

Operation Manual

GPS NAVIGATION AUDIO SYSTEM

AVIC-F320BT AVIC-F3210BT

Be sure to read **Important Information for the User** first!

Important Information for the User includes the important information that you must understand before using this navigation system.

Thank you for buying this Pioneer product.

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



Important

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

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Manual overview

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

How to use this manual

Finding the operation procedure for what you want to do

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

Finding the operation procedure from a menu name

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

Glossary

Use the glossary to find the meanings of terms.

Conventions used in this manual

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

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

e.g.)

[**Address**], [**Settings**].

- Extra information, alternatives and other notes are presented in the following format: e.g.)
 - If the home location has not been stored yet, set the location first.
- Descriptions of separate operations to be performed on the same screen are indicated with ■ at the beginning of the description: e.g.)
 - Touch [**OK**].
- References are indicated like this: e.g.)
 - ➔ For details, refer to *Displaying the “Route info” screen* on page 44.

Terms used in this manual


“USB storage device”

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

“SD memory card”



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





Notice regarding MP3 file usage

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


iPod compatibility

This product supports only the following iPod models and iPod software versions. Others may not work correctly.





- iPod nano first generation: Ver. 1.3.1
 - iPod nano second generation: Ver. 1.1.3
 - iPod nano third generation: Ver. 1.1.3
 - iPod nano fourth generation: Ver. 1.0.4
 - iPod nano fifth generation: Ver. 1.0.1
 - iPod fifth generation: Ver. 1.3
 - iPod classic 80GB: Ver. 1.1.2
 - iPod classic 120GB: Ver. 2.0.1
 - iPod classic 160GB (2007): Ver. 1.1.2
 - iPod classic 160GB (2009): Ver. 2.0.3
 - iPod touch first generation: Ver. 3.1.2
 - iPod touch second generation: Ver. 3.1.1
 - iPhone: Ver. 2.2
 - iPhone 3G: Ver. 3.1.2
 - iPhone 3GS: Ver. 3.1.2
-  In this manual, iPod and iPhone will be referred to as iPod.
-  When you use this navigation system with a Pioneer USB interface cable for iPod (CD-LU50) (sold separately), you can control an iPod compatible with this navigation system.

-  To obtain maximum performance, we recommend that you use the latest software for the iPod.
-  Operation methods may vary depending on the iPod models and the software version of iPod.
-  For details about iPod compatibility with this navigation system, refer to the information on our website. 

Map coverage

For details about the map coverage of this navigation system, refer to the information on our website. 

Protecting the LCD panel and screen


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

Resