1   Touch the playlist in [Albums],
[My Favorites], or [Artists].**

2   Touch the track you want to edit.
The item displayed in blue is the track cur-
rently playing.

3   Touch 　　.
The system enters the track edit mode.

➲ For details, refer to *Operating the track edit
mode* on the next page

**4   Touch [Back] to return the previous
screen.**

**5   Touch 　　 to return to the previous
level.**

The item displayed in blue is the selected play-
list.

6   Touch 　　.
The system enters the playlist edit mode.

❐ To return to the previous screen, touch
[**Back**].

Operating the playlist edit mode
"Album" playlist:

All editing operations are possible. The edited contents will be reflected to all groups in the hard disk drive.

"My Mix" playlist, "My Favorite" playlist:
Only ④, ⑥, and ⑧ can be performed.

① **Enter a desired playlist title**
⮞ For details, refer to *Changing the title of the playlist or track* on the next page
② **Edit the pronunciation that is used as a voice command for voice recognition**
⮞ For details, refer to *Changing the pronunciation of a playlist name or track name* on the next page
③ **Enter a desired artist name**
⮞ For details, refer to *Renaming an artist name in the playlist or track* on page 120
④ **Sort playback order of the playlists**
⮞ For details, refer to *Sorting the playlists* on page 120
⑤ **Delete the playlist**
⮞ For details, refer to *Deleting a playlist* on page 121
⑥ **Delete the selected tracks from that playlist**
⮞ For details, refer to *Deleting a track from the playlist* on page 121
⑦ **Update title information**
⮞ For details, refer to *Assigning another candidate for title information* on page 122

⑧ **Add the selected tracks to "My Favorite"**
⮞ For details, refer to *Registering multiple tracks at a time* on page 116

Operating the track edit mode
"Album" playlist:
All items can be edited except for ⑤. The edited contents will be reflected to all groups in the hard disk drive.

"My Mix" playlist, "My Favorite" playlist:
Only ⑤, ⑥, ⑧ can be performed.

① **Enter a desired track title**
⮞ For details, refer to *Changing the title of the playlist or track* on the next page
② **Edit the pronunciation that is used as a voice command for voice recognition**
⮞ For details, refer to *Changing the pronunciation of a playlist name or track name* on the next page
③ **Enter a desired artist name**
⮞ For details, refer to *Renaming an artist name in the playlist or track* on page 120
④ **Change genre**
⮞ For details, refer to *Changing the genre of a track* on page 122
⑤ **Change the order to play back tracks**

Using the AV Source (Music Library)

⊃ For details, refer to *Sorting the tracks in "My Mix" ("My Favorite") playlist* on page 121

⑥ **Delete the current track**
⊃ For details, refer to *Deleting the current track* on page 121

⑦ **Update track title information**
⊃ For details, refer to *Assigning another candidate for title information* on page 122

⑧ **Add the track to "My Favorite"**
⊃ For details, refer to *Register tracks one by one* on page 116

Changing the title of the playlist or track

You can change titles of playlists or tracks. The titles changed here are displayed on the screen.

1   Enter the playlist edit mode or track edit mode.
⊃ For details, refer to *Switching to the edit mode* on page 117

2   Touch [Title].

3   Touch [Yes].
The content to be changed in Step 4 can be reflected to the voice command.
[**No**]:
Proceeds to the next step without registering it as a voice command.

4   Enter a new character string, and then touch [OK].
❐ Touch [**Small**] to enter lowercase letters. Touch [**Caps.**] to enter uppercase letters. Touch to toggle the selection.

⬇

The system pronounces the character string once, and the pronunciation confirmation message appears.
[**No**]:
Completes the edit without editing the pronunciation.
[**Repeat**]:
You can listen to the pronunciation again.
❐ If the pronunciation is not the desired one, edit the characters so that the pronunciation matches your desired pronunciation.

5   Touch [Yes].
The changed character string is fixed and the system returns to the previous screen.

Changing the pronunciation of a playlist name or track name

You can change the pronunciation of a playlist or track name. The pronunciation is used as a command for voice recognition.
❐ Only pronunciation can be edited for "**Artist**" playlist.
❐ The navigation system recognizes only the voice recognition characters registered in the current language. If you change the interface language, the voice recognition character registered before you change the language will not be recognized.

1   Enter the playlist edit mode or track edit mode.
⊃ For details, refer to *Switching to the edit mode* on page 117

2   Touch [🎤].

3 Enter a new character string, and then touch [OK].
The system pronounces the character once, and the pronunciation confirmation message appears. Touch [**Yes**] to fix the change.
[**No**]:
Returns to the detailed information screen.
[**Repeat**]:
You can listen to the pronunciation again.

❒ If the pronunciation is not the desired one, edit the characters so that the pronunciation matches your desired pronunciation.

4 Touch [Yes].
The changed character is fixed and the system returns to the previous screen.

Renaming an artist name in the playlist or track

You can rename the artist name in the playlist or track.

1 Enter the playlist edit mode or track edit mode.
➲ For details, refer to *Switching to the edit mode* on page 117

2 Touch [Artist].

3 Touch [Select from history List].
[**Keyboard Input**]:
The character input screen appears, and you can change the artist name with the keyboard.

4 Select an artist name from the list.
The artist name is changed to the one you selected. In the playlist edit mode, touching [**Yes**] changes the artist name to the one you selected.

Sorting the playlists

The playback order of playlists in the group can be changed.
❒ If there is only one playlist, the playback order cannot be changed.

1 Enter the playlist edit mode.
➲ For details, refer to *Switching to the edit mode* on page 117

2 Touch [Sort Playlists].

3 Touch the playlist that you want to change the order for.

4 Touch ⊞, ⊟, ⬆, or ⬇ to determine the position you want to put.

⊞⊟:
Moves playlists by page.
⬆⬇:
Moves playlists one by one.

5 Touch the selected playlist again.
The position of that playlist is fixed.

6 Repeat Step 3 to Step 5 to change the playback order of other playlists.

7 Touch [ESC].
The new order is fixed, and the system returns to the normal playback screen.

Using the AV Source (Music Library)

Sorting the tracks in "My Mix" ("My Favorite") playlist

The playback order of tracks in "**My Mix**" playlist and "**My Favorite**" playlist can be changed.

1 Enter the track edit mode.
➲ For details, refer to *Switching to the edit mode* on page 117

2 Touch [Sort Tracklists].

3 Touch the track that you want to change.

4 Touch ▲, ▼, ▲ or ▼ to determine the position you want to put.

5 Touch the selected track again.
The destination is fixed.

6 Repeat Step 3 to Step 5 to change the playback order of other tracks.

7 Touch [ESC].
The new order is fixed, and the system returns to the normal playback screen.

Deleting a playlist

You can delete a playlist in [**Albums**] group. (You cannot delete playlists in other groups.)
❐ If you delete a playlist in [**Albums**] group, all tracks in the playlist are deleted from the hard disk drive. (They are deleted from [**My Favorites**] group at the same time.)
❐ If you delete the playlist, the system does not delete the edited title information, such as album title, artist name, or track name.

1 Enter the playlist edit mode.
➲ For details, refer to *Switching to the edit mode* on page 117

2 Touch [Delete This Playlist].

3 Touch [Yes].
The playlist is deleted.

Deleting a track from the playlist

You can delete tracks from the playlist.
❐ If you delete a track in [**Albums**] group, the track is deleted from the hard disk drive. (It is deleted from [**My Favorites**] group at the same time.)
❐ If you delete the track, the system does not delete the edited title information.
❐ If you delete the tracks in "**My Mix**" playlist or "**My Favorite**" playlist, they are only deleted from the playlist, and not from the hard disk drive.

1 Enter the playlist edit mode.
➲ For details, refer to *Switching to the edit mode* on page 117

2 Touch [Delete Tracks].

3 Touch the tracks you want to delete.
When you touch a track, a check mark appears indicating that it is selected. To deselect it, touch the track again.

Touch ► to proceed to the next operation.
[**Select All**]:
Selects all tracks in the playlist.
[**All Off**]:
Cancels the selection of all tracks in the playlist.

4 Touch [Back].

5 Touch [Yes].

Deleting the current track

❐ If you delete the track, the track is deleted from the hard disk drive. (It is deleted from [**My Favorites**] group at the same time.)
❐ If you delete the track, the system does not delete the edited title information.

❐ If you delete the tracks in "**My Mix**" playlist or "**My Favorite**" playlist, they are only deleted from the playlist, and not from the hard disk drive.

1   Enter the track edit mode.
➲ For details, refer to *Switching to the edit mode* on page 117

2   Touch [Delete This Track].

3   Touch [Yes].

Changing the genre of a track

1   Enter the track edit mode.
➲ For details, refer to *Switching to the edit mode* on page 117

2   Touch [Genres].

3   Select the desired genre from the list.
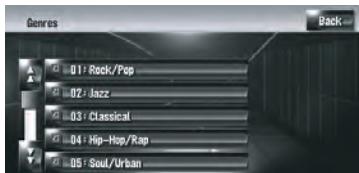
The genre is changed, and the system returns to the previous screen.

Assigning another candidate for title information

If the current title information is not desired title, you can search for another title information from Gracenote® Database in the hard disk drive manually and assign another candidate. If there were multiple options for the title information, you can select one title from them.
❐ Music recognition technology and related data are provided by Gracenote®. Gracenote is the industry standard in music recognition technology and related content delivery. For more information visit www.gracenote.com.

❐ Once you update the title information, the information you edit before will be overwritten by the title information of the Gracenote® Database.

Gracenote® Database updates are available. You can download the latest update from Pioneer website by using your PC. To install the update, burn the data onto a CD-R(-RW) and insert it into your navigation system. When you download the files and install the update, follow the instructions in the website.

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1   Select the playlist in [Albums] group, and enter the playlist edit mode or track edit mode.
➲ For details, refer to *Switching to the edit mode* on page 117

2   Touch [Update Title].
Information search begins. When the title information is obtained, the candidates screen appears.

3   Select the desired album title from the list.
The title information is updated to the one you selected. ◼

Operating the XM Satellite Radio

You can use the navigation system to control an XM satellite digital tuner, which is sold separately.

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

Selecting [XM] as the source

● **Touch the source icon and touch [XM].**
➲ For details, refer to *Selecting a source* on page 97

Screen configuration
GEX-P10XMT, GEX-P920XM

All CH Mode

Category Mode
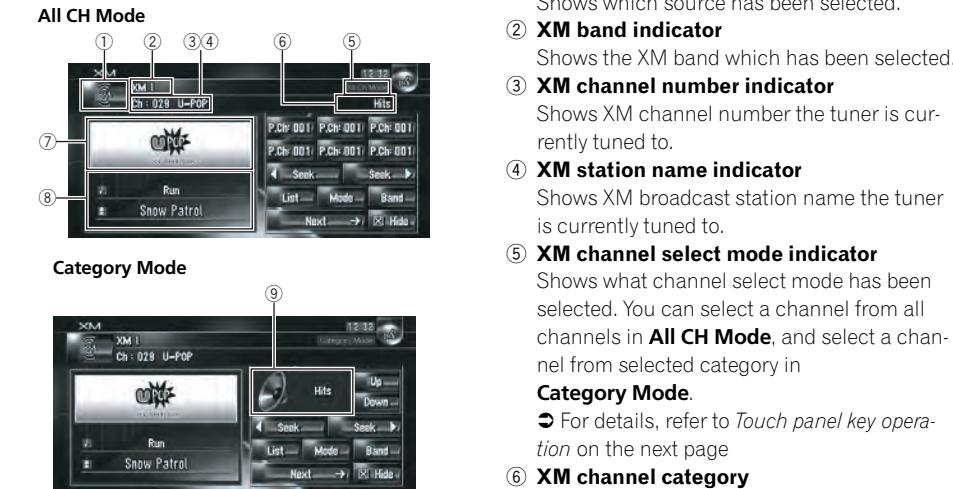
GEX-P910XM, GEX-P900XM

About the logo for channel name

Only the logo data that is contained in the navigation system can be displayed for each channel. The logo of a newly established channel that is not contained cannot be displayed. When no logo can be displayed, the following substitute icon is displayed.

Substitute icon

① **Source icon**
  Shows which source has been selected.
② **XM band indicator**
  Shows the XM band which has been selected.
③ **XM channel number indicator**
  Shows XM channel number the tuner is currently tuned to.
④ **XM station name indicator**
  Shows XM broadcast station name the tuner is currently tuned to.
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.
  ➲ For details, refer to *Touch panel key operation* on the next page
⑥ **XM channel category**
  Shows the category of broadcast channel.
⑦ **XM station name logo**
  ❒ The message "**-ON THE AIR-**" disappears if the navigation system cannot receive XM tuner reception for some reason.

❒ If you use GEX-P910XM or GEX-P900XM, the logo for channel name is not available.

⑧ **Detail information**

Shows the detailed information of the broadcast channel currently being received.

⑨ **Category icon**

Shows the category icon for the selected channel.

Touch panel key operation

● **Touch the source icon and then touch [XM] to select the XM.**

When the source icon is not displayed, you can display it by touching the screen.

Touch panel keys (GEX-P10XMT, GEX-P920XM)

Page 1 (All CH Mode)

Page 1 (Category Mode)
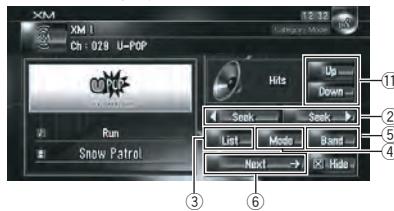
Page 2

Touch panel keys (GEX-P910XM or GEX-P900XM)

Items marked with an asterisk (*) cannot be used on GEX-P910XM or GEX-P900XM.

① **Touch: Recalling channels from the preset**

Touch to recall the preset channel.

❒ In **All CH Mode**, you can also recall the preset channel by pressing the **P.LIST** (▲/▼) button.

❒ In **Category Mode**, the screen shows category search.

Touch and hold: Storing broadcast stations

You can register the channel currently being broadcast to the preset list.

❒ Up to 18 stations, 6 for each of three XM bands can be stored in memory.

❒ If you use GEX-P910XM or GEX-P900XM, the channel number does not appear on the touch panel key.

② **Perform manual tuning**

The channels move up or down one at a time.

❒ If you keep touching ◄ Seek or Seek ► you can skip broadcasting channels.

❒ You can also perform these operations by using the **TRK** (◄/►) button.

③ **Switching to the list display***

You can select a desired channel from the list display.

➲ For details, refer to *Selecting a channel from the xm channel list display* on the next page

④ **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.

⑤ **Select an XM band**
Touch [**Band**] repeatedly until the desired XM band is displayed, **XM 1**, **XM 2** or **XM 3**. This is useful for switching the preset.

⑥ **Switching the touch panel keys to next page**

⑦ **Memorizing the current song***
The song title and artist name being broadcast will be memorized in "My Mix". When a song that matches the song information memorized in "My Mix" is broadcast, you can tune the channel to the one that is broadcasting that song.
➲ For details, refer to *Memorizing the song title and the artist name of a song* on the next page

⑧ **Setting the notification of the memorized songs***
You can set an alert for the songs memorized in "My Mix". You can also delete the memorized song.
➲ For details, refer to *Setting the alert for each memorized song* on the next page
➲ For details, refer to *Deleting the memorized songs* on page 127

⑨ **Selecting an XM channel directly**
You can select an XM channel directly by entering the desired channel number. Enter the channel number, touch [**Enter**], and then touch [**Back**].
❒ To cancel the input numbers, touch [**Clear**].
❒ This function in not available with GEX-P900XM.

⑩ **Switching the touch panel keys to previous page**

⑪ **Switching the channel category**
Touch [**Up**] or [**Down**] to select the desired category.

⑫ **Switching the XM information**

Each touch of [**DISP**] changes the display on the bottom of the detail information as follows:
GEX-P900XM:
Channel name — Artist name/feature — Song/program title — Information — Channel number
GEX-P910XM:
Channel name — Artist name/feature — Song/program title — Channel category
❒ This function is not available with GEX-P10XMT and GEX-P920XM.

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

1 Touch [10Key Direct].

2 Input [000] and then touch [Enter].
If you select another channel, display of the Radio ID is canceled.
❒ You can also display the Radio ID to select [**RADIO ID**] from channel category in **Category Mode**.

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 channels during **All CH Mode**, and the channels included in the selected category during **Category Mode**. To switch the channel mode, touch [**Mode**].

1 Touch [List].
XM channel list appears in the display.
Each touch of [**List**] changes the settings as follows:
Detail information 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.

Touch ⧈ or ⧉ to switch to the next page or previous page.

❒ During **Category Mode**, touch [**Up**] or [**Down**] to switch to another category.

Using "My Mix" function

"My Mix" function memorizes the song title and artist name of the song currently being received. When the song that matches the memorized song title and artist name is being broadcast 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. 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 to "My Mix".

● **Touch and hold [Memo].**

The song title and artist name of current song you are listening to are memorized, and a confirmation message appears.

❒ The song title and artist name of up to 15 songs can be memorized. Trying to save more than 15 songs will overwrite old ones.

❒ The song title or the artist name cannot be memorized when [————————] is displayed on the title information.

❒ This function invalid for the channel 000.

❒ There is a possibility the memorized title is not displayed correctly.

When the memorized song is broadcast

Alert message is displayed. Touch [**Yes**] to switch to that station, and you can listen to that track.

❒ If the memorized song is not selected in "My Mix" list or [**Alert Off**] is selected, no notification will be provided even when that song is broadcast.

➲ For details, refer to *Setting the alert for each memorized song* on this page
➲ For details, refer to *Switching the alert setting* on this page

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

❒ Alert may not be provided depending on the situation of the navigation system.

Setting the alert for each memorized song

You can change the setting of the alert when the track is broadcast again. You can enable or disable alert for each song.

1 Touch [Memo Edit].

Memorized song list ("My Mix" list) will be displayed. If the alert setting for the song is on, the square on the right is blue. Otherwise, the square is inactive.

2 Touch the song title that you want to exclude from the alert target.

The square on the right turn inactive and the song title is excluded from the alert target.

❒ If you touch that again, the square will turn blue and the song title is included in the alert target.

Switching the alert setting

You can enable or disable the alert for all items at once. This function will be useful when you want to turn the alert off temporarily without changing the condition of each memorized song.

1 Touch [Memo Edit].

2   Touch [Alert On] or [Alert Off].
When the alert setting is [**Alert Off**], My Mix
is displayed on the information plate.

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

1   Touch [Memo Edit].

**2   Touch and hold the track you want to
delete.**
A message will appear asking you to confirm
the deletion.
❒ To delete all songs that are memorized,
touch [**Delete All**].

3   Touch [Yes].

Using the direct traffic announcement function
You can listen to the memorized "Instant Traf-
fic & Weather" channel by directly calling it up
with the **T** button on the navigation unit. (Only
one station can be memorized.)
❒ This function is not available with GEX-
P910XM and GEX-P900XM.

Memorize a "Instant Traffic & Weather" channel

**1   Tune into "Instant Traffic & Weather"
channel.**

**2   Press and hold T button for two sec-
onds or more.**
That "Instant Traffic & Weather" channel will
be memorized.
❒ The channel 000 and 001 can not be mem-
orized newly (although the channel 001 is
the default).
❒ Even if you use the SiriusConnect universal
tuner together, only one station can be
memorized. The station memorized after-
ward will overwrite the existing one.

Calling up the memorized "Instant Traffic & Weather" channel

● **Press T button.**
❒ You can call up a "Instant Traffic & Weather"
channel even from a source other than the
XM source.
❒ To cancel the announcement, touch
[**TRFC Off**] on the screen or press **T** button
again.■

Operating the SIRIUS Satellite Radio
You can use the navigation system to control a
SiriusConnect universal tuner, which is sold
separately. This section provides information
on SIRIUS operations with the navigation sys-
tem which differs from that described in the
SiriusConnect universal tuner's operation
manual.
❒ When you use the SiriusConnect universal
tuner (sold separately) with this Navigation
System, Pioneer SIRIUS BUS INTERFACE is
required. For details concerning operation,
refer to the owner's manual of Pioneer SIR-
IUS BUS INTERFACE and SiriusConnect
universal tuner.
❒ The following function is not available if
this navigation system is connected to the
Pioneer SIRIUS BUS INTERFACE CD-SB10
and the SiriusConnect universal tuner.
— Using Instant Replay function
❒ The following functions are not available in
SIR-PNR1.
— Selecting team for game alert
— Displaying game information
— Using the song alert function
— Using the direct traffic announcement
function

Selecting [SIRIUS] as the source

● **Touch the source icon and touch [SIRIUS].**
➲ For details, refer to *Selecting a source* on page 97
Screen configuration
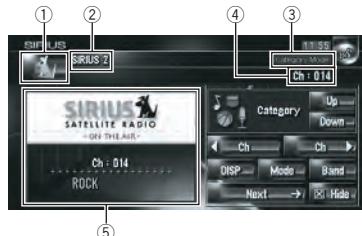
① **Source icon**
Shows which source has been selected.
② **SIRIUS band indicator**
Shows the SIRIUS band which has been selected.
③ **SIRIUS channel select mode indicator**
Shows what channel select mode has been selected. You can select a channel from all channels in **All Ch Mode**, and select a channel from the selected category in **Category Mode**.
➲ For details, refer to **Switch the SIRIUS channel select mode** on the next page
④ **SIRIUS channel number indicator**
Shows the SIRIUS channel number that the tuner is tuned to.
⑤ **Detail information**
Shows the detail information of the broadcast channel currently being received.
❒ The message "**-ON THE AIR-**" disappears if the navigation system cannot receive SIRIUS tuner reception for some reason.
➲ For details, refer to *Troubleshooting* on page 174

Touch panel key operation

● **Touch the source icon and then touch [SIRIUS] to select the SIRIUS.**
When the source icon is not displayed, you can display it by touching the screen.
Touch panel keys

Page 1 (**All Ch Mode**)

Page 2 (**All Ch Mode**)

Page 1 (**Category Mode**)

Items marked with an asterisk (*) cannot be used on SIR-PNR1.

① **Touch: Recalling channels from the preset**
Touch to recall the preset channel.
❒ In **All Ch Mode**, you can also recall the preset channel by pressing the **P.LIST** (▲/▼) button.
❒ In **Category Mode**, the screen displays category search.
Touch and hold: Storing broadcast stations
You can register the channel currently being broadcast to the preset list.

❒ Up to 18 stations, 6 for each of three SIRIUS bands can be stored in memory.

② **Perform manual tuning**
The channels move up or down one at a time.
❒ If you keep touching [Seek] or [Seek] you can skip broadcasting channels.
❒ You can also perform these operations by using the **TRK** (◄/►) button.

③ **Switch the SIRIUS display**
Each touch of [**DISP**] changes the display information.
Channel number — Channel name — Channel category — Artist name/feature — Song/program title — Composer
❒ Touch and hold to switch ON/OFF the information scroll.

④ **Switch the SIRIUS 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.

⑤ **Select a SIRIUS band**
Touch [**Band**] repeatedly until the desired SIRIUS band is displayed, **SIRIUS 1**, **SIRIUS 2**, or **SIRIUS 3**. This is useful for switching the preset.

⑥ **Switch the touch panel keys to next page**

⑦ **Select team for game alert***
You can register your favorite team.
➲ For details, refer to *Selecting teams for Game Alert* on this page
➲ For details, refer to *Switching the Game Alert on or off* on the next page

⑧ **Display game information***
You can display game information and changes to the broadcast channel.
➲ For details, refer to *Displaying game information (Game Info)* on the next page

⑨ **Memorize the current song***
The song title and artist name being broadcast will be memorized in "My Mix". When the song that matches the song information memorized in "My Mix" is broadcast, you can tune the channel to the one that is broadcasting that song.
➲ For details, refer to *Memorizing the song title and the artist name of a song* on page 131

⑩ **Set the notification of the memorized songs***
You can set the alert for the songs memorized in "My Mix". You can also delete the memorized song.
➲ For details, refer to *Setting the alert for each memorized song* on page 131
➲ For details, refer to *Deleting the memorized songs* on page 131

⑪ **Select a SIRIUS channel directly**
The Channel number input screen appears. You can select a SIRIUS channel directly by entering the desired channel number.
While the input number is displayed, touch [**Enter**], and then touch [**Back**].
❒ To cancel the input numbers, touch [**Clear**].

⑫ **Switch the touch panel keys to previous page**

⑬ **Switch the channel category**
Touch [**Up**] or [**Down**] to select the desired category.

Selecting teams for Game Alert

This navigation system can alert you when games involving your favorite teams are about to start. To use this function you need to set the game alert to the teams in advance.

1 Touch [Game Alert].
The League/Team Setting screen appears.

2   Touch [Next] or [Previous] to select the league.

Game Alert – League/Team Setting   Back

NFL   On/Off

◀ Previous   League   Next ▶
◀ Previous   Team   Next ▶

Alert On   Alert Off

3   Touch [Next] or [Previous] to select the team.

4   Touch [On/Off].
The team displayed as [**On**] is the alert target.

Game Alert – League/Team Setting   Back

NFL   On/Off

◀ Previous   League   Next ▶
◀ Previous   Team   Next ▶

Alert On   Alert Off

5   Touch [Alert On].
  ❒ When the selected team is excluded from
     the alert target, the team is displayed as
     [**Off**]. Up to 12 teams can be selected.
     When you have already made 12 team se-
     lections, **Full** is displayed and additional
     team selection is not possible. In this case,
     first delete the team selection and then try
     again.

Switching the Game Alert on or off

You can enable or disable the alert for selected
items. This function will be useful when to
turn the alert off temporarily without changing
the setting of each selected team.

1   Touch [Game Alert].
The League/Team Setting screen appears.

2   Touch [Alert On] or [Alert Off].
When the alert setting is [**Alert Off**], ⚙ Game
is displayed on the information plate.

When a game involving team is broadcast

A message is displayed. Touch [**Jump**] to
switch to that station, and you can view to that
game information. If you touch [**Stay**], the
channel does not switch.
  ❒ Alert may not be provided depending on
     the situation of the navigation system.

Displaying game information (Game Info)

You can display the game information of a
team that you have set an alert for, and change
to the broadcast channel.
  ❒ This function is unavailable if no team is se-
     lected in the game alert function.

1   Touch [Game Info].
The game name and the broadcast channel
are also displayed.

**2   Touch [Next] or [Previous] to view the game score information which is regis-
tered.**
  ❒ The game score will be updated automati-
     cally.
  ❒ Touch [**Tune To**] to switch to the channel
     that broadcasts the displayed game.
  ❒ If you have not made any team selections,
     Not Set is displayed.
  ❒ When games involving your favorite teams
     are not currently playing, **No Game** is dis-
     played.

Using "My Mix" function

"My Mix" function memorizes the song title
and artist name of the song currently being re-
ceived. When the track that matches the mem-
orized song title and artist name is being
broadcast 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. ONLY the
     song title and the artist name are memor-
     ized.

Using the AV Source (XM, SIRIUS)

Memorizing the song title and the artist name of a song

The song title and artist name of the current song you are listening to can be memorized to "My Mix".

● **Touch and hold [Memo].**
The song title and artist name of the song you are listening to are memorized, and [**Song Saved**] is displayed.

❒ The song title and artist name of up to 10 tracks can be memorized. If you try to save more than 10 tracks [**FULL**] is displayed.

❒ You cannot memorize a song that does not have song title and artist name information.

❒ There is a possibility the memorized title is not displayed correctly.

When the memorized song is broadcast

Alert message is displayed. Touch [**Jump**] to switch to that station, and you can listen to that track. If you touch [**Stay**], the cannel does not switch.

❒ If the alert for the song is "OFF" or [**Alert Off**] is selected, no notification will be provided even when that song is broadcast.
➲ For details, refer to *Setting the alert for each memorized song* on this page
➲ For details, refer to *Switching the alert setting* on this page

❒ If there is a 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.

❒ Alert may not be provided depending on the situation of the navigation system.

Setting the alert for each memorized song

You can change the setting of the alert when the track is broadcast again. You can enable or disable alert for each song.

1   Touch [Memo Edit].
"My Mix" setting screen will be displayed.

2   Touch [Previous] and [Next] to select the song title that you want to exclude from the alert target.

3   Touch [On/Off].
Each touch of [**On/Off**] turns the alert setting for the song "**On**" or "**Off**".

Switching the alert setting

You can enable or disable the alert for all items at the time. This function will be useful when you want to turn the alert off temporarily without changing the condition of each memorized song.

1   Touch [Memo Edit].

2   Touch [Alert On] or [Alert Off].
When the alert setting is [**Alert Off**], Song is displayed on the information plate.

Deleting the memorized songs

You can delete each one of the memorized songs.

1   Touch [Memo Edit].

2   Touch [Previous] or [Next] to select the song title that you want to delete.

3   Touch [Delete This Song] when the song you want to delete is displayed.
A message will appear asking you to confirm the deletion.

4   Touch [Yes].

Using the Traffic & Weather preset function

You can listen to the memorized Traffic & Weather channel by directly calling it up with the **T** button on the navigation system. (Only one station can be memorized.)

Memorize a Traffic & Weather channel

1 Tune into the Traffic & Weather channel.

2 Press and hold T button for two seconds or more.
That Traffic & Weather channel will be memorized.

❒ Even if you use the XM satellite radio tuner together, only one station can be memorized. The station memorized afterward will overwrite the existing one.

Calling up the memorized Traffic & Weather channel

● **Press T button.**

❒ You can call up a Traffic & Weather channel even from a source other than the SIRIUS source.

❒ To cancel the announcement, touch [**TRFC Off**] on the screen or press **T** button again. ◾

When Pioneer audio equipment is connected to the navigation system using IP-BUS or AV-BUS, such equipment can be operated from the navigation system. 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.

Operating the Multi-CD Player

You can use the navigation system to control a multi-CD player, which is sold separately.

❒ Only those functions described in this manual are available for multi-CD player. (Depending on the multi-CD player, the function may be invalid.)

Selecting [M-CD] as the source

● Touch the source icon and touch [M-CD].
➲ For details, refer to *Selecting a source* on page 97

Screen configuration
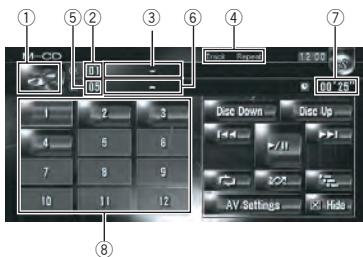
① **Source icon**
Shows which source has been selected.
② **Disc number indicator**
Shows the disc currently playing.
③ **Disc title indicator***
Shows the title of the disc currently playing.
④ **Playback method indicator**

Shows which repeat range has been selected.
⑤ **Track number indicator**
Shows the track currently playing.
⑥ **Track title indicator***
Shows the title of the track currently playing.
⑦ **Play time indicator**
Shows the elapsed playing time of the current track.
⑧ **Disc number display**
Shows the number of the disc in the multi-CD player.
❒ The titles of the items marked with an asterisk (*) will be displayed only when the CD-TEXT disc is used. When using a normal music CD, they are displayed as [–].

Touch panel key operation

● Touch the source icon and then touch [M-CD] to select the multi-CD player.
When the source icon is not displayed, you can display it by touching the screen.

Touch panel keys
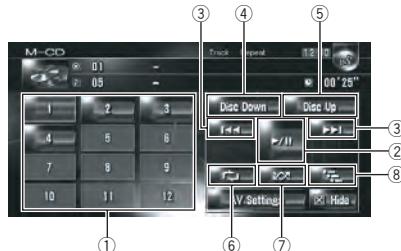
❒ When the multi-CD player has performed the preparatory operations, **Ready** is displayed.
❒ If the multi-CD player does not operate properly, an error message such as **Error-XX** may be displayed. Refer to the multi-CD player owner's manual.
❒ If there are no discs in the multi-CD player magazine, **No Disc** is displayed.
① **Change the disc in the magazine**
② **Playback and Pause**
Touching ▶/❚❚ switches between "playback" and "pause".

③ **Touch: Skip forward or backward**
Touching ►►I skips to the start of the next track. Touching I◄◄ once skips to the start of the current track. Touching again will skip to the previous track.

Touch and hold: fast backward or forward
Keep touching I◄◄ or ►►I to perform fast backward or forward.

❒ You can also perform these operations by using **TRK** (◄/►) button.

④ **Play back the previous disc**
The disc before the currently played disc will be played.

⑤ **Play back the next disc**
The disc after the currently played disc will be played.

⑥ **Repeat play**
Each touch of ◄▭► changes the settings as follows:

Track Repeat — Repeat just the current track

Disc Repeat — Repeat the current disc

❒ If you select other discs during repeat play, the repeat play range setting will be canceled.

❒ If you perform track search or fast forward/rewind during **Track Repeat**, the repeat play range changes to **Disc Repeat**.

⑦ **Play tracks in random order**
Tracks will play in a random order within the previously selected repeat ranges.

Indicator	Implication
[**Random**] only	Tracks of all disc in the magazine are played in random order.
[**Disc Repeat**] and [**Random**]	Tracks in the selected disc are played in random order.

❒ If you perform random play during [**Track Repeat**], the repeat play range changes to [**Disc Repeat**].

⑧ **Scan play**

The first 10 seconds of each track of the current disc (or the first track of each disc) are played.

Indicator	Implication
[**Scan**] only	The beginning of the first tracks of each disc is played for about 10 seconds.
[**Disc Repeat**] and [**Scan**]	The beginning of each track in the selected disc is played for about 10 seconds.

❒ When you find the desired track (or disc) touch ▭ to turn scan play off.

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

Operating the iPod®

You can control an iPod by combining the Pioneer Interface adapter for iPod (sold separately) to the navigation system. For details concerning operation, refer to the owner's manual of the Interface adapter for iPod. This section provides information on iPod operations with the navigation system that differ from those described in the owner's manual of Interface adapter for iPod.

❒ When you use the iPod (sold separately) with this Navigation System, Pioneer Interface adapter for iPod is required.
iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

Selecting [iPod] as the source

● **Touch the source icon and touch [iPod].**
➲ For details, refer to *Selecting a source* on page 97

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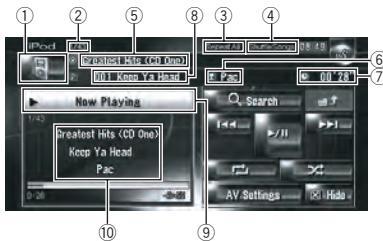
① **Source icon**
Shows which source has been selected.

② **Song number indicator**
Shows the number of the song playing in the selected list.

③ **Repeat play indicator**
Shows whether Repeat is selected for the current song or all songs on current list.

④ **Shuffle play indicator**
Shows whether Shuffle play is selected for songs of albums.

⑤ **Album title indicator**
Shows the title of the album for the song.

⑥ **Artist name indicator**
Shows the name of the artist of the current song.

⑦ **Play time indicator**
Shows the elapsed playing time of the current song.

⑧ **Song title indicator**
Shows the title of the current song.

⑨ **Playing Song Information**
Shows the information and status of the current song.

⑩ **Song title, Artist name, and Album title indicator**
When playing a song, Song title, Artist name, and Album title are displayed.

Touch panel key operation

● **Touch the source icon and then touch [iPod] to select the iPod.**
When the source icon is not displayed, you can display it by touching the screen.

Touch panel keys
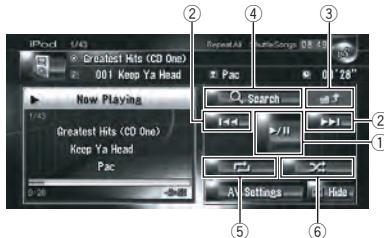
① **Playback and Pause**
Touching ▶/❙❙ switches between "playback" and "pause".

② **Touch: Skip back or forward to another song**
Touching ▶▶❙ skips to the start of the next song. Touching ❙◀◀ once skips to the start of the current song. Touching again will skip to the previous song.
Touch and hold: fast forward or rewind
❒ You can also perform these operation with pressing **TRK** (◀/▶) button.

③ **Display the previous screen**
Touch on the refine search or other screen to return to the previous screen.

④ **Narrow down the songs to play back**
You can narrow down the choices of songs to play from five categories.
➲ For details, refer to *Browsing for a song* on the next page

⑤ **Repeat play**
Touch ▭ repeatedly until the desired repeat range appears in the display.
• **Repeat One** — Repeat just the current song
• **Repeat All** — Repeat all songs in the selected list

⑥ **Shuffle play**
This function shuffles songs or albums and plays them in random order.
Each touch of ✕ changes the settings as follows:
• **Shuffle Songs** — Play back songs in random order within the selected list

• **Shuffle Albums** — Select an album randomly, and then play back all songs in that album in order

Browsing for a song

The operations for controlling an iPod with this navigation system are designed to be close to iPod operation. This allows you to search and play songs as you would with an iPod.

1   Touch [Search].

If you do nothing about 30 seconds after Steps 1 to 4 are finished, the screen returns to the previous screen.

2   Touch one of the categories in which you want to search for a song.

• **Playlists** (playlists)
• **Artists** (artists)
• **Albums** (albums)
• **Songs** (songs)
• **Genres** (genres)

The search screen is displayed.
The 🖼 icon on the left indicates that the item is a "Playlist", and the 🎵 icon indicates that the item is a "Song".

❒ If you select [**Songs**], proceed to step 4.
❒ When you select [**Artists**], [**Albums**] or [**Genres**], you can start a playback of all songs in the selected list. To do this, keep touching the list title.

3   Touch the title of the list that you want to play.

Repeat this operation until you find the desired song.

❒ To return to the previous screen touch

![icon]

4   From the song list, touch the song you want to play.

❒ To go to the next page of the list, touch 🔽.
❒ To return to the previous page of the list, touch 🔼. ∎

Operating the 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 (For details, refer to *To ensure safe driving* on page 22).

You can use the navigation system to control a TV tuner (e.g. GEX-P6400TV, GEX-P5700TV), which is sold separately. For details concerning operation, refer to the TV tuner's operation manual. This section provides information on TV operations with the navigation system that differ from those described in the TV tuner's operation manual. When you attempt to watch visual images while driving, the warning **ATTENTION! Viewing of front seat video source while driving is strictly prohibited.** will appear on the screen.

Selecting [TV] as the source

● **Touch the source icon and touch [TV].**
➲ For details, refer to *Selecting a source* on page 97

Using the AV Source (M-CD, iPod®, TV)

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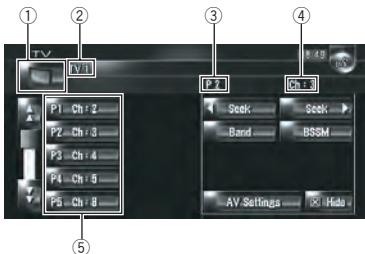
① **Source icon**
Shows which source has been selected.

② **Band indicator**
Shows which band the TV tuner is tuned to: TV 1 or TV 2.

③ **Preset number indicator**
Shows which preset has been selected.

④ **Channel indicator**
Shows which channel the TV tuner is tuned to.

⑤ **Preset list display**
Shows the preset list.

Touch panel key operation

● **Touch the source icon and then touch [TV] to select the TV tuner.**
When the source icon is not displayed, you can display it by touching the screen.

Touch panel keys

① **Select channels from the list**
The list lets you see the list of channels and select one of them to view.

❐ Touching 🔼 or 🔽 switches to the next or previous page in the list.

❐ You can register your favorite channels in the list.
➲ For details, refer to *Storing and recalling broadcast frequencies* on this page

② **Touch: Perform manual tuning**
The channels move up or down one step.
Touch and hold: Perform seek tuning
The tuner will scan the channels until a broadcast strong enough for good reception is found.

❐ If you keep touching ◀ Seek or Seek ▶ you can skip broadcasting channels. Seek tuning starts as soon as you release the keys.

❐ You can also perform these operations by using **TRK** (◀/▶) button.

③ **Store the strongest broadcast stations sequentially**
Twelve channels with strong reception sensitivity can be registered automatically in the preset list.
➲ For details, refer to *Storing the strongest broadcast stations sequentially* on the next page

④ **Change band**
Touching [**Band**] switches between "**TV 1**" and "**TV 2**".

Storing and recalling broadcast frequencies

If you touch any of the preset tuning keys **P1** — **P12**, you can easily store up to 12 broadcast stations for later recall with a touch of the key.

● **When you find a station that you want to store in memory keep touching a preset tuning key P1 — P12.**
The selected station is 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 press the **P.LIST** (▲/▼) button to recall stations assigned to preset tuning keys **P1** — **P12**.

Storing the strongest broadcast stations sequentially

● **Touch and hold [BSSM].**
BSSM starts. The 12 strongest broadcast stations will be stored under preset tuning keys **P1** — **P12** in order from the lowest channel up.

❒ To cancel the storage process, touch [**Cancel**].

❒ Storing broadcast stations with [**BSSM**] may replace current broadcast stations stored in preset memory. ▪

Operating the AV Input source

⚠ 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 (For details, refer to *To ensure safe driving* on page 22).

Selecting [AV INPUT] as the source

1   [AV Input] is set to [Video].
➲ For details, refer to *Setting the video input* on page 150

2   Touch the source icon and touch [AV INPUT].
➲ For details, refer to *Selecting a source* on page 97 ■

Operating the External Unit

The term "external unit" refers to future Pioneer devices that are not currently planned for, or devices that allow control of basic functions although they are not fully controlled by the navigation system. Two external units can be controlled by this navigation system. When two external units are connected, the navigation system allocates them to external unit 1 or external unit 2.
For details concerning operation, refer to the external unit's operation manual. This section provides information on external unit operations with the navigation system that differ from those described in the external unit's operation manual.
❒ Operation varies depending on the external unit connected. (In some cases, the external unit may not respond.)

Selecting [EXT 1] or [EXT 2] as the source

● **Touch the source icon and touch [EXT 1] or [EXT 2].**
➲ For details, refer to *Selecting a source* on page 97

Screen configuration

① **Source icon**
Shows which source has been selected.
② **External unit indicator**
Displays any connected external units.
③ **Auto/Manual mode indicator**
Shows the current mode.
➲ For details, refer to *Switching the automatic and manual function* on the next page

Touch panel key operation

● **Touch the source icon and then touch [EXT 1] or [EXT 2] to select the external unit.**
When the source icon is not displayed, you can display it by touching the screen.

Touch panel keys
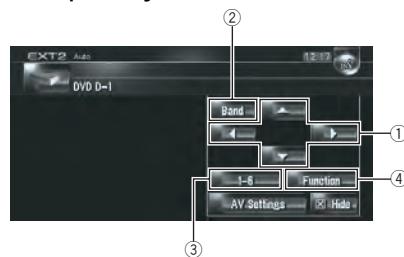
① **Send an ▲, ▼, ◄, or ► command**
Touch to operate the external unit.

❒ Operation varies depending on the external unit connected. (In some cases, some functions may not be used until you touch and hold the key.)

② **Send a band command**
Touch to send a band command to the external unit.

❒ Operation varies depending on the external unit connected. (In some cases, the external unit may not respond.)

③ **Send a 1 key to 6 key command**
➲ For details, refer to *Operate the external unit by using* **1** *key —* **6** *key* on this page

④ **Operate the external unit by using Function 1 to Function 4 key and Auto/Manual key**
➲ For details, refer to *Operate the external unit by using* **Function 1** — **Function 4** on this page
➲ For details, refer to *Switching the automatic and manual function* on this page

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.

1 Touch [1] — [6].

2 Touch desired key to operate the external unit.

❒ To return to the previous screen, touch [**Back**].

❒ Operation varies depending on the external unit connected. (In some cases, some functions may not be used until you touch and hold the key.)

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.

1 Touch [Function].

2 Touch [Function 1, 2, 3 or 4].

The operation command is transmitted to the external unit.

❒ Some functions may not be used until you touch and hold the key.

❒ To return to the previous screen, touch [**Back**].

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 [Function].

2 Touch [Auto/Manual].
Touching [**Auto/Manual**] switches between [**Auto**] and [**Manual**].

❒ Operation varies depending on the external unit connected. (In some cases, the external unit may not respond.)

❒ To return to the previous screen, touch [**Back**]. ◼

Operating the AUX input source (AUX)

An IP-BUS-RCA Interconnector such as CD-RB20/CD-RB10 (sold separately) lets you connect your navigation system to auxiliary equipment featuring RCA output. For more details, refer to the IP-BUS-RCA Interconnector owner's manual.

Selecting [AUX] as the source

1   [AUX Input] is set to [On].
➲ For details, refer to *Switching the auxiliary setting* on page 150

2   Touch the source icon and touch [AUX].
➲ For details, refer to *Selecting a source* on page 97 ◼

Customizing the Audio Setting related with Audio Visual

Various settings are available with the audio source according to your audiovisual needs. This chapter describes the methods of changing the various settings and setting the LCD panel.

AV Setting Overview

The audio visual setting is divided into [**Audio Settings**] and [**System Settings**].

Audio Settings screen

System Settings screen

➲ For more details about "[**Audio Settings**]", refer to this page to page 146.
➲ For more details about "[**System Settings**]", refer to page 146 to page 152.
❒ When **Preout** (the subwoofer controller setting in **System Settings** menu) is **Full**, the **Non Fading** will be displayed instead of **Sub Woofer**.
➲ For details, refer to *Setting the rear output and subwoofer controller* on page 152
When selecting the FM tuner as the source, you cannot select [**Source Level**].

How to Operate the Audio Settings screen

1   Press AV button.
The Navigation screen changes to the Audio source screen (of any source).

2   Touch [AV Settings].
The AV Settings screen appears.

3   Touch the item you want to change.

4   Change Setting.

(E.g. Equalizer screen)

❒ Touch [**ESC**] to return to the selected source screen currently.
❒ Touch [**Back**] to return to the AV Settings screen.∎

Customizing the Audio Settings Items

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 recall. Here is a list of the equalizer curves:

Equalizer curve
Super Bass **Super Bass** is a curve in which only low-range is boosted.
Powerful (Default) **Powerful** is a curve in which low-range and high-range sounds are boosted.

Customizing the Audio Setting related with Audio Visual

Natural
Natural is a curve in which low-range and high-range sounds are slightly boosted.

Vocal
Vocal is a curve in which the mid-range sounds, such as the human vocal range, are boosted.

Flat
Flat is a flat curve in which nothing is boosted.

Custom1
Custom1 is an adjusted equalizer curve that you create. A separate custom curve can be created. **Custom1** and **Custom2** are adjusted equalizer curves that you create. Adjustments can be made with a 3-band parametric equalizer.

Custom2
Custom2 is an adjusted equalizer curve that you create. If you select this curve, the effect is reflected all audio source.

1   Touch [Equalizer] in Audio Settings menu.

2   Touch desired equalizer.

❒ When [**Flat**] is selected, no supplement or correction is made to the sound. This is useful to check the effect of the equalizer curves by switching alternatively between [**Flat**] and a set equalizer curve.

Adjusting equalizer curves
You can adjust the currently selected equalizer curve setting as desired.
- A separate **Custom1** curve can be created for each source. If you make adjustments when a curve **Super Bass**, **Powerful**, **Natural**, **Vocal**, **Flat**, or **Custom1** is selected, the equalizer curve settings will be memorized in **Custom1**.
- A **Custom2** curve can be created common to all sources. If you make adjustments

when **Custom2** curve is selected, the **Custom2** curve will be updated.
❒ The adjusted **Custom1** curve is memorized for each of the source selected, but one curve is shared for the following sources.
- **AM** and **FM**
- **EXT 1** and **EXT 2**
- **AUX** and **AV INPUT**
In the built-in DVD drive, different curves can be memorized for a DVD-Video and a CD (CD-DA or MP3).
You can adjust the center frequency, level and the Q (curve characteristics) of each band (**Low**/**Mid**/**High**).

- **Band**:
  You can select the band you want to adjust.
- **Frequency**:
  You can select which frequency to be set as the center frequency.
- **Level**:
  You can adjust the decibel (dB) level of the selected band.
- **Q**:
  You can select the details of the curve characteristics. (The following figure shows the characteristic image.)
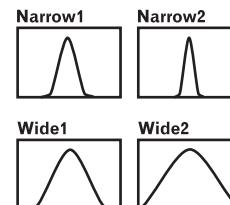
1   Touch [Equalizer] in Audio Settings menu.

2   Touch [Customize].
The details setting screen appears.

3   Touch ◄ or ► to select the equalizer band to adjust.
Each time you touch ◄ or ► selects equalizer bands in the following order:
Low — **Mid** — **High**

4   Touch ◄ or ► to select the desired center frequency.
Low: 40 — **80** — **100** — **160** (Hz)
Mid: 200 — **500** — **1K** — **2K** (Hz)
High: 3.15K — **8K** — **10K** — **12.5K** (Hz)

5   Touch ◄ or ► to adjust the level of the equalizer band.
Each time you touch ◄ or ► increases or decreases the level of the equalization band.
+12dB to **–12dB** is displayed as the level is increased or decreased.

6   Touch ◄ or ► to select the desired [Q].
Touch ◄ or ► until the desired the curve characteristics appears in the display.
Wide2 — **Wide1** — **Narrow1** — **Narrow2**
  ❐ To adjust other bands, repeat step 3 to step 6.

Setting the simulated sound stage

You can select the desired effect from various simulated sound stages, such as Music Studio or Dynamic Theater. You can also adjust a listener positioning effect.

Setting a stage that fits your image

1   Touch [Staging] in Audio Settings menu.

2   Touch desired stage setting.

  ❐ [**Living Room**] setting that emphasizes mid-range sound hardly has any effect near the maximum volume level.

  ❐ When you set staging to an option other than [**Off**], the high pass filter (**HPF**) setting turns [**Off**].
➲ For details, refer to *Using the high pass filter* on page 146

Adjusting a position effect

You can select a listener position that you want to make as the center of sound effects.

1   Touch [Staging] in Audio Settings menu.

2   Touch [Position].

3   Touch desired position.

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 Audio Settings menu.
The FAD/BAL screen appears. When **Rear SP** (the subwoofer controller setting in **System Settings** menu) is **Sub.W**, **Balance** will be displayed instead of **FAD/BAL**.
➲ For details, refer to *Setting the rear output and subwoofer controller* on page 152

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.

Customizing the Audio Setting related with Audio Visual
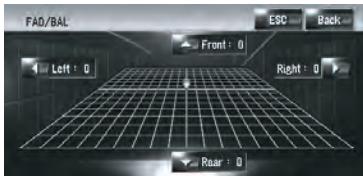
Front: 15 to **Rear: 15** is displayed as the front/rear speaker balance moves from front to rear. When the rear output setting is **Rear SP Sub.W**, you cannot adjust front/rear speaker balance.
➲ For details, refer to *Setting the rear output and subwoofer controller* on page 152

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 to **Right: 9** is displayed as the left/right speaker balance moves from left to right.

Using subwoofer output

This 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, the output level, and the phase of the subwoofer.

1   Touch [Sub Woofer] in Audio Settings menu.
When **Preout** (the subwoofer controller setting in **System Settings** menu) is **Full**, you cannot select [**Sub Woofer**].
➲ For details, refer to *Setting the rear output and subwoofer controller* on page 152

2   Touch [On] to turn subwoofer output on.
To turn subwoofer output off, touch [**Off**].

3   Touch [Reverse] or [Normal] to select the phase of subwoofer output.
❒ If subwoofer output sound is not clear with [**Normal**], change it to [**Reverse**].

4   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.

5   Touch [+] or [-] to adjust the output level of the subwoofer.
+6 to **-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 system's low pass filter (for the subwoofer), but is output through the RCA output.

1   Touch [Non Fading] in Audio Settings menu.
Only when **Preout** (the subwoofer controller setting in **System Settings** menu) is **Full**, you can select [**Non Fading**].
➲ For details, refer to *Setting the rear output and subwoofer controller* on page 152

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 to **-6** is displayed as the level is increased or decreased.

Adjusting loudness

Loudness compensates for deficiencies in the low- and high-sound ranges at low volume.

1   Touch [Loudness] in Audio Settings 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 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 **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 Audio Settings 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 fre-
quency.**
Each time you touch ◄ or ► selects cut-off fre-
quencies in the following order:
50 — **80** — **125** (Hz)
When **Preout** (the subwoofer controller set-
ting in **System Settings** menu) is **Sub.W**, **HPF**
function is effective for front speakers only.

If you change the acoustic field after you set it
once, the high pass filter (**HPF**) setting turns **Off**.

Adjusting source levels

Source Level (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 ad-
just.**

**2   Touch [Source Level] in Audio Settings
menu.**

**3   Touch [+] or [-] to adjust the source vo-
lume.**
+8 to **-8** is displayed as the source volume is
increased or decreased.
Sources are set to same source level adjust-
ment volume automatically.
  • **CD** and **ROM** (**MP3**)
  • **XM** and **SIRIUS**
  • **EXT 1** and **EXT 2**
  • **AUX** and **AV INPUT**▣

Customizing the System Settings Items

System Settings lets you perform system set
up of different settings for navigation system.

How to view and operate the System Settings

1   Press AV button.
The Navigation screen changes to the Audio
source screen (of any source).

2   Touch [AV Settings].
The AV Settings screen appears.

3   Touch [System Settings].

4   Touch the item you want to change.
The setting change screen appears, or the set-
ting changes by toggling it.

❒ Touch [Next →] or [← Back] to move to the next or previous page.

5 Change Setting.

❒ Touch [**ESC**] to return to the selected source screen.
❒ To return to the previous screen, touch [**Back**].

Setting up the built-in DVD drive

You can change the preference for playing a DVD on the built-in DVD drive.
You can use this menu to change audio, subtitle, parental lock, and other DVD settings.
Some changes or settings which you have set here may be invalid depending on the features of the DVD disc. For details, see the disc's instructions.

❒ You can enter this menu while [**DVD**] is selected as audio source.
❒ If you can enter this menu during DVD playback, playback will be stopped and return to the first chapter.

Setting the language

You can set each desired language for subtitle, audio and menu. If the selected language is recorded on the DVD, subtitles, audio, and menu are displayed in that language.

1 Switch the audio source to [DVD].

2 Touch [DVD-V Setup] in System Settings menu.

3 Touch [Subtitle Language], [Audio Language] or [Menu Language].
Each language menu is displayed and the currently set language is selected.

4 Touch the desired language.
When you select [**Others**], a language code input display is shown. Input the four digit code of the desired language then touch [**Enter**].
➲ For details, refer to *Language Code Chart for DVD* on page 155

❒ If the selected language is not recorded on the disc, the default language specified on the disc is output and displayed.
❒ You can also switch the subtitle and audio language by touching [**Subtitle**] or [**Audio**] during playback.

➲ For more details about "Changing the subtitle language during playback (Multi-subtitle)", refer to *Touch panel key operation* on page 105
➲ For more details about "Changing audio language during playback (Multi-audio)", refer to *Touch panel key operation* on page 105

Setting assist subtitles on or off

Assist subtitles offer explanations for the aurally impaired. However, they are only displayed if they are recorded on the DVD.
You can turn assist subtitles on or off as desired.

1 Touch [DVD-V Setup] in System Settings menu.

2 Touch [Assist Subtitle].
Touching [**Assist Subtitle**] switches between [**On**] and [**Off**].

Setting angle icon display

You can set to display the angle icon 🎞 on scenes where the angle can be switched.

1 Touch [DVD-V Setup] in System Settings menu.

2 Touch [Multi Angle].
Touching [**Multi Angle**] switches between [**On**] and [**Off**].

Customizing the Audio Setting related with Audio Visual

Customizing the Audio Setting related with Audio Visual

Setting the aspect ratio

There are two kinds of display. A wide screen display has a width-to-height ratio (TV aspect) of 16:9, while a regular display has a TV aspect of 4:3. If you use a regular rear display has a TV aspect of 4:3, you can set the aspect ratio suitable for your rear display. (We recommend use this function only when you want to fit it to rear display.)

❒ When using a regular display, select either **Letter Box** or **Panscan**. Selecting **16:9** may result in an unnatural picture.

1 Touch [DVD-V Setup] in System Settings menu.

2 Touch [TV Aspect].

Each touch of [**TV Aspect**] changes the settings as follows:

• **16:9** — Wide screen picture (16:9) is displayed as it is (initial setting)
• **Letter Box** — The picture is in the shape of a letter box with black bands at the top and bottom of the screen
• **Panscan** — The picture is cut short at the right and left of the screen
❒ When playing discs that do not have a pan-scan system, the disc is played back with [**Letter Box**] even if you select [**Panscan**] setting. Confirm whether the disc package bears the 16 : 9 LB mark.

Setting the parental lock

Some DVD-Video discs let you use parental lock to set restrictions so that children cannot watch a violent and adult oriented scenes. You can set the parental lock level in steps as desired.

❒ When you set a parental lock level and then play a disc featuring parental lock, code number input indications may be displayed. In this case, playback will begin when the correct code number is input.

Setting the code number and level

When you first use this function, register your code number. If you do not register a code number, parental lock will not operate.

1 Touch [DVD-V Setup] in System Settings menu.

2 Touch [Parental Level].

3 Touch [0] — [9] to input a four digit code number.

4 While the input number is displayed, touch [Enter].

The code number is registered, and you can now set the level.

5 Touch any of [1] — [8] to select the desired level.

The parental lock level is set.

• **Level 8** — Playback of the entire disc is possible (initial setting)
• **Level 7** — **Level 2** — Playback of discs for children and non-adult oriented discs is possible
• **Level 1** — Only playback of discs for children is possible
❒ If you want to change the parental level, enter the registered code number. Proceed to Step 3.
❒ We recommend that you keep a record of your code number in case you forget it.
❒ The parental lock level is recorded on the disc. You can confirm it by looking at the disc package, the included literature or the disc itself. With discs that do not feature a recorded parental lock level, you cannot use parental lock.
❒ With some discs, parental lock operates to skip certain scenes only, after which normal playback resumes. For details, refer to the disc's instructions.
❒ If you forget the registered code number, touch [**Clear**] 10 times on the screen in the Step 3. The registered code number is canceled, letting you register a new one.

Customizing the Audio Setting related with Audio Visual

Changing the wide screen mode

⚠ CAUTION

For safety reasons, you cannot use some of these navigation functions while your vehicle is in motion. To enable these functions, you must stop in a safe place and apply the parking brake (refer to *To ensure safe driving* on page 22).

● **Touch [Wide Mode] in System Settings menu.**
The Wide Mode screen appears.
On the Wide Mode screen, you can select the following items:
Full, **Just**, **Cinema**, **Zoom**, or **Normal**
Normal (normal)
A 4:3 picture is displayed normally, 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 the frame.
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 may appear grainy when viewed in **Cinema** or **Zoom** mode.
  ❒ The navigation map and the rear view camera picture is always **Full**.

Setting for rear view camera

The following two functions are available. The rear view camera feature requires a separately sold rear view camera (e.g. ND-BC2). (For details, consult your dealer.)

Camera for backing up

The navigation system features a function that automatically switches to the full-screen rear camera image installed on your vehicle. When the shift lever is in the REVERSE (R) position, the screen automatically switches to full-screen rear view camera.

Camera for Rear view mode

[**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 be aware that in this setting, camera image is not resized to fit, and 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.

  ❒ Immediately confirm whether the display changes to a rear view camera image when the shift lever is moved to REVERSE (R) from another position.
  ❒ When the screen changes to full-screen rear view camera image during normal driving, switch to the opposite setting in [**Polarity**].
  ❒ Initially, this function is set to [**Off**].

1 Touch [Camera Input] in System Settings menu.

2   Touch [On] to turn rear view camera setting on.
❐ 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

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 INPUT** source.

● **Touch [AV Input] in System Settings menu.**
Each touch of [**AV Input**] changes the settings as follows:
- **Off** — No video component is connected
- **Video** — External video component
- **EXT** — Pioneer external unit connected with an RCA video cable
❐ When a Pioneer external unit is connected with an IP-BUS cable, select [**EXT**]. When the audio source is [**EXT**], the "Video image" of the Pioneer external unit can be displayed.

Switching the auxiliary setting

It is possible to use auxiliary equipment with the navigation system as the one of sources. Activate the auxiliary setting when using auxiliary equipment connected to the navigation system.

● **Touch [AUX Input] in System Settings menu.**
Touching [**AUX Input**] switches between [**On**] and [**Off**].

➲ For details, refer to *Selecting [***AUX***] as the source* on page 141

Switching the muting/attenuation timing

You can mute the audio source volume or attenuate the output signal. This setting is invalid for the mute signal has been received from the MUTE lead connected to the navigation unit. (Even if this setting is [**Off**], the navigation system will mute or attenuate the audio source volume when the signal is output via MUTE lead.)

● **Touch [Mute Set] in System Settings menu.**
Each touch of [**Mute Set**] changes the settings as follows:
- **Guide/Tel/VR** — The volume is muted or attenuated according to the following conditions
  — When the navigation outputs the guidance voice.
  — When you use a cellular phone via Bluetooth technology (dialing, talking, incoming call).
  — When the voice recognition mode is activated.
- **Tel/VR** — The volume is muted or attenuated according to the following conditions
  — When you use a cellular phone via Bluetooth technology (dialing, talking, incoming call).
  — When the voice recognition mode is activated.
- **Off** — The volume does not change
❐ Operation returns to normal when the correspond action is ended.
❐ The navigation voice guidance itself cannot be attenuated or muted. If you want to mute the navigation guidance voice temporarily, use 🔇 on the navigation map screen.

Switching the muting/attenuation level

You can select the muting/attenuation level of [**Mute Set**]. This setting is also effective for a mute signal that has been received from the MUTE lead connected to the navigation unit.

❒ This menu is not available in the following cases:
— Audio source is [**OFF**]
— During muting/attenuation
— [**5.1Ch Setup**] is [**On**]

● **Touch [Mute Level] in System Settings menu.**

Each touch of [**Mute Level**] changes the settings as follows:
- **All** — The volume becomes 0
- **–20dB** — The volume becomes 1/10
- **–10dB** — The volume becomes 1/3

❒ When you select [**All**], [**Mute**] is displayed and no audio adjustments are possible during the sound is turned off.

❒ When you select [**–20dB**] or [**–10dB**], no audio adjustments, except volume control, are possible during the sound is attenuated.

❒ Operation returns to normal when the correspond action is ended.

❒ Even when a mute signal has been received from MUTE lead connected to the navigation unit, navigation voice guidance cannot be attenuated or muted. If you want to mute the navigation guidance voice temporarily, use [icon] on the navigation map screen.

Changing the voice output of the navigation guidance

You can set the speaker to output the navigation guidance and phone voice, etc.

● **Touch [Guide/Tel SP] in System Settings menu.**

Each touch of [**Guide/Tel SP**] changes the settings as follows:
- **Left SP** — Uses only the front left speaker
- **Right SP** — Uses only the front right speaker

- **L+R SP** — Uses both the front right and left speakers

Switching the auto antenna setting

If the blue lead of the navigation system is connected to the antenna control terminal of the vehicle, select either of the following settings.

- **Radio** — The antenna extends or turns on only when the audio source is **FM** or **AM**. The antenna is stored or turned off when the source is switched to another.
- **Power** — The antenna extends or turns on when the ignition switch is turns on. The antenna is stored or turned off when the ignition switch is turned off.

● **Touch [Auto ANT] in System Settings menu.**

Touching [**Auto ANT**] switches between [**Radio**] and [**Power**].

❒ Regardless of whether [**Radio**] or [**Power**] is selected, turning off the ignition switch will cause the antenna to automatically retract or turn off.

Setting the clock display on the video image

You can select whether to display the clock on the video image screen without touch panel keys, such as DVD-Video, AV INPUT, or TV tuner.

● **Touch [Clock DISP] in System Settings menu.**

Touching [**Clock DISP**] switches between [**All SCRN**] and [**Audio SCRN**].

- **All SCRN** — The clock is overlaid on the "Video image"
- **Audio SCRN** — The clock is not overlaid on the "Video image"

Setting the CD recording mode

You can set whether to start recording tracks automatically when you play a CD, or to manually trigger recording.

● **Touch [REC Mode] in System Settings menu.**
Each touch of [**REC Mode**] changes the settings as follows:
  • **Auto** — Records the tracks automatically when a CD is played
  • **Manual** — Lets you select the tracks you want to record manually, and records them
  • **Single** — Automatically records only the first track of the CD

Setting the rear output and subwoofer controller

The navigation system's rear output can be used for full-range speaker or subwoofer connection. If you switch **Rear SP** setting to **Sub.W**, you can connect a rear speaker lead directly to a subwoofer without using an auxiliary amp.
Initially, the navigation system is set for rear fullrange speaker connection. When rear output is connected to full-range speakers (when **Rear SP** setting is **Full**), you can connect the RCA subwoofer output (SUBWOOFER OUTPUT or NON-FADING OUTPUT) to a subwoofer. In this case, you can select whether to use the subwoofer controller's (low pass filter, phase) built-in amp of the navigation system or the auxiliary amp or subwoofer.
❒ If you change the subwoofer controller [**Rear SP**] or [**Preout**], [**Sub Woofer**] or [**Non Fading**] in **Audio Settings** menu return to the factory settings.
❒ Both rear speaker leads output and RCA rear output are switched simultaneously in this setting.
❒ **Rear SP** can be set only when the source is [**OFF**].

1   Touch [Rear SP] in System Settings menu.

2   Touch [Full] or [Sub.W] 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 speaker leads directly, select **Sub.W**.

3   Touch [Preout] to switch the subwoofer output or non fading output.
❒ When [**Rear SP**] setting is **Sub.W**, [**Preout**] is invalid.
❒ Even if you change this setting, there is no output unless you turn [**Non Fading**] or [**Sub Woofer**] in **Audio Settings** menu [**On**].
➲ For details, refer to *Using non fading output* on page 145
➲ For details, refer to *Using subwoofer output* on page 145

Switching the 5.1ch setting

When the navigation system is combined with the multi-channel processor system (sold separately), you can use the multi-channel sound.
Enter the following setting when combining the multi-channel processor system.

⚠ CAUTION

DO NOT enter this setting before you connect the multi-channel processor system. (If this setting is entered, the RCA ("SUBWOOFER OUTPUT or NON-FADING OUTPUT") will output maximum volume for the multi-channel processor system.) Pioneer is not responsible for any damage to the speaker equipment caused by ignoring this warning.

❒ This setting is possible only when the optical cable connection box (supplied with the Multi-channel processor) is connected to the navigation system.

1   Touch the source icon and then touch [OFF] to turn source off.
When the source icon is not displayed, you can display it by touching the screen.

**2   Touch [5.1Ch Setup] in the System Set-
tings menu.**
If you touch [**5.1Ch Setup**], it will be turned
[**On**]. If you touch [**5.1Ch Setup**] again to turn
[**Off**] the setting, [**5.1Ch Setup**] will disappear.
If you want to turn it [**On**] again, you have to
repeat the procedure from the Step1. ◼

Other Functions

Selecting the video for "Rear display"

You can choose either to show the same
image as the front screen or to show the se-
lected source on the "Rear display".

**1   Press AV button to switch Audio opera-
tion screen.**

**2   Touch the source icon and then touch
[REAR SCREEN].**

Each touch of [**REAR SCREEN**] changes the
settings as follows:

- **MIRROR** — The video on the front screen of
  the navigation unit is output to the "Rear
  display"
- **DVD** — The video and sound of the DVDs
  are output to the "Rear display"
- **AV** — The video and sound of **AV INPUT**
  are output to the "Rear display"
- ❒ When **MIRROR** is selected, the following re-
  strictions are applied to "Rear display".
  — When the TV tuner is connected with
    AV-BUS, its "Video image" cannot be
    output. (Connect the TV tuner's rear out-
    put to "Rear display" directly.)
  — When selecting [**Rear View**] in the map
    display, nothing is displayed.

— All sounds cannot be output for "Rear
  display".
— There is no picture on "Rear display"
  while [**Picture Adjust**] for
  [**Back-Camera**] is carried out.
— The map screen navigation images out-
  put to the "Rear display" differ from
  standard NTSC format images. There-
  fore, their quality will be inferior to the
  images that appear on the front screen.
❒ When **DVD** is selected, the following re-
  strictions are applied to "Rear display".
  — When a CD or MP3 disc is set in the
    built-in DVD drive, nothing is output.
❒ When **AV** is selected, the following restric-
  tions are applied to "Rear display".
  — The "Video image" and sound are output
    only when **AV INPUT** has both video and
    sound.
  — The "Video image" and sound are output
    only when the appropriate setting on
    [**AV Input**] is [**Video**].

Operating the picture adjustment

⚠ **CAUTION**

For safety reasons, you cannot use some of these
navigation functions while your vehicle is in mo-
tion. To enable these functions, you must stop in
a safe place and apply the parking brake (refer to
To ensure safe driving on page 22).

You can adjust the picture for each source and
rear view camera.

**1   Press V button to display Picture Adjust
screen.**

- **Brightness** — Adjusts the black intensity
- **Contrast** — Adjusts the contrast
- **Color** — Adjusts the color saturation

- **Hue** — Adjusts the tone of color (red is emphasized or green is emphasized)
- **Dimmer** — Adjusts the brightness of display
- [**Back-Camera**] — Shows the picture adjustment display for the rear view camera
- ❒ Touching [**Source**] while adjusting the rear view camera image returns you to the previous screen.
- ❒ The adjustments of **Brightness**, **Contrast** and **Dimmer** are stored separately when your vehicle's headlights are off (daytime) and when your vehicle's headlights are on (nighttime). These are switched automatically depending on the vehicle's headlights are on or off.
- ❒ You cannot adjust **Color** and **Hue** for the source without a video and navigation map display.
- ❒ The setting contents can be memorized separately for the following screen and the "Video image".
  - — **AM**/**FM**/**M-CD**/**iPod**/**AUX**/**XM**/**SIRIUS** screen
  - — **LIBRARY** (Music Library) screen
  - — Built-in DVD drive
  - — **TV** image
  - — **AV INPUT** and **EXT 1**, **EXT 2**
  - — Rear view camera image
  - — Navigation map and menu screen
- ❒ The picture adjustment may not be available with some rear view cameras.
- ❒ Because of the LCD screen characteristics, you may not be able to adjust the screen at low temperatures.

2   Touch [+] or [-] to adjust the desired item.
Each time you touch [**+**] or [**-**] increases or decreases the level of the desired item.

3   Touch [ESC] to return to the previous screen.

Switching the backlight on or off

By turning off the backlight of the LCD screen, you can turn off the screen display and the voice guidance.

● **Press and hold V button.**
The backlight turns off, and the screen turns off.

- ❒ Press **V** button once again to turn on the backlight, and the screen is displayed. ▣

Customizing the Audio Setting related with Audio Visual

Language Code Chart for DVD

Language (code), input code	Language (code), input code	Language (code), input code
Japanese (ja), 1001	Guarani (gn), 0714	Pashto, Pushto (ps), 1619
English (en), 0514	Gujarati (gu), 0721	Quechua (qu), 1721
French (fr), 0618	Hausa (ha), 0801	Rhaeto-Romance (rm), 1813
Spanish (es), 0519	Hindi (hi), 0809	Kirundi (rn), 1814
German (de), 0405	Croatian (hr), 0818	Rumanian (ro), 1815
Italian (it), 0920	Hungarian (hu), 0821	Kinyarwanda (rw), 1823
Chinese (zh), 2608	Armenian (hy), 0825	Sanskrit (sa), 1901
Dutch (nl), 1412	Interlingua (ia), 0901	Sindhi (sd), 1904
Portuguese (pt), 1620	Interlingue (ie), 0905	Sango (sg), 1907
Swedish (sv), 1922	Inupiak (ik), 0911	Serbo-Croatian (sh), 1908
Russian (ru), 1821	Indonesian (in), 0914	Shinghalese (si), 1909
Korean (ko), 1115	Icelandic (is), 0919	Slovak (sk), 1911
Greek (el), 0512	Hebrew (iw), 0923	Slovenian (sl), 1912
Afar (aa), 0101	Yiddish (ji), 1009	Samoan (sm), 1913
Abkhazian (ab), 0102	Javanese (jw), 1023	Shona (sn), 1914
Afrikaans (af), 0106	Georgian (ka), 1101	Somali (so), 1915
Amharic (am), 0113	Kazakh (kk), 1111	Albanian (sq), 1917
Arabic (ar), 0118	Greenlandic (kl), 1112	Serbian (sr), 1918
Assamese (as), 0119	Cambodian (km), 1113	Siswati (ss), 1919
Aymara (ay), 0125	Kannada (kn), 1114	Sesotho (st), 1920
Azerbaijani (az), 0126	Kashmiri (ks), 1119	Sundanese (su), 1921
Bashkir (ba), 0201	Kurdish (ku), 1121	Swahili (sw), 1923
Belorussian (be), 0205	Kirghiz (ky), 1125	Tamil (ta), 2001
Bulgarian (bg), 0207	Latin (la), 1201	Telugu (te), 2005
Bihari (bh), 0208	Lingala (ln), 1214	Tajik (tg), 2007
Bislama (bi), 0209	Laotian (lo), 1215	Thai (th), 2008
Bengali, Bangla (bn), 0214	Lithusnian (lt), 1220	Tigrinya (ti), 2009
Tibetan (bo), 0215	Latvian, Lettish (lv), 1222	Turkmen (tk), 2011
Breton (br), 0218	Malagasy (mg), 1307	Tagalog (tl), 2012
Catalan (ca), 0301	Maori (mi), 1309	Setswana (tn), 2014
Corsican (co), 0315	Macedonian (mk), 1311	Tongan (to), 2015
Czach (cs), 0319	Malayalam (ml), 1312	Turkish (tr), 2018
Welsh (cy), 0325	Mongolian (mn), 1314	Tsonga (ts), 2019
Danish (da), 0401	Moldavian (mo), 1315	Tatar (tt), 2020
Bhutani (dz), 0426	Marathi (mr), 1318	Twi (tw), 2023
Esperanto (eo), 0515	Malay (ms), 1319	Ukrainian (uk), 2111
Estonian (et), 0520	Maltese (mt), 1320	Urdu (ur), 2118
Basque (eu), 0521	Burmese (my), 1325	Uzbek (uz), 2126
Persian (fa), 0601	Nauru (na), 1401	Vietnamese (vi), 2209
Finnish (fi), 0609	Nepali (ne), 1405	Volapük (vo), 2215
Fiji (fj), 0610	Norwegian (no), 1415	Wolof (wo), 2315
Faroese (fo), 0615	Occitan (oc), 1503	Xhosa (xh), 2408
Frisian (fy), 0625	Oromo (om), 1513	Yoruba (yo), 2515
Irish (ga), 0701	Oriya (or), 1518	Zulu (zu), 2621
Scottish Gaelic (gd), 0704	Panjabi (pa), 1601	
Galician (gl), 0712	Polish (pl), 1612	

To Ensure Safe Driving

⚠️ **CAUTION**

For safety reasons, Voice Help menu (Voice Reco-g.Help) is not available while your vehicle is in motion. To enable this function, you must stop in a safe place and put on the parking brake before setting your route.

Depending on the selected languages, the commands that you registered before may not be available.
➲ For details, refer to *Available Voice Commands* on page 159

■

Basics of Voice Operation

Your Pioneer navigation system uses the latest in voice recognition technology. You can use voice commands to operate many of its functions. This chapter describes where you can use voice commands, and also what commands the system accepts.

Flow of voice operation

You can start voice operation any time even when the map screen is displayed or audio is operated. (Some operations are not available.) The basic steps of voice operation are as follows.

1   Touch VOICE icon to activate voice operation.

⬇

2   Speak a command into the microphone after the beep.

⬇

3   When the command is recognized, the navigation system displays the response message on the screen, and pronounces it in some cases.

⬇

4   As necessary, repeat Step 3.

⬇

5   The requested operation will be carried out.

❒ The voice operation may not be operable for a minute after the navigation system has booted up.
❒ If you operate using "CD-SR1" Steering Remote Control (sold separately), the following buttons can be used for operation:
VR ACTIVATION / OFF HOOK button:
Same function as **VOICE** icon.
VR CANCEL / ON HOOK button:
Return to previous screen.

To start voice operation

No sounds can be output during 🔊.

● **Touch VOICE icon.**

Navigation screen

Audio screen

❒ Depending on the operating state of the na-
vigation system, some commands dis-
played in Voice Help may be unavailable.
Available commands are in white and una-
vailable commands are in gray.

When using voice operation for the first time

Until you are familiar with this system, it is re-
commended that you stop the vehicle in a safe
place and refer to the commands displayed in
the Voice Help menu (a list of the words you
can speak). When your vehicle is parked with
the parking brake on, see the Voice Help
menu and speak voice command on that
menu (except for some cases).

Voice Help menu

VOICE icon

- 🔊 When voice command is possible
- 🔊 When voice command is not accepted
- ❒ When you say "**Voice Help**", the navigation
system pronounces the displayed words
that can be vocalized.
- ❒ If no **VOICE** icon is displayed, check to see
whether the microphone is properly con-
nected and turn the power on again.
- ❒ If there are multiple pages, the voice help
menu can be switched by using ▶ or
◀ on the screen. You can also switch
the page by saying "**Next page**" or "**Pre-
vious page**".
- ❒ If you say "**Back**" or touch [**Back**], the
screen returns to the previous screen.

To cancel voice operation

You can cancel voice operation features at any
time by saying "**Cancel**". After you cancel
voice operation, the map is displayed.

❒ If no command is made in the next 6 sec-
onds or the recognition fails three times
successively, the voice recognition
switches to standby mode. To reactivate
voice operation, touch **VOICE** icon. ◼

Tips for Voice Operation

For your voice commands to be correctly re-
cognized and interpreted, ensure that condi-
tions are suitable for recognition.

Reduce the volume setting on your vehicle audio system

➲ For details, refer to *Switching the muting/at-
tenuation timing* on page 150

Close the vehicle windows

Please note that wind through the vehicle win-
dow or miscellaneous noise from outside the
vehicle can interfere with voice operation.

Position the microphone carefully

For optimum pick-up, the microphone should
be fixed at a suitable distance directly in front
of the driver.

Pause before giving a command

Speaking too soon may cause the recognition
to fail.

Pronounce your commands carefully

Speak slowly, deliberately, and clearly.

- ❒ If the registered voice command and the
default voice command is the same, the re-
gistered voice command (e.g. the pronun-
ciation for the entry in "Address Book" and
the playlist in Music library) will take prior-
ity. In this case, the default voice command
will not function. To use the default voice
command, change or delete the registered
voice command that is identical to the de-
fault voice command. ◼

An Example of Voice Operation

Search for POI in vicinity

In this example, you want to search for the nearest gas station and set it as your destination.

❒ Give the following verbal commands after switching to the navigation screen.

➲ For details, refer to *Voice commands related to navigation* on page 161

1   Press MAP button to display the navigation map screen.

2   Touch VOICE icon.
A list of commands for voice operation appears. After the message, the beep indicates that the system is ready to accept your voice command. Say a command after this beep.

3   Say "Destination".

⬇

A message to prompt the next operation is given.

❒ If you say "**Back**" or touch [**Back**], the screen returns to the previous screen.

4   Say "Vicinity Search".
Say the corresponding commands for the function you want to operate. Here, the selection method of your destination is specified.

When you want to search the gas station nearest to the current location, say "**Vicinity Search**".
The message "**Vicinity search. Please request POI category.**" appears, and the navigation system pronounces that message.

5   Say "GAS Station".
The message "**Vicinity search. Gas Station**" appears.
The map of the nearest gas station is shown.

❒ For categories that can be used as the voice commands, refer to "*Category list for vicinity search*".

➲ For details, refer to *Category list for vicinity search* on page 172

6   Touch VOICE icon.

7   Say "Next" or "Previous" to select the desired facilities.
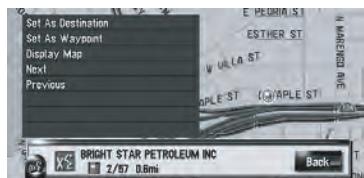
8   After confirming the location, say "Set As Destination".
If there is no route, the system starts the route calculation. If the route is already set, touch **VOICE** icon to start route calculation.

Operating Your Navigation System with Voice

Search for the playlist

In this example, you want to search for a playlist and play that playlist.

1   Touch VOICE icon when the audio source is "LIBRARY".

2   Say "Music Search".

3   Say the desired group.

❒ If the desired group is already selected, you can skip this step.

4   Say the name of the playlist you want to play.

❒ If there are multiple pages, voice help menu can be switched by using ◄ or ► on the screen. You can also switch the page by saying "**Next page**" or "**Previous page**".

❒ You can also search the track in the current playlist by saying "**Track Search**". ◾

Available Voice Commands

This section describes the flow and available commands of each voice operation.

❒ When [**Language**] in [**Regional Settings**] is changed to another language, the commands that you registered can be used only if the language for voice operation is the same.

❒ For <City Name>, <Street Name>, <House number> shown on the following chart, say the real name or number which you want to search for. For example, if the real city name is "Long Beach" and you want to operate "Search by address," say "Long Beach" instead of <City Name>.

❒ For <POI Name> shown on the following chart, say the real POI name that you want to search for. For example, if the real POI name is "San Francisco International Airport" and you want to operate "Go to <POI Name>," say "Go to San Francisco International Airport" (or "Go to SFO"). You can vocalize <POI Name> included in the following categories only.

— Railway Station, City Center, Airport, Ferry Terminal, Airline Access, Golf Courses, Shopping Center, Parks, and Recreation Area

❒ For <Registered location's pronunciation> shown on the following chart, say the registered pronunciation. For example, if the registered pronunciation in address book is "My office" and you want to operate "Search by entry on the address book", say "My office". You can hear and edit the pronunciation.
➲ For details, refer to *Changing a pronunciation* on page 62

❒ For <Registered phone book's pronunciation> shown on the following chart, say the registered pronunciation. For example, if the registered pronunciation in phone book is "My friend" and you want to operate "*Telephone Book*", say "My friend". You can hear and edit the pronunciation.
➲ For details, refer to *Editing the entry in "Phone Book"* on page 84

❒ For <Album playlist name>, <Artist playlist name>, <Track name> shown on the following chart, say the name in the music library (if you edited their pronunciation, say their pronunciation). You can hear and edit the pronunciation.

➲ For details, refer to *Changing the pronunciation of a playlist name or track name* on page 119

❒ For <Category Name>and <Sub Category Name> in "*Vicinity Search*", refer to "Category list for vicinity search" and say the desired category in that list.

❒ You can skip the commands with the mark (*). For example, in case search by Point of interest, the system can recognize the command even if you say "POI" without saying "Destination".

❒ If some candidates have been found, the candidate list appears. Select the one from the list and proceed to next step.

❒ During the voice operation, location screen (A) or (B) may appear. In such a case, go to "*Location screen (A) and (B)*" in the later section, and continue the voice operation.
➲ For details, refer to *Location screen (A) and (B)* on page 167

❒ The voice operations related the telephone are available only using hands-free phoning feature of this system and is unavailable during a call.
➲ For details, refer to *Using Hands-free Phoning* on page 77

❒ Terms written in italics are voice commands.

Operating Your Navigation System with Voice

Basic commands for voice operation

The following verbal commands can be used
both in navigation screen and audio operation
screen.

Basic commands

Back → Return the previous screen.
Cancel → Cancel the voice operation.
Current Location → Return the current location map screen.
Voice Help → Pronounces the display words that can be vocalized.
Next Page, *Previous Page* → Switch the page of Voice Help Menu.

Voice commands related to navigation

Give the following verbal commands after
switching to the navigation screen.

Search by address

Destination* → *Address* → *<City Name>* → *<Street Name>* → *<House Number>* → Location Screen (A)
Notes:
• Select the state, province or territory manually before the voice operation.
• When you say the street name, say the street type together <e.g. *XXXX street*, *xxxx avenue*, *xxxx road*, *xxxxx boule-
vard*, etc. >
• Some operation may be skipped depending on the address.
• If you don't know the street name or house number, you can say "*Area*" so that your destination can be set to the
main point of that city or street.

Search by Points of interest

Destination* → *POI* → *<POI Name>* → Location Screen (A)

Destination* → *POI* → *Go To <POI Name>* → If the route already set, touch **VOICE** icon to start route calculation. If
there is no route, the system starts the route calculation.

Destination* → *POI* → *Waypoint <POI name>* → Touch **VOICE** icon to start route calculation.

Making phone call to POI

Destination* → *POI* → *Call <POI name>* → Touch **VOICE** icon to call that facility (Only when the phone number is
registered in the facility.)

Displaying the map of POI

Destination* → *POI* → *Display <POI name>* → Display the map of that facility's surroundings.

Search by telephone number

Destination* → *Telephone Number* → Say the telephone number you want to search. → Location Screen (A) (If mul-
tiple facilities exist with the same phone number, the facilities you intend may not be displayed.)
Note:
You can say 10 digits telephone number only. 911 and the number other than 10 digits is not available.

Operating Your Navigation System with Voice

Search by entry on the address book

Destination* ➞ *Address Book** ➞ *<Registered location's pronunciation>* ➞ Location Screen (A)

Destination* ➞ *Go To <Registered location's pronunciation>* ➞ If the route already set, touch **VOICE** icon to start route calculation. If there is no route, the system starts the route calculation.

Destination* ➞ *Waypoint <Registered location's pronunciation>* ➞ Touch **VOICE** icon to start route calculation.

Making phone call to entry on the address book

Destination* ➞ *Call <Registered location's pronunciation>* ➞ If the registered location has telephone number data, touch **VOICE** icon to call the registered location.

Displaying the map of the entry on the address book

Destination* ➞ *Display <Registered location's pronunciation>* ➞ Display the map of surroundings on that facility.

Search the facilities in vicinity

Destination* ➞ *Vicinity Search* ➞ *<Category Name>*, *<Sub Category Name>* ➞ Location Screen (B)

Displaying the destination history

Destination* ➞ *Destination History* ➞ Display the Destination History screen.

Setting the route to your home

Destination* ➞ *Return Home* ➞ If the route already set, touch **VOICE** icon to start route calculation. (If there is no route, the system starts the route calculation.)

Making phone call to your home

Destination* ➞ *Call Home* ➞ Touch **VOICE** icon to call your home (Only when the phone number is registered in your home.)

Setting your home to waypoint

Destination* ➞ *Waypoint Home* ➞ Touch **VOICE** icon to start route calculation. (This function is only available if you have set the destination.)

Display the map of surroundings on your home

Destination* ➞ *Display Home* ➞ Display the map of surroundings on your home.

Display the map of surroundings on your destination

Destination* ➞ *Display Destination* ➞ Display the map of surroundings on your destination.

Set the map location as your destination

Scroll the navigation map or switch the scroll mode from search result screen. ➞ *Basic Operation** ➞ *Set As Destination* ➞ If the route already set, touch **VOICE** icon to start route calculation. If there is no route, the system starts the route calculation.

Operating Your Navigation System with Voice

Set the map location as your waypoint

Scroll the navigation map or switch the scroll mode from search result screen. → *Basic Operation** → *Set As Waypoint* → Touch **VOICE** icon to start route calculation.

Registering the map location to the address book

Basic Operation* → *Registration* → The system register that point and Information edit screen appears.

Operating the navigation map scale

Map Operation* → *Change Scale** → *XXXX kilometer(s) Scale <25 meters Scale, 50 meters Scale, 100 meters Scale, 200 meters Scale, 500 meters Scale, 1 kilometer Scale, 2 kilometers Scale, 5 kilometers Scale, 10 kilometers Scale, 20 kilometers Scale, 50 kilometers Scale, 100 kilometers Scale, 200 kilometers Scale, 500 kilometers Scale, 1000 kilometers Scale, 2000 kilometers Scale>* → Map screen will be changed to selected scale.
Notes:
• These commands are available only when [**km / mile**] setting is [**km**].
• This function is not available in vehicle dynamics mode.

Map Operation* → *Change Scale** → *XXXX mile(s) Scale <0.02 miles Scale, 0.05 miles Scale, 0.1 miles Scale, 0.25 miles Scale, 0.5 miles Scale, 0.75 miles Scale, 1 mile Scale, 2.5 miles Scale, 5 miles Scale, 10 miles Scale, 25 miles Scale, 50 miles Scale, 100 miles Scale, 250 miles Scale, 500 miles Scale, 1000 miles Scale>* → Map screen will be changed to selected scale.
Notes:
• These commands are available only when [**km / mile**] setting is [**mile**].
• This function is not available in vehicle dynamics mode.

Map Operation* → *Change Scale** → *XXXX mile(s)/yards Scale <25 yards Scale, 50 yards Scale, 100 yards Scale, 0.25 miles Scale, 0.5 miles Scale, 0.75 miles Scale, 1 mile Scale, 2.5 miles Scale, 5 miles Scale, 10 miles Scale, 25 miles Scale, 50 miles Scale, 100 miles Scale, 250 miles Scale, 500 miles Scale, 1000 miles Scale>* → Map screen will be changed to selected scale.
Notes:
• These commands are available only when [**km / mile**] setting is [**Mile&Yard**].
• This function is not available in vehicle dynamics mode.

Map Operation* → *Change Scale** → *Zoom Out*, *Zoom In* → Map screen will zoom out or zoom in.

Operating the view mode

Map Operation* → *Change View Mode** → *Map View*, *Driver's View*, *2D Twin Map View*, *3D Twin Map View*, *Route View*, *Guide View*, *Rear View*, *Vehicle Dynamics* → Map screen will be changed to selected view mode.

Operating the map orientation

Map Operation* → *Heading Up*, *North Up* → Map orientation will be changed.

Recalculating the route

Route Options* → *Change Route** → *Rerouting*, *Use Main Road*, *Use Fast Route*, *Use Short Route*, *Use Freeway*, *Avoid Freeway*, *Use Ferry*, *Avoid Ferry*, *Use Toll Road*, *Avoid Toll Road* → If the route already set, touch **VOICE** icon to recalculate.

Operating Your Navigation System with Voice

Checking the current route

Route Options* → *Route Profile* → Displaying the route profile screen.

Route Options* → *Next Guidance* → You can hear the information of next guidance point.

Canceling the route

Route Options* → *Cancel Route* → If the route is already set, touch **VOICE** icon to cancel the current route.

Route Options* → *Cancel Waypoint* → If the waypoint is already set, touch **VOICE** icon to cancel route until next waypoint.

Checking the traffic list

Traffic Information* → *Traffic Events List* → Displaying the traffic event list.

Traffic Information* → *Traffic On Route List* → Displaying the traffic event list on your route.

Traffic Information* → *Traffic Flow List* → Displaying the traffic flow list.

Erase the tracking

Other Operation* → *Erase Tracks* → Touch **VOICE** icon to delete the tracking.

Viewing the Emergency Info screen

Other Operation* → *Emergency Information* → Displaying the Emergency info screen.

Turning on or off the Overlay POI

Other Operation* → *Display Overlay POI* → Displaying the selected POI in Overlay POI.

Other Operation* → *Hide Overlay POI* → Turn off Overlay POI.

Voice commands related to hands-free phoning

The following verbal commands can be used both in navigation screen and audio operation screen.

Operating the cellular phone featuring Bluetooth technology

Call* → *Telephone Book* → *<Registered phone book's pronunciation>* → If the registered entry in phone book has telephone number data, touch **VOICE** icon to call the entry.

Call* → *Call Registered Point* → *<Registered location's pronunciation>* → If the registered location has telephone number data, touch **VOICE** icon to call the registered location.

Call* → *Redial* → Touch **VOICE** icon to redial.

Call* → *Call Phone Number* → Say the number you want to call. → Touch **VOICE** icon to dial. (Note 1)

Call* → *Received Call* → Displaying the received call list.

Call* → *Call Favorite X* → Touch **VOICE** icon to dial.

Operating Your Navigation System with Voice

Call* ➔ *Call Home* ➔ Touch **VOICE** icon to call your home (Only when the phone number is registered in your home.)

Call* ➔ *Call <Registered location's pronunciation>* ➔ If the registered location has telephone number data, touch **VOICE** icon to call the registered location.

(Note 1): International call with using "+" is not available in the voice operation.

Voice commands related to AV operation

The following verbal commands can be used both in navigation screen and audio operation screen.

Common AV commands
AV Operation* ➔ *Change Display** ➔ *Navigation Screen* ➔ Switching to the navigation map or menu screen.
AV Operation* ➔ *Change Display** ➔ *AV Screen* ➔ Switching to the Audio source screen.
AV Operation* ➔ *Source Off* ➔ Turning the Audio source off.
AV Operation* ➔ *Traffic Channel* ➔ Recalling the memorized traffic channel for XM or SiriusConnect universal tuner.
AV Operation* ➔ *Change Source** ➔ *CD*, *DVD*, *AM*, *FM*, *TV*, *MCD*, *AV Input*, *AUX*, *Sirius*, *iPod*, *XM*, *EXTERNAL1*, *EXTERNAL2*, *Music Library* ➔ Switching to the desired audio source. (You cannot switch to an unavailable source.)

Give the following verbal commands after switching the correspond audio source.

Operation for Multi-CD
AV Operation* ➔ *Disc 1* to *Disc 12* ➔ Selecting the disc for playback.

Operation for FM
AV Operation* ➔ *Preset 1* to *Preset 6* ➔ Switching to that preset station directly.
AV Operation* ➔ *Change Band* ➔ Switching the band.

Operation for AM
AV Operation* ➔ *Preset 1* to *Preset 6* ➔ Switching to that preset station directly.

Operation for TV
AV Operation* ➔ *Preset 1* to *Preset 12* ➔ Switching to that preset station directly.
AV Operation* ➔ *Change Band* ➔ Switching the band.

Operation for XM, SIRIUS tuner
AV Operation* ➔ *Preset 1* to *Preset 6* ➔ Switching to that preset station directly.
AV Operation* ➔ *Change Band* ➔ Switching the band.

AV Operation* ➝ *Category Mode* ➝ Switching to the Category mode.

AV Operation* ➝ *All Channel Mode* ➝ Switching to the All Channel mode.

AV Operation* ➝ *Memo* ➝ Memorizing the title and artist information of that song to "My Mix".

Operation for CD

AV Operation* ➝ *Change Media* ➝ Switching the CD-DA part and CD-ROM (MP3) part.

Operation for Music Library

AV Operation* ➝ *Music Search** ➝ *Album* ➝ *<Album Playlist name>* ➝ Playback the selected album playlist.

AV Operation* ➝ *Music Search** ➝ *<Album Playlist name>* ➝ Playback the selected album playlist. (Note 2)

AV Operation* ➝ *Music Search** ➝ *Artist* ➝ *<Artist Playlist name>* ➝ Playback the selected artist playlist.

AV Operation* ➝ *Music Search** ➝ *<Artist Playlist name>* ➝ Playback the selected artist playlist. (Note 2)

AV Operation* ➝ *Music Search** ➝ *Genre* ➝ *<Genre name>* ➝ Playback the selected genre playlist.

AV Operation* ➝ *Music Search** ➝ *<Genre name>* ➝ Playback the selected genre playlist. (Note 2)

AV Operation* ➝ *Music Search** ➝ *My Favorites* ➝ *My Favorite 1, My Favorite 2, My Favorite 3, My Favorite 4, My Mix* ➝ Playback selected playlist.

AV Operation* ➝ *Music Search** ➝ *My Favorite 1, My Favorite 2, My Favorite 3, My Favorite 4, My Mix* ➝ Playback selected playlist. (Note 2)

AV Operation* ➝ *Track Search* ➝ *<Track name>* ➝ Playback the selected track. (Note 3)

(Note 2):This operation is available only when that group is already selected.
(Note 3):This operation is available for the playlist currently playing.

Operating Your Navigation System with Voice

After checking traffic information manually

If traffic congestion is found after checking the traffic information manually, "**Do you want to reroute?**" appears on screen. In this time, you can say voice commands to operate. Options:

Yes:

The route will be recalculated by touching **VOICE** icon.

No:

The route will not be recalculated and the map screen of that location appears.

Location screen (A) and (B)

Location screen (A)

The following commands can be vocalized:

Set As Destination

If there is no route, the system starts the route calculation. If the route is already set, touch **VOICE** icon to start route calculation.

Set As Waypoint

Touch **VOICE** icon to start route calculation.

Display Map

Displays the map of surroundings on that location.

Call here

If the location has telephone number data, touch the **VOICE** icon to make a call to the location.

Location screen (B)

The following commands can be vocalized:

Set As Destination

Same as above.

Set As Waypoint

Same as above.

Display Map

Same as above.

Next

See the next POI.

Previous

See the previous POI. ◼

Operating Your Navigation System with Voice

Other Voice Commands

The navigation system also can recognize the words in the following list.

Other voice commands for navigation operation

Preferential voice command	Other voice command
Back	*Return, Before*
Cancel	*Escape, Skip*
Current Location	*My Location*
Voice Help	*Recognition Help, Help*
Next Page	*Next, Following*
Previous Page	*Back Page*
Basic Operation	*Basics, Basic*
Set As Destination	*Set, Go, Route To Destination, Begin Guidance, Start*
Set As Waypoint	*Set Waypoint, Waypoint*
Registration	*Register, Store*
Destination	*Go To, Search*
POI	*Point Of Interest, Points Of Interest, Business Listing*
Address	*Addresses, Address Search, Search By Address*
Area	*Surrounding, Around*
Telephone Number	*Telephone, Phone Number*
Address Book	*Registered Points, My Addresses, Search By Address Book*
Destination History	*Search History, Destination List*
Vicinity Search	*Vicinity, Search Around, Search In Vicinity*
Return Home	*Go Home, Drive Home*
Waypoint Home	*Waypoint To Home, Registered Home As Waypoint*
Call Home	*Phone Home, Dial Home*
Display Home	*Show Home*
Display Destination	*Destination Map, Show Destination*
Map Operation	*Map, Map Option*
Zoom Out	*Out, Higher*
Zoom In	*In, Lower*
Change Scale	*Scale, Zoom*
XXXX meter(s) Scale	*XXX meter(s)*

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XXXX kilometer(s) Scale	*XXXX kilometer(s)*
XXXX mile(s) Scale	*XXXX mile(s)*
XXXX yards Scale	*XXXX yards*
Change View Mode	*View Mode, Change View*
Map View	*Normal Map, Flat Map*
Driver's View	*Driver, 3D*
2D Twin Map View	*2D Twin, 2D Split*
3D Twin Map View	*3D Twin, 3D Split*
Route View	*Turns, Turn View*
Guide View	*Guide, Arrow*
Rear View	*Rear, Back View*
Vehicle Dynamics	*Dynamics, Meters*
North Up	*North, Compass*
Heading Up	*Head Up, Car Up*
Route Options	*Change Route Options*
Change Route	*Edit Route*
Rerouting	*New Route, Update Route*
Use Main Road	*Main Roads, Take Main Roads*
Use Fast Route	*Fast Route, Fastest Route*
Use Short Route	*Short Route, Shortest Route*
Use Freeway	*Freeways, Highways*
Use Ferry	*Ferry, Ferries*
Use Toll Road	*Toll Road, Payroad*
Avoid Freeway	*Avoid Highway, Avoid Interstate*
Avoid Ferry	*Avoid Ferries, Skip Ferries*
Avoid Toll Road	*Avoid Tolls, Avoid Pay*
Cancel Route	*Delete Route, Cancel Guidance*
Route Profile	*Profile*
Cancel Waypoint	*Delete Waypoint, Take Away Waypoint*
Next Guidance	*Following Guidance, Guidance After This*
Traffic Information	*Traffic, View Traffic Info, Display Traffic Information, Current Traffic Information, Display Traffic Condition*
Traffic Events List	*Event List, Events, Traffic Events*
Traffic On Route List	*On Route List, Route List, Traffic On Route*
Traffic Flow List	*Flow List, Flows, Traffic Flow*

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Call	*Dial, Ring, Dial Out , Place A Call, Make A Call*
Call Registered Point	*Call Address Book, Call Registered*
Call Phone Number	*Call By Number, Call Number, Call By Phone Number, Call Using Phone Number*
Telephone Book	*Tel Book, Phone Book*
Redial	*Call Again, Phone Again*
Call Favorite X	*Call X, Phone X*
Received Call	*Received, Who Called*
Other Operation	*Other, Others*
Erase Tracks	*Delete Tracks, Remove Tracks*
Display Overlay POI	*Show Overlay POI, Display POIs*
Yes	*Ok, I Agree*
No	*Not Ok, I Disagree*

Other voice commands for AV operation

Preferential voice command	**Other voice command**
Navigation Screen	*Navigation, Navi*
AV Screen	*AV, Audio*
Change Source	*Next Source, Source Change*
CD	*Change To CD, Switch To CD*
DVD	*Change To DVD, Switch To DVD*
TV	*Change To TV, Switch To TV*
AM	*Change To AM, Switch To AM*
FM	*Change To FM, Switch To FM*
AV Input	*Video Input*
MCD	*CD Changer*
Music Library	*Change To Music Library, Switch To Music Library*
Music Search	*Search My Music, Search Music*
Album	*Search By Album, Search Album*
Artist	*Search By Artist, Search Artist*
Genre	*Search By Genre, Search Genre*
Rock/Pop	*Rock, Pop*
Hip-Hop/Rap	*Hip-Hop, Rap*
Soul/Urban	*Soul, Urban*
Track Search	*Search By Track*

iPod	Change To iPod, Switch To iPod
XM	Change To XM, Switch To XM
Sirius	Change To Sirius, Switch To Sirius

Category list for vicinity search

❐ If you say the category name (category title), the system searches for vicinity POIs in that category without taking the chain into consideration.

Category name:
Gas Station

76, ARCO, BP-AMOCO, CHEVRON, CITGO, CLARK, CONOCO, ESSO, EXXON, FINA, GETTY, GULF, MOBIL, PETROCANADA, PHILLIPS 66, SHELL, SINCLAIR, SUNOCO, TEXACO, ULTRAMAR, Gas Station-Others

Category name:
Bank & ATM

B B & T, BANK OF AMERICA, BANK OF MONTREAL, BANK OF NEW YORK, BANK OF NOVA SCOTIA, CIBC BANK, CITIBANK, HSBC BANK USA, J P MORGAN CHASE, KEY BANK, LA SALLE BANK, LAURENTIAN BANK OF CANADA, MELLON BANK, NATIONAL BANK OF CANADA, PNC BANK, REGIONS BANK, ROYAL BANK OF CANADA, SUN TRUST BANK, TD CANADA TRUST, UNION BANK OF CALIFORNIA, US BANK, WACHOVIA BANK, WASHINGTON MUTUAL, WELLS FARGO BANK, Bank & ATM-Others

Category name:
Restaurant

American, Asian, Barbecue, Café & Espresso, Chinese, Continental, Creole-Cajun, French, Greek, Indian, Italian, Japanese, Mexican, Pizzeria, Seafood, Steak House, Thai, Restaurant-Others

Category name:
Fast Food Chains

ARBY'S, AU BON PAIN, BAJA FRESH, BASKIN-ROBBINS, BOSTON MARKET, BRAUM'S ICE CREAM & DAIRY, BURGER KING, CARL'S JR., CARVEL ICE CREAM BAKERY, CHURCH'S CHICKEN, COLD STONE CREAMERY, DAIRY QUEEN, DUNKIN DONUTS, HAAGEN-DAZS ICE CREAM, HARDEE'S, HARVEY'S, IN-N-OUT BURGER, JACK IN THE BOX, K F C, LONG JOHN SILVER'S, MC DONALD'S, PANDA EXPRESS, PICK UP STIX, POPEYE'S CHICKEN & BISCUITS, QUIZNOS, RUBIO'S, SECOND CUP, SONIC, STARBUCK'S COFFEE, SUBWAY SANDWICHES & SALADS, TACO BELL, TACO JOHN'S, TCBY, TIM HORTON'S, TJ CINNAMONS, TOGO'S, WENDY'S, WHATABURGER

Category name:
Restaurant Chains

A & W FAMILY RESTAURANT, APPLEBEE'S, BENNIGAN'S, BOB'S BIG BOY, BONANZA, BONEFISH GRILL, CARRABBA'S ITALIAN GRILL, CHILI'S GRILL & BAR, CHUCK E CHEESE PIZZA, CLAIM JUMPER, COCO'S, DOMINO'S PIZZA, FAZOLI'S, GODFATHER'S PIZZA, GOLDEN CORRAL FAMILY STEAK HSE, IHOP RESTAURANT, KELSEY'S, LITTLE CAESARS PIZZA, LONE STAR STEAKHOUSE, MARIE CALLENDER, OLIVE GARDEN ITALIAN RSTRNT, OUTBACK STEAKHOUSE, PAPA JOHN'S PIZZA, PASTA CONNECTION, PERKINS FAMILY RESTAURANT, PIZZA HUT, PONDEROSA STEAK HOUSE, RED LOBSTER, ROUND TABLE PIZZA, RUBY TUESDAY, SHAKEY'S PIZZA, SIZZLER, SMOKEY BONES, STEAK & ALE, SWISS CHALET, TGI FRIDAY'S, THE KEG

Category name:
Supermarkets

ACME, ALBERTSONS, ALDI, A & P, BI-LO, CUB FOODS, CUMBERLAND FARMS, FOOD LION, GIANT, GIANT EAGLE, H-E-B, HY-VEE, IGA, JEWEL-OSCO, KROGER, MEIJER, PANTRY, PATHMARK, PIGGLY WIGGLY, PUBLIX, RALEY'S, RALPH'S, SAFEWAY, SAVE-A-LOT, SHAW'S SUPERMARKET, STOP & SHOP, STOP N GO, TOPS FRIENDLY MARKET, VON'S, WHOLE FOODS, WINN-DIXIE, Supermarkets-Others

Category name:
Automotive

AAA, RV/Truck Facility, Automobile Club, Parking, Car Parts & Accessories, Car Repair Facility, Car Wash

Category name:
Retailer Chains

BURLINGTON COAT FACTORY, COSTCO, FACTORY 2-U, KMART, KOHL'S, ROSS, SAM'S CLUB, STEIN MART, T J MAXX, TARGET STORES, WAL-MART, Retailer Chains-Others

Category name:
Hotel

AMERI HOST INN, BAYMONT INN & SUITES, BEST WESTERN, COURTYARD BY MARRIOTT, CROWNE PLAZA, DAYS INN, DOUBLE TREE, ECONO LODGE, EMBASSY SUITES, FAIRFIELD INN, HAMPTON INN, HILTON, HILTON GARDEN INN, HOLIDAY INN, HOLIDAY INN EXPRESS, HOMEWOOD SUITES, HOWARD JOHNSON, HYATT, KNIGHTS INN, LA QUINTA INN, MARRIOTT, MOTEL 6, QUALITY-COMFORT-CLARION, RAMADA INN, RED ROOF INN, RESIDENCE INNS, SCOTTISH INN, SHERATON, STAYBRIDGE SUITES, STUDIO 6, SUPER 8, TRAVELODGE, WINGATE INN, Hotel-Others

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Category name:
Car Dealer

ACURA, AUDI, BMW, BUICK, CADILLAC, CHEVRO-
LET, CHRYSLER, DAEWOO, DODGE, FORD, HONDA,
HYUNDAI, INFINITI, ISUZU, JAGUAR, JEEP, KIA,
LAND ROVER, LEXUS, LINCOLN, MAZDA, MER-
CEDES-BENZ, MITSUBISHI, NISSAN, OLDSMOBILE,
PONTIAC, PORSCHE, SAAB, SATURN, SUBARU, SU-
ZUKI, TOYOTA, VOLKSWAGEN, VOLVO, Car Dealer-
Others

Category name:
Rental and Other Services

Rental Car, Video Rental, Laundromat, Dry Cleaners

Category name:
Electronics Retailer

BEST BUY, CIRCUIT CITY, COMP USA, FRY'S ELEC-
TRONICS, RADIO SHACK, ULTIMATE ELECTRONICS,
Electronics Retailer-Others

Category name:
Groceries

Liquor Store, Bakery, Butcher, Convenience Store, De-
licatessen, Groceries-Others

Category name:
Shopping

Shopping Center, Beauty & Barber, Book Store, Music
Store, Fashion, Florist, Furniture, Home Improvement,
Glassware, House & Office, Optometrist, Shoes &
Bags, Sporting Goods, Toys, Cellular Phone Shop,
Shopping-Others

Category name:
Entertainment

Stadium & Arena, Brewery, Casino, Cinema, Night
Club, Theater & Play, Winery, Pub

Category name:
Leisure

Museum, Art Gallery, Zoo, Amusement Park, Fair
Ground, Beach, National Park & Forest, Camping &
Hiking, Ski Resort, Bowling, Golf Course, Gym, Pool &
Tennis, Travel Agency, Tourist Information, Tourist At-
traction, Park & Recreation

Category name:
Public Service & Facility

Police Station, Government Office, Post Office, Court
House, Convention Center, City Center, Library

Category name:
Transportation

Airline Access, Airport, Ferry Terminal, Train Station,
Rest Area

Category name:
Medical

Doctor, Dentist, Veterinarian, Emergency Medical Ser-
vice, Hospital, Pharmacy

Category name:
School

University & College, Nursery School, Elementary
School, Junior High School, High School, Vocational
School

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Operating Your Navigation System with Voice

Appendix

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

Symptom	Cause	Action (See)
Power doesn't turn on. The navigation system doesn't operate.	Leads and connectors are incorrectly connected.	Confirm once more that all connections are correct.
	The fuse is blown.	Rectify the reason for the fuse blowing, then replace the fuse. Be very sure to install a correct fuse with the same rate.
	Noise and other factors are causing the internal memory to operate incorrectly.	Refer to "Page 187" and carry out appropriate measures.
	The hard disk drive is not working because the temperature is extremely low or high.	Wait until the temperature inside the vehicle falls or rises.
When the ignition switch is turned ON (or turned to ACC), the motor sounds.	This system confirms whether a disc is loaded or not.	This is a normal operation.
The navigation does not boot up.	The power cable is not wired correctly.	Turn the system off and the check the wiring.
	The hard disk drive is not running because the temperature is too low.	Wait until the inside of the vehicle warms up.
	The hard disk drive is defective.	Consult your authorized Pioneer dealer.
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.)	Check the GPS signal reception and the position of the GPS antenna if necessary, or continue driving until reception improves. Keep the antenna clear. (Page 90)

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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: • 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 and the position of the GPS antenna if necessary, or continue driving until reception improves. Keep the antenna clear. (Page 90)
	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 system may not be mounted securely in your vehicle.	Check that the navigation system is securely mounted and, if necessary, consult the dealer that installed the system.
	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 ([**Learning Status**]).
	The navigation system is installed with an extreme angle exceeding the limitation of the installation angle.	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**].) (Page 92)
	Indication of the position of your vehicle is misaligned after a U-turn or reversing.	Check whether or not the reverse gear signal input lead (violet) is connected properly. (The navigation system works properly without the lead connected, but positioning accuracy will be adversely affected.)
The map continually reorients itself.	The traveling direction is always set to Heading Up.	Touch 🔼 on the screen and change the map display.
The daylight display is used even when the vehicle lights are on.	[**Day**] is selected to [**Day/Night Display**].	Check [**Day/Night Display**] setting and make sure [**Automatic**] is selected. (Page 50)
	The orange/white lead is not connected.	Check the connection.
The display is very dim.	The vehicle's light is turned ON, and [**Automatic**] is selected on [**Day/Night Display**].	Read about [**Day/Night Display**] setting and, if desired, select [**Day**]. (Page 50)
	The vehicle cabin temperature is extremely low.	A Liquid Crystal Display (LCD) is used, and such displays tend to darken when cold. Wait for the vehicle to warm up.
	Picture quality adjustment of the display is not correct.	Adjust the picture quality. (Page 153)
	Display tilt is not at the proper setting.	Press and hold **EJECT** button to adjust the tilt.

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No sounds are heard. The volume level will not rise.	The volume level is low.	Adjust the volume level.
	The attenuator or mute is on.	Turn the attenuator or mute off.
	The speaker lead is disconnected.	Check the connection.
The volume of beeps and navigation guidance cannot be adjusted.	You cannot adjust these parameters with **VOL** (▲/▼) button.	Turn the volume up or down with [**Volume**] in [**Settings**] menu.
Adjusting the volume of navigation guidance and beeps is not possible.	You cannot adjust them with **VOL** (▲/▼) button.	Turn the volume up or down according to [**Volume**] in [**Settings**] menu. (Page 88)
A strange sound is heard when the vehicle comes close to a certain place (e.g. Dog barking).	The sound for the entry of [**Address Book**] is set.	Set the sound setting of that entry to [**No Sound**]. (Page 63)
An alarm sounds when you approach the registered location and the set image pops up, regardless of whether [**Address Book Icon**] is set to [**Off**].	This is a normal operation and not a malfunction.	To turn off the sound output and image pop up, select [**No Sound**] and [**No Picture**].
Slope is not displayed on **Vehicle Dynamics** screen. "Inclination" does not move on **3D Calibration Status** screen.	The speed pulse lead is not connected.	Connect the speed pulse lead.
No sound, no voice.	🔇 has been set, or sound volume is reduced to 0.	Adjust the volume of the guidance or turn 🔇 off. (Page 88)
The person on the other end of the phone call cannot hear the conversation due to an echo.	The voice from the person on the other end of the phone call is output from the speakers and then picked up by the microphone again, creating an echo.	Use the following methods to reduce the echo: —Lower the volume on the receiver —Have both speakers pause slightly before speaking
The registered phone cannot be deleted.	Normally, the registered phone cannot be deleted.	• Overwrite the old registered phone with a new phone. • Clear [**Phone Settings**]. (Page 187)
CD or DVD playback is not possible.	The disc is inserted upside down.	Insert the disc with the label upward.
	The disc is dirty.	Clean disc.
	The disc is cracked or otherwise damaged.	Insert a normal, round disc.
	The files on the CD are an irregular file format.	Check the file format.
	The CD format cannot be played back.	Replace disc.
	The loaded disc is a type this system cannot play.	Check what type the disc is. (Also see "Handling and Care of the Disc" in the hardware manual and "Page 199" for more cautions about handling each type of media.)
No picture.	The parking brake lead is not connected or applied.	Connect a parking brake lead correctly, and apply the parking brake.
	Parking brake interlock is activated.	Park your vehicle in a safe place and apply the parking brake. (Page 22)
	[**AV Input**] setting is incorrect.	Please read the following page and set the setting correctly. (Page 150)

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The audio skips.	The navigation system is not firmly secured.	Secure the navigation system firmly.
	Failure hard disk drive.	Consult your Pioneer dealer.
"Rear display" picture disappears.	The setting for [**REAR SCREEN**] is incorrect.	Please read the following page and set the rear screen setting correctly. (Page 153)
	There was a problem with the "Rear display" or a faulty wiring connection, for example.	Check the "Rear display" and its connection.
	When the shift lever is in [R], the rear view camera images are displayed. (When [**MIRROR**] is selected in [**REAR SCREEN**] menu.)	Select [**DVD**] or [**AV**] in [**REAR SCREEN**] menu. When you move the shift lever to a position other than [R], the screen will be returned to the previous display.
	[**DVD-V Setup**] is carried out.	You can not display the video image to "Rear display" during [**DVD-V Setup**] menu.
Nothing is displayed and the touch panel keys cannot be used.	The setting for the rear view camera is incorrect.	Connect a rear view camera correctly.
	The shift lever was placed in [R] when the rear view camera was not connected.	Press **AV** button to return to the source display and then select the correct polarity setting for [**Camera Input**]. (Page 149)
	The back light of the LCD panel is turned off.	Press **V** button to turn on the back light.
Touch panel key is not respond or a different key is responding.	Touch panel keys deviate from the actual positions that respond to your touch for some reason.	Perform the touch panel calibration. (Page 190)
CD recording is not possible.	A disc that cannot be recorded, such as MP3 disc or DVD-video, is inserted.	A disc other than a normal music CD cannot be recorded.
CD recording doesn't stop though the record progress indicator shows 100 %.	Music Library recording will be canceled after playback of the current track is finished. (The recording mode stops at the interval of the tracks.)	Wait until the current track has ended or change the source manually.
"**NO SIGNAL**" is displayed at the right corner on the map.	While waiting for a response from the XM tuner.	Wait for a while and try the operation again.
	You are in an area that cannot receive XM tuner reception.	Move into an area that can receive XM tuner reception.
	Your current location provides very poor reception.	Change your location.
"**UPDATING**" is displayed at the right corner on the map.	Service subscription is either XM audio only or XM NavTraffic stand alone.	Since the GEX-P10XMT is capable of receiving both XM audio and XM NavTraffic service, if you are subscribed to only one or the other, the system checks to see if you have added another service to your account since you last powered on the navigation system. When you subscribe to both services, this message will stop appearing when you turn the ignition ON (ACC ON).

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No sounds are heard. The volume level will not rise.	Cables are not connected correctly.	Connect the cables correctly.
	The system is performing still, slow motion, or frame-by-frame playback with DVD-video.	There is no sound during still, slow motion, or frame-by-frame playback with DVD-video.
	The system is paused or performing, fast rewind or forward during the MP3 disc playback.	For an MP3, there is no sound on fast rewind or forward.
	"DTS" is selected for the DVD-Video disc sound track.	Switch to a non "DTS" sound track.
The icon ⃠ is displayed, and operation is not possible.	The operation is not compatible with the DVD's configuration.	This operation is not possible. (For example, the DVD playing does not feature that angle, audio system, subtitle language, etc.)
The picture stops (pauses) and the unit cannot be operated.	Reading of data has become impossible during DVD playback.	After touching ■ once, start playback once more.
The picture is stretched, the aspect is incorrect.	The aspect setting is incorrect for the display.	Select the appropriate setting for that image. (Page 149, Page 148)
A parental lock message is displayed and DVD playback is not possible.	Parental lock is on.	Turn parental lock off or change the level. (Page 148)
Parental lock for DVD playback cannot be canceled.	The code number is incorrect.	Input the correct code number. (Page 148)
Playback is not with the audio language and subtitle language settings selected in [**DVD-V Setup**].	The DVD playing does not feature dialog or subtitles in the language selected in [**DVD-V Setup**].	Switching to a selected language is not possible if the language selected in [**DVD-V Setup**] is not recorded on the disc.
Dialing is not possible because the touch panel keys for dialing are inactive.	Your phone is out of range for service.	Retry after entering within range for service.
	The connection between cellular phone and the Bluetooth unit (sold separately) (navigation system) cannot be established now.	Perform the connection process.
	The cellular phone is not registered to the navigation system yet.	To use the cellular phone featuring the Bluetooth wireless technology with this navigation system, the registration process is necessary.

When the screen is frozen...

Park your vehicle in a safe place, and cut off the engine. Turn the ignition key back to "Acc off". Then start the engine again, and turn the power to the navigation system back on. If this does not solve the problem, press **RESET** button on the navigation system.

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Appendix

Messages and How to React to Them

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.

Messages for navigation functions

Message	When	What to do (See)
Irregular speed pulse signal detected. Please power off the system and check the installation. Then, please re-boot the system and press "OK".	If the Navigation system does not receive the vehicle speed pulse.	Consult your Pioneer dealer.
Speed pulse not connected. Calibration will start without speed pulse. Accuracy is not fully ensured without speed pulse.	The speed signal input (pink lead wire) of the power cable is not connected.	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.
Vibration detected. Please power off the system and check the installation. Then, please re-boot the system and press "OK".	The navigation unit is installed in a place where it may be affected by a large vibration.	Re-install the navigation unit in a place where the unit will not be affected by vibration.
Direction of G sensor is not correct. Please power off the system and check the installation. Then, please re-boot the system and press "OK".	Direction of G sensor is set incorrectly.	See the Installation Manual and set the direction of the navigation unit correctly.
Gyro Sensor is not working properly. Please consult your dealer or Pioneer service center.	Abnormal Gyrosensor output is detected.	Write down the error code shown on the screen. Turn off the power, and then contact your nearest Pioneer service facility.
Positioning is not possible due to the hardware. Please contact your dealer or Pioneer service center.	The location display is not possible due to hardware failure.	Consult your dealer.
GPS antenna problem detected. Please contact your dealer or Pioneer service center.	The location display is not possible due to failure of the GPS antenna.	Consult your dealer.
This function is not available now.	The screen cannot be displayed with **Vehicle Dynamics** Display. The sensor has not been taught so the sensor information cannot be acquired.	If the sensor learning status reaches the Sensor Initializing, the system is ready to be used.
The vertical installation angle is changed. Gyro Sensor calibration is re-initialized.	If the mounting angle of the navigation unit has been changed.	The system initializes the sensor in order to operate it with the maximum performance and automatically starts re-learning.

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Excess vertical installation angle detected. Please install the navigation unit correctly.	The navigation system is installed with an extreme angle exceeding the limitation of the installation angle.	Confirm the installation angle. (The navigation system must be installed within the allowed installation angle. For details refer to Installation Manual.)
No data available at this time.	No data is available that can be used with the XM tuner.	Wait for a while and try the operation again.
UPDATING (Updating)	The selected channel is not included in your subscription.	Select another channel.
	Radio is being updated with the latest encryption code.	Wait until the encryption code is fully updated.
Route calculation was not possible.	Route calculation has failed because of a malfunction in map data, software, or hardware.	• Change the destination. • Consult the Pioneer Local dealer if this message persists.
Route calculation not possible because destination is too far.	The destination is too far.	• Set a destination closer to the starting point. • Set one or more waypoints.
Route calculation not possible because destination is too close.	The destination or waypoint(s) are too close.	Set a destination and waypoint(s) farther from the starting point.
Route calculation not possible due to traffic regulations.	• The destination or waypoint(s) are in a Control Traffic Zone (CTR) and the route calculation is hampered. • Your vehicle is currently in a Control Traffic Zone (CTR) and the route calculation is hampered.	• Set a destination and waypoint(s) outside the CTR if you know where the restricted area is. • Try a destination or waypoint(s) away from the currently set points to some extent. • Drive your vehicle to an unrestricted area and reset the destination and waypoint(s).
Route calculation not possible because navigation cannot be provided around destination or starting point.	The destination, waypoint(s), or starting point are in an area where no road exists (e.g. a mountain) and the route calculation is impossible.	• Set a destination and waypoint(s) on roads. • Reset the destination after you drive the vehicle to any road.
Route to destination cannot be calculated.	The destination or waypoint(s) are in an isolated island, etc. without a ferry and the route calculation is impossible. If there is no road connected to your starting point or destination, this message will appear.	Change the destination.
• **Ferry could not be avoided.** • **Toll roads could not be avoided.** • **Freeway could not be avoided.** • **Ferry, toll roads and freeways could not be avoided.** • **Ferry and toll roads could not be avoided.** • **Toll roads and freeways could not be avoided.** • **Ferry and freeways could not be avoided.**	These messages appear when a ferry route, toll roads, or freeways are included in the route to the destination or waypoints even though a route is set to avoid them. You can identify these condition by the icons.	If the current route is not desired, set destination or waypoints that do not pass through a ferry route, toll roads, or freeways. (Page 32)

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The address does not exist. Do you want to continue ?	The house number entered does not exist in the database for the specified street.	Re-enter the existing house number. Or, proceed to the next step without entering the house number and set the main point of that street as your destination.
This area does not contain any POI's of the selected type.	Facilities of the selected category do not exist in the surrounding areas.	Use another search method or move to another location and perform **Vicinity Search** again.
Failed to make the route profile.	In rare cases, a route calculation error may occur.	• Retry. • Consult the Pioneer Local dealer if this message persists.
There is no Traffic List.	There is no available traffic information now.	Move to the location where you can receive the XM NavTraffic information, and then try the operation again.
There is no pictures folder. Please create /Pictures/ folder and store JPEG files in that Folder.	Cannot load the image because **Pictures** folder is not found in the inserted disc.	Use the appropriate data after reading "Page 94".
Data Read error.	Failed to read the data because the CD-R is damaged or dirty. Or, the pick-up lens of the DVD drive is dirty.	Try re-reading the data by inserting a clean CD-R. Clean the pick-up lens with a commercially available cleaning kit for DVD, then try to reading again.
	Pictures folder exists on the CD-R but no data in JPEG format exists.	Use the appropriate data after reading "Page 94".
JPEG file is corrupt.	The data is damaged or an attempt was made to set a JPEG image that was not made to specifications as the background picture.	Use the appropriate data after reading "Page 94".
CAUTION! System detected improper connection of Parking Brake lead. Please check your configuration for safety. Please see Operation Manual for more information regarding safe operation.	Parking brake lead is incorrectly connected.	Confirm once more that their connections are correct.
Connection failed.	The cellular phone's Bluetooth wireless technology is turned off.	Turn the target phone's Bluetooth wireless technology on.
	The cellular phone is paired (connected) with another device.	Cancel the pairing (connection) and retry.
	Rejection has been received from the cellular phone.	Operate the target phone and accept the connection request from the navigation system. (Furthermore, check the connection settings on your cellular phone.)
	The target cellular phone can not be found.	Check whether your cellular phone is turned off and, whether the distance to your cellular phone is too far.
	Registration step has been successful but connection has failed for some reason.	Retry the registration and if a connection still cannot be established, try connecting using your cellular phone.

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Registration failed.	The cellular phone's Bluetooth wireless technology is turned off during the registration step.	Keep turning the target phone's Bluetooth wireless technology on during the registration.
	Rejection by the cellular phone has received.	Operate the target phone and accept the registration request from the navigation system. (Furthermore, check the connection settings on your cellular phone.)
	Registration step has failed for some reason.	Retry the registration and if the registration still fails, try registering using your cellular phone.
Automatic connection in progress. Please try again later.	If you try to perform another operation during automatic connection by the system.	• Wait for a while and retry. • Establish that connection temporarily and retry that later.
Automatic connection in progress. Please try manually later.	If you try to connect another phone during automatic connection by the system.	Establish that connection temporarily and retry it later.
Could not find any available phone.	No available phone exists in the surroundings when the system searches for the cellular phone featuring Bluetooth wireless technology for registration.	• Turn the target phone's Bluetooth wireless technology on. • Check whether your cellular phone is turned off and, whether the distance to your cellular phone is too far.
Bluetooth unit error. It is not possible to find any cell phones.	If the Bluetooth unit (sold separately) is disconnected from this navigation system or Bluetooth unit carries out another processing when the system search the cellular phone featuring Bluetooth wireless technology for registration.	• Check the connection and retry. • Establish that connection temporarily and retry later.
Bluetooth unit error. The device name could not be set.	If the Bluetooth unit (sold separately) is disconnected from this navigation system or the Bluetooth unit carries out another process when you change the device name.	• Check the connection and retry. • Establish that connection temporarily and retry later.
Registration is not available.	If you try to perform another operation immediately after connection failure.	Wait for a while and retry.
Reading failed.	If you transferred the data from your cellular phone in a format can not be received with navigation system.	Select just a suitable item, format, and then retry.
	Disconnection has been made during transfer for some reason.	Connect your cellular phone again and retry.
Calibration failed. Please refer to the owner's manual.	The touch panel calibration has not been carried out with appropriate steps.	Please read the instruction of touch panel calibration and retry. (Page 190)
The HDD is not connected.	Failure of the built-in hard disk drive has occurred, such as internal electrical problem or file system error.	Consult your dealer.
Cannot use HDD.	Failure of the built-in hard disk drive has occurred, such as internal electrical problem or file system error.	Consult your dealer.

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There is no applicable program.	Failure of the built-in hard disk drive has occurred, such as internal electrical problem or file system error.	Consult your dealer.
The HDD cannot be operated due to excessive heat. Please move your vehicle to a safe place and turn the power off until the temperature goes down.	Hard disk drive cannot run due to high temperature.	Park your vehicle to safe place, turn the ignition switch off, and wait until the temperature inside the vehicle drops.

■

Appendix

Appendix

Messages for Audio Functions

When problems occur in the audio source, a message may appears on the display. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists, contact your dealer or your nearest Pioneer Service Center.

Built-in DVD drive

Message	When	What to do (See)
Unreadable disc	If you try to use a disc which is incompatible with this system.	Insert a suitable disc.
	If you insert a disc upside down.	Insert the disc with the label upward.
	If the disc is dirty.	Clean the disc.
	If the disc is cracked or otherwise damaged.	Insert a normal, round disc.
	Mechanical failure of DVD drive occurs.	Consult your Pioneer dealer.
Playback error. Please remove the disc.	Electrical or mechanical error has occurred.	Press **RESET** button. (Also see the Hardware Manual.) (Page 187)
Region code error	The disc does not have the same region number as the navigation system.	Replace the DVD-Video with one bearing the correct region number.
Playback error due to irregular temperature. Please remove the disc.	The temperature of the built-in DVD drive exceeds the operating limits.	Park your vehicle in safe place, turn the ignition switch off, and wait until the built-in DVD drive's temperature returns to within normal operating limits.
ATTENTION! Viewing of front seat video source while driving is strictly prohibited.	Parking brake interlock is activated.	Park your vehicle in the safe place and apply the parking brake. (Page 22)
Search error	The title number, chapter number, time, or 10 key command that you enter in [**10Key Search**] do not exist. (This message will appear when the DVD drive cannot accept that command.)	Enter the available numbers or 10 key command or use another search method.

Hard disk drive (Music Library)

Message	When	What to do (See)
This CD cannot be recorded	If you insert a CD which prohibits second-generation copies or duplicate.	Use another CD and retry.
• Recording error. Switching to CD playback mode • Recording error. Recording is stopped • The recording was unstable. Restart the recording from the beginning of the track.	If recording can not be carried out due to continuous skipping on certain part of the disc because the disc is dirty, scratched, or otherwise damaged, the pick-up lens of the DVD drive is dirty, or extreme vibration occurs continuously.	• Clean the disc and retry. • Clean the pick-up lens with a commercially available cleaning kit for DVD, then retry. • Retry in vibration-free condition.

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Exceeded playlist maximum. No more playlists can be re- corded.	If you try to record a new CD but the maximum number of playlists are already recorded. (The album play- list can be stores up to 400.)	Delete some playlists and retry.
Playback error. Music Library cannot be played	The music library component is ab- normal.	Consult your dealer.
This playlist cannot store more than 99 tracks.	If you try to add tracks but **My Mix** or **My Favorite** playlists are maxi- mum number. (**My Mix** and **My Fa- vorite** playlists can store the tracks up to 99.)	Delete some tracks and retry.
This track cannot be added to MyMix.	The music library component is ab- normal.	Consult your dealer.
Name cannot be used for voice recognition. Try again.	Some invalid characters have been entered and the system cannot con- vert it to the appropriate pronuncia- tion.	Enter different characters so that the system can pronounce it.
Single recording mode will only record the first track of CD	Recording tracks other than the first track of CD when the recording mode is [**Single**].	When you set [**Single**] in [**REC Mode**], the system only can record the first track of CD. Set [**Auto**] or [**Manual**] in [**REC Mode**] and retry. (Page 152)
HDD is full. This CD cannot be recorded	There is no free space for recording in the hard disk drive.	Delete some tracks or playlists and try again if you want to record that CD.
Unable to select appropriate Track info due to multiple en- tries in the database.	Some corresponding data is found in the Gracenote® Database, but the system cannot select one to append a title.	Enter the title manually, or try to retrieve the title by touching [**Update Title**].
All artist names in the playlist have been deleted because no character has been en- tered. Do you want to pro- ceed?	If you try to delete the artist name entirely. The artist will not be dis- played in the artist group and artist name on the information plate also will not be displayed.	If you enter the artist name again, the artist name appears.

Other sources

Message	When	What to do (See)
Search failed.	iPod is preparing playback. There- fore, the operation is invalid now.	Wait until [**Ready**] disappears and try the op- eration.
Invalid command - the memo has not been stored.	• If you try to memorize 000 Chan- nel to My Mix. • If you try to memorize a channel that is OFF AIR to My Mix. • If you try to memorize a channel to My Mix while an XM tuner error occurs.	Tune an appropriate channel and memorize it.
Invalid command - the CH has not been stored.	• If you try to memorize 000 or 001 Channel to **T** button's preset. • If you try to memorize a channel that is OFF AIR to **T** button's preset. • If you try to memorize a channel to **T** button's preset while an XM tuner error occurs.	Tune an appropriate channel and memorize it.

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Returning the Navigation System to the Default or Factory Settings

You can return settings or recorded contents to the default or factory settings. There are four methods to clear user data, and the situations and the cleared contents are different for each method. For the contents that are cleared in each method, see the list presented later.

❒ The map data and the system data are not cleared from the hard disk drive by any clearing method.

Method 1: RESET button
Pressing **RESET** button clears almost all settings of the audio function.
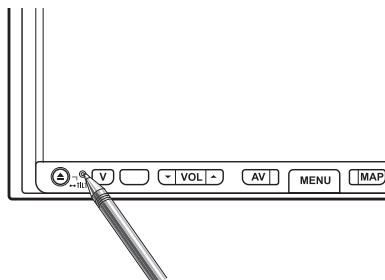
The system becomes the same state when the battery of the vehicle is removed or the yellow lead of the navigation system is disconnected.

Method 2: [Restore Factory Settings]
Clears some items in [**Map**] menu and in [**Settings**] menu.

➲ For details, refer to *Restoring the Default Setting* on page 96

Method 3: [Reset] on start-up

Clears the setting values stored in the hard disk drive.

➲ For details, refer to *If system errors frequently occur* on page 190

Method 4: [Clear user information from hard disk] on start-up
Clears all user data (including Music Library) stored in the hard disk drive.

➲ For details, refer to *Completely returning the navigation system to the initial state* on page 190

Appendix

Setting items to be deleted

The items to be deleted vary depending on the reset method. The items listed in the following table return to the default or factory settings. The items not listed below will be retained. **However, if you carry out [Clear user information from hard disk], all the settings related to the navigation function including the items not listed below are deleted.**

— : The setting will be retained.

✓ : The setting will be cleared and returned to the default or factory settings.

Navigation functions		Method 1	Method 2	Method 3	Method 4
Map function	View mode and scale setting on the map	—	—	✓	✓
	Direction of the map	—	—	✓	✓
	Last cursor position on the map screen	—	—	✓	✓
Route Setting	Current route	—	—	✓	✓
	Guidance state of the current route	—	—	✓	✓
	Vehicle position information	—	—	✓	✓
	Route conditions	—	✓	✓	✓
[**Destination**] menu	Auto fill-in function for cities and streets	—	—	✓	✓
	Point registered in [**Address Book**]	—	—	—	✓
	Sorting order selected in [**Address Book**]	—	—	✓	✓
[**Information**] menu	Sorting order selected in [**Traffic Events**], [**Traffic On Route**], and [**Traffic Flow**]	—	—	✓	✓
	[**Traffic Settings**]	—	—	✓	✓
	[**Phone Settings**] ([**Phone Menu**])	—	—	✓	✓
	[**Phone Book**], [**Dial Favorites**], [**Dialed Numbers**], [**Received Calls**] ([**Phone Menu**])	—	—	✓	✓
	[**Stock Info**]	—	—	—	✓
	[**My Favorites**]	—	—	—	✓
	[**Emergency Info**]	—	—	✓	✓

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[**Map**] menu	[**Short-Cut Selection**],[**View Mode**]	—	—	✓	✓
	[**Displayed Info**], [**Overlay POI**], [**Day/Night Display**], [**AV Guide Mode**], [**Road Color**]	—	✓	✓	✓
[**Settings**] menu	[**Language**] ([**Regional Settings**]), [**Time**] ([**Regional Settings**]), [**Installation Angle Setup**] ([**Hardware**]), [**Defined Locations**], [**Modify Current Location**], [**Background Picture Setting**]	—	—	✓	✓
	Items other than above	—	✓	✓	✓
	[**3D Calibration Status**] ([**Hardware**])	—	—	—	—
[**Vehicle Dynamics**]	Right and left gauge type, [**Adjust Look**]	—	—	✓	✓
[**Audio Settings**]	All items	✓	—	—	—
[**System Settings**]	[**Mute Set**], [**Clock DISP**], [**REC Mode**]	✓	—	✓	✓
	Other items	✓	—	—	—

Audio functions		Method 1	Method 2	Method 3	Method 4
Music Library [**LIBRARY**]	Repeat, Random settings	✓	—	✓	✓
	Track data	—	—	—	✓
	Playlist	—	—	—	✓
	Last playback position	—	—	—	✓
[**XM**]	Alert on/off for My Mix	✓	—	✓	✓
[**DVD**]	All settings	✓	—	—	—
[**CD**]	All settings	✓	—	—	—
[**ROM**](**MP3**)	All settings	✓	—	—	—
[**FM**]	Preset memory and the other settings	✓	—	—	—
[**AM**]	Preset memory and the other settings	✓	—	—	—
[**TV**]	Preset memory and the other settings	✓	—	—	—
[**REAR SCREEN**]	Rear Screen setting	✓	—	—	—
Others	**Picture Adjust**	✓	—	—	—
	Display Tilt	✓	—	—	—

Appendix

If system errors frequently occur

If system errors frequently occur and the power to the navigation system turns off, inappropriate content may have been recorded in the memory or the hard disk drive. In such a case, normal operations may be restored by clearing the setting values stored in the hard disk drive.

1 Start the engine.
After a few moments, the start-up screen comes on for a few seconds.

2 Touch and hold MAP button while the start-up screen is displayed.
"Clear memory screen" appears.

3 Touch [Reset].

4 Touch [Yes].
The setting values stored in the hard disk drive return to the default or factory settings. After that, the navigation splash screen appears.

Completely returning the navigation system to the initial state

To return the entire navigation system to the default or factory settings, initialize the navigation system in the following order:
1 Press **RESET** button on the hardware.
2 Initialize the user data area on the hard disk drive.
3 Clear the learned data in the sensor.

1 Turn the ignition switch off.

2 Press RESET button.

3 Start the engine.
After a few moments, the start-up screen comes on for a few seconds.

4 Touch and hold MAP button while the start-up screen is displayed.
"Clear memory screen" appears.

5 Touch [Clear user information from hard disk].
❒ This reset operation clears all music data recorded in the music library. Note that the cleared data cannot be restored.

6 Touch [Yes].
The user area in the hard disk drive is initialized. After that, the navigation system restarts.

7 Press MENU button and then touch [Settings].
The setting menu appears.

8 Touch [Hardware] and then touch [3D Calibration Status].

9 Touch [Learning Status] and then touch [Reset All].

Adjusting the Response Positions of the Touch Panels (Touch Panel Calibration)

If you feel that the touch panel keys on the screen deviate from the actual positions that respond to your touch, adjust the response positions of the touch panel. There are two adjustment methods: 4-point adjustment, in which you touch four corners of the screen; and 16-point adjustment, in which you make fine-adjustments on the entire screen.

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

Stylus (supplied with navigation system)

1   Press V button.
The Picture Adjust screen appears.

2   Press and hold V button for two seconds or more.
The 4-point touch panel adjustment screen appears.

3   Touch and hold each of the arrows on the four corners of the screen with the touch panel adjustment pen.
Hold the pen on the arrow until each one of the four arrows turns red.
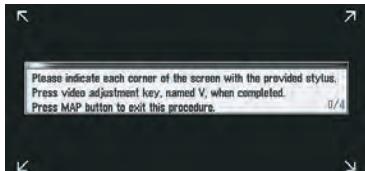
4   Press V button.
The adjusted position data is saved.
  ❐ Do not turn off the engine while saving the adjusted position data.
  ❐ Press **MAP** button to complete the 4-point adjustment.

5   Press V button.
The 16-point touch panel adjustment screen appears.

6   Gently touch the center of + mark displayed on the screen with the touch panel adjustment pen.
After you touch all marks, the adjusted position data is saved.
  ❐ Do not turn off the engine while saving the adjusted position data.
  ❐ Press **V** button to return to the previous adjustment position.
  ❐ To cancel the adjustment, press **MAP** button.

7   Press MAP button.
The adjustment is complete.
  ❐ If touch panel adjustment cannot be performed properly, consult your local Pioneer dealer. ▮

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 ground's surface.

Appendix

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.
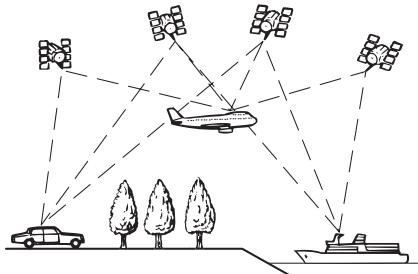
Positioning by dead reckoning

The 3D Hybrid Sensor in the navigation system 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 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.

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❐ If 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.
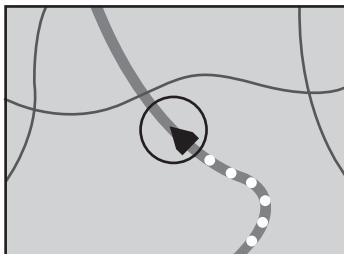
With map matching

Without 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
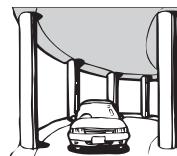
Under elevated roads or similar structures

When driving among high buildings

When driving through a dense forest or tall trees

• If a car phone or cellular phone is used near the GPS antenna, GPS reception may be lost temporarily.

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- 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 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.
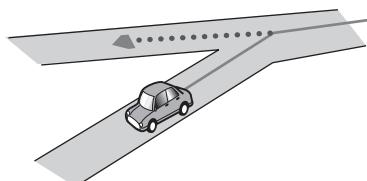
- If there is a parallel road.
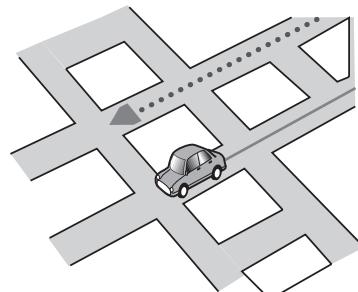
- If there is another road very nearby, such as in the case of an elevated freeway.
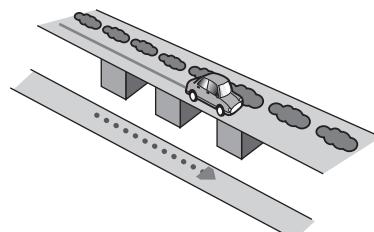
- If you take a recently opened road that is not on the map.
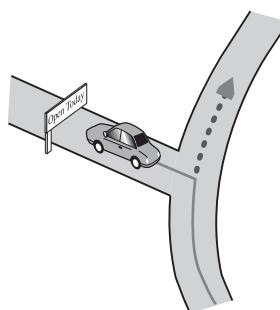
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- If you drive in zig-zags.
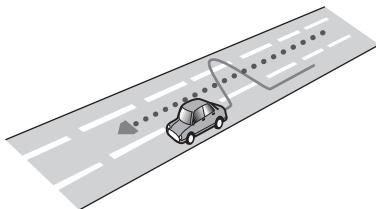
- If the road has connected hairpin bends.
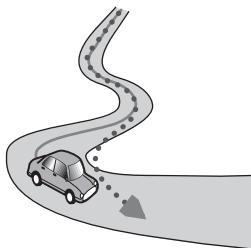
- If there is a loop or similar road configuration.
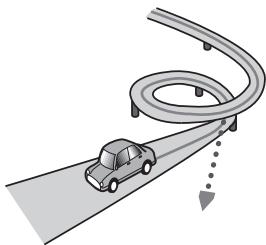
- If you take a ferry.
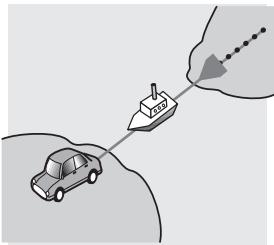
- If you are driving on a long, straight road or a gently curving road.
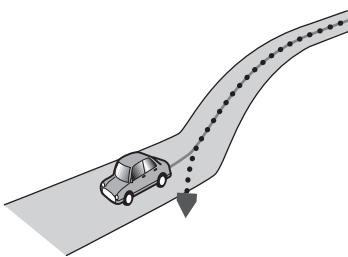
- If you are on a steep mountain road with many height changes.
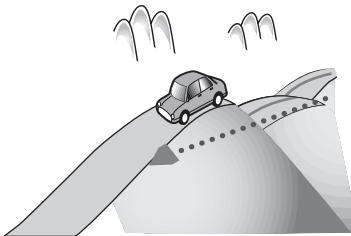
- If you enter or exit a multi-storey parking lot or similar using a spiral ramp.
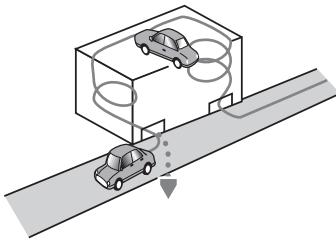
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- If your vehicle is turned on a turntable or similar structure.
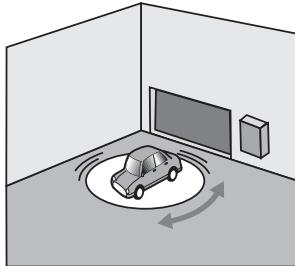
- If your vehicle's wheels spin, such as on a gravel road or in snow.

- If you put on chains, or change your tires for ones with a different size.
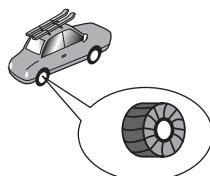
- If trees or other obstacles block the GPS signals for a considerable period.
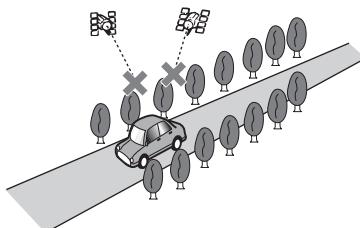
- If you drive very slowly, or in a start-and-stop manner, as in a traffic congestion.
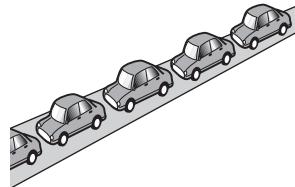
- If you join the road after driving around a large parking lot.
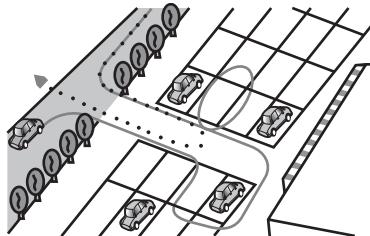
- When you pass around a traffic circle.
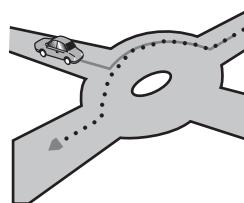
- When starting driving immediately after starting the engine.
- If you turn your navigation system on while driving.

Some types of vehicles 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. ◼

Appendix

When the Hard Disk Drive is Disconnected

If there is no hard disk drive because of repair or service, you can operate only the Radio source without the hard disk drive.
The following screen also may appear because the hard disk drive can not run due to low temperature. In such a case, park your vehicle in a safe place and turn the ignition switch off. After the temperature inside the vehicle returns to normal, turn the ignition switch on.
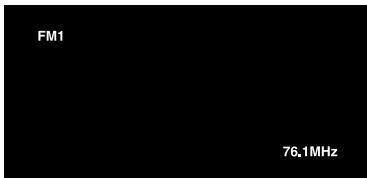
Only the following operations are available. Other functions cannot be operated.
• Only the FM and AM sources can be operated. (Preset station select cannot be operated.)
• If the selected source before ejecting the hard disk drive is [**AV**], the [**AV INPUT**] source is available on "Rear display". (If the selected source is [**DVD**], nothing is output to "Rear display". If the selected source is [**MIRROR**], the same image as "Front display" is output to "Rear display".)
• Rear view camera is available only when the vehicle is backing up. ([**Rear View**] is not available.) ◼

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.

• 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 need to pass a certain street, set the waypoint on that street.)
• The route set by your navigation system may not use the streets known to local drivers, such as small streets or special roads.
• Some route options may become the same route. If waypoints are set, only one route is calculated.
• If 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 waypoints 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.

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- In some cases, the route may require you to travel in the opposite direction to your current heading. In such cases, you are instructed to turn around, so please turn around safely by following the actual traffic rules.
- In some cases, 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.
- 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 appear.
- 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 0.02 mile (Approx. 30 m) from the route.
- The 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 driving on the routes are described in "*Route highlighting*"
- 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.

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 on screen, the following roads are not included in route calculations.
- Walkways
- Public vehicle only
- Non access road

➲ For details, refer to *Viewing the Map Color Legend* on page 49

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 155 miles (250 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 (160 km) tracking of your vehicle with white dots.

➲ For details, refer to *Setting the Item on the Map Screen* on page 46

Displaying POI
Points of Interest (POI) that can be displayed on the enlarged map of the intersection or [**Driver's View**] (left screen) are only the special Points of Interest (POI) that contain the position information. Not all of Points of Interests (POI) are displayed. ■

Appendix

Detail Information for Playable Media

DVD discs and other DVD media types

- It may not be possible to use certain functions with some DVD-Video discs.
- It may not be possible to play back some DVD video discs.
- When DVD-R/DVD-RW discs are used, playback is possible only for discs that have been finalized.
- When DVD-R/DVD-RW discs are used, playback is possible only for discs that have been recorded in Video format (video mode). It is not possible to play back DVD-R/-RW discs which have been recorded in Video Recording format (VR mode).
- It may not be possible to play back DVD-R/ DVD-RW discs that have been recorded in Video format (video mode) because of disc characteristics, scratches or dirt on the disc, or dirt, scratches or condensation on the lens of this product.
- It is not possible to play back general DVD-ROM discs or DVD-RAM discs. Only DVD-ROM discs authorized by Pioneer can be read.
- Playback of discs recorded on a personal computer may not be possible depending on the environment and the application settings. Please record with the correct format. (For details, contact the manufacturer of the application.)

About playing DualDisc

- DualDiscs are two-sided discs that have a recordable CD for audio on one side and a recordable DVD for video on the other.
- Playback of the DVD side is possible with this unit. However, since the CD side of DualDiscs is not physically compatible with the general CD standard, it may not be possible to play the CD side with this navigation system.

- Frequent loading and ejecting of a DualDisc may result in scratches on the disc.
- Serious scratches can lead to playback problems on this navigation system. In some cases, a DualDisc may become stuck in the disc loading slot and will not eject. To prevent this, we recommend you refrain from using DualDisc with this navigation system.
- Please refer to the manufacturer for more detailed information about DualDiscs.

About AVCHD recorded discs

- This unit is not compatible with discs recorded in AVCHD (Advanced Video Codec High Definition) format. Do not insert AVCHD discs. If inserted, the disc may not be ejected.

CD-R/CD-RW discs

- When CD-R/CD-RW discs are used, playback is possible only for discs that have been finalized.
- It may not be possible to play back CD-R/ CD-RW discs recorded on a music CD recorder or a personal computer because of disc characteristics, scratches or dirt on the disc, or dirt, scratches or condensation on the lens of this product.
- Playback of discs recorded on a personal computer may not be possible, depending on the environment and the application settings. Please record with the correct format. (For details, contact the manufacturer of the application.)
- Playback of CD-R/CD-RW discs may become impossible with direct exposure to sunlight, high temperatures, or depending on the storage conditions in the vehicle.
- Titles and other text information recorded on a CD-R/CD-RW disc may not be displayed by this product (in the case of audio data (CD-DA)).

Appendix

- If you insert a CD-RW disc into this product, it will take more time to play back than when you insert a conventional CD or CD-R disc.
- Read the precautions with CD-R/CD-RW discs before using them.

MP3 files

- When naming an MP3 file, add the corresponding filename extension (.mp3).
- This navigation system plays back files with the filename extension (.mp3) as MP3 files. To prevent noise and malfunctions, do not use this extension for files other than MP3 files.
- MP3 is short for MPEG Audio Layer 3 and refers to an audio compression technology standard.
- This product allows playback of MP3 files on CD-ROM, CD-R and CD-RW discs. Recorded discs can be played back if they are compatible with level 1 and level 2 of ISO9660 and with the Romeo and Joliet file system.
- It is possible to play back multi-session compatible recorded discs.
- MP3 files are not compatible with packet write data transfer.
- The maximum number of characters for the file and folder name is 32 characters, including extension (.mp3). However the navigation system uses proportional font. Therefore, the number of the characters that you can display varies according to the width of each character.
- When playing discs with both MP3 files and audio data (CD-DA), such as CD-EXTRA and MIXED-MODE CDs, both types can be played only by switching the mode between MP3 and CD-DA.
- The folder selection sequence for playback and other operations is the writing sequence used by the writing software. For this reason, the expected sequence at the time of playback may not coincide with the actual playback sequence. However, there

also are some writing software that permit the setting of the playback order.
- Some audio CDs contain tracks that merge into one another without a pause. When these discs are converted to MP3 files and burned to a CD-R/CD-RW/CD-ROM, the files will be played back on this player with a short pause between each one, regardless of the length of the pause between tracks on the original audio CD.
- Files are compatible with the ID3 Tag Ver. 1.0 and Ver. 1.1 formats for displaying album (disc title), track (track title) and artist (track artist).
- The emphasis function is valid only when MP3 files of 32 kHz, 44.1 kHz and 48 kHz frequencies are played back. (16 kHz, 22.05 kHz, 24 kHz, 32 kHz, 44.1 kHz, 48 kHz sampling frequencies can be played back.)
- There is no m3u playlist compatibility.
- There is no compatibility with the MP3i (MP3 interactive) or MP3 PRO formats.
- The sound quality of MP3 files generally improves with an increased bit rate. This product can play recordings with bit rates from 8 kbps to 320 kbps, but in order to be able to enjoy sound of a certain quality, we recommend only using discs recorded with a bit rate of at least 128 kbps.
- Playing MP3 file on the DVD-R (-RW) is not supported.

About folders and MP3 files

An outline of a CD-ROM with MP3 files on it is shown below. Subfolders are shown as folders in the folder currently selected.

❐ The following figure is an example of the tier structure in the CD. The numbers in the figure indicate the order in which folder numbers are assigned and the order to be played back.

⌐ Indicates the order in which folder numbers are assigned.

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♪ Indicates each file. The number is assigned in the order of the track to be played back.
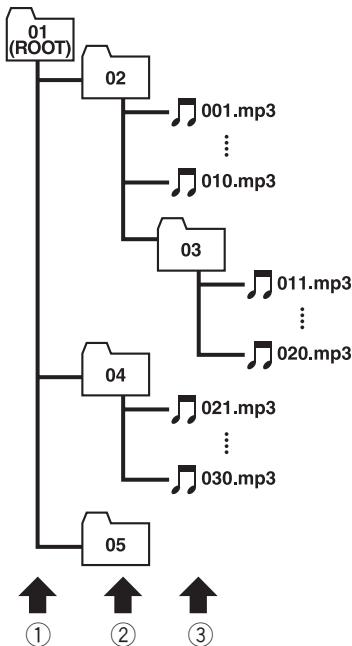
① **First tier**
② **Second tier**
③ **Third tier**

📝 Notes

• This product assigns folder numbers. The user can not assign folder numbers.
• If you are using a folder that does not contain an MP3 file, the folder itself will display but you will not be able to see any files in the folder.
• MP3 files in up to 8 tiers of folders can be played back. However, there is a delay when starting playback on discs with numerous tiers. For this reason we recommend creating discs with no more than 2 tiers.
• It is possible to play back up to 253 folders on one disc. ◼

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Display Information

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[Settings] menu
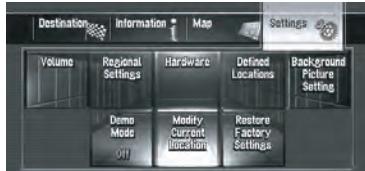
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Shortcut menu

❒ The shortcuts displayed on screen can be customized.
❒ Items marked with an asterisk (*) cannot be removed from Shortcut menu.
➲ For details, refer to *Selecting the Shortcut* on page 48

Shortcut menu

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Appendix

Menu in the Audio Screen

[Audio Settings] menu

[System Settings] menu

▪

Appendix

Glossary

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 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.

Chapter
DVD titles are in turn divided into chapters which are numbered in the same way as the chapters of a book. With DVD-Video discs featuring chapters, you can quickly find a desired scene with chapter search.

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 customize default settings to suit your own needs in the menu.

Destination
A location you choose as the end point of your journey.

Dolby Digital
Dolby Digital provides multi-channel audio from up to 5.1 independent channels. This is the same as the Dolby Digital surround sound system used in theaters.

Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.

DTS
This stands for Digital Theater Systems. DTS is a surround system delivering multi-channel audio from up to 6 independent channels.

"DTS" and "DTS Digital Out" are registered trademarks of DTS, Inc.

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.

Appendix

Gracenote® Music recognition service

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

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 DVD/CD-ROM folders and files. For the ISO9660 format, there are regulations for the following two levels:

Level 1:
The file name is in 8.3 format (the name consists of up to 8 characters, half-byte English capital letters, half-byte numerals and the "_" sign, with a file-extension of three characters).

Level 2:
The file name can have up to 31 characters (including the separation mark "." and a file extension). Each folder contains less than 8 hierarchies.

Extended formats
Joliet:
File names can have up to 64 characters.
Romeo:
File names can have up to 128 characters.

Linear PCM (LPCM)/Pulse code modulation

This stands for linear pulse code modulation, which is the signal recording system used for music CDs and DVDs. Generally, DVDs are recorded with higher sampling frequency and bit rate than CDs. Therefore, DVDs can provide higher sound quality.

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 size of a conventional disc.

MPEG

This stands for Moving Pictures Experts Group, and is an international video image compression standard. Some DVDs feature digital audio compressed and recorded using this system.

Appendix

Multi-angle

With regular TV programs, although multiple cameras are used to simultaneously shoot scenes, only images from one camera at a time are transmitted to your TV. Some DVDs feature scenes shot from multiple angles, letting you choose your viewing angle as desired.

Multi-audio (Multilingual dialog)

Some DVDs feature dialog recorded in multiple languages. Dialog in up to 8 languages can be recorded on a single disc, letting you choose as desired.

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.

Multi-subtitle

Subtitles in up to 32 languages can be recorded on a single DVD, letting you choose as desired.

Optical digital output

By transmitting audio signals in a digital signal format, the chance of sonic quality deteriorating in the course of transmission is minimized. An optical digital output is designed to transmit digital signals optically.

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.

Parental lock

Some DVD-Video discs with violent or adult-oriented scenes feature parental lock which prevents children from viewing such scenes. With this kind of disc, if you set the unit's parental lock level, playback of scenes inappropriate for children will be disabled, or these scenes will be skipped.

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.

Region number

DVD players and DVD discs feature region numbers indicating the area in which they were purchased. Playback of a DVD is not possible unless it features the same region number as the DVD player. The navigation system's region number is displayed on the bottom of the navigation unit.

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.

Title

DVD-Video discs have a high data capacity, enabling recording of multiple movies on a single disc. If, for example, one disc contains three separate movies, they are divided into title 1, title 2 and title 3. This lets you enjoy the convenience of title search and other functions.

Tracking

Marks on the map indicating the route you have traveled.

TV system (NTSC, PAL, SECAM)

Different areas of the world use different TV systems. North America uses NTSC, Europe uses PAL and SECAM, and South America uses PAL-M, PAL-N, PAL and NTSC.

Appendix

Almost all are incompatible with each other. To display the video image, such as TV or DVD-video correctly, you may need to coordinate your system at the same TV system or use a multi-system equipment.

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.

Voice recognition
The technology that allows the system to understand the driver's voice commands.

Waypoint
A location that you choose to visit before your destination; a journey can be built up from multiple way points and the destination. ◨

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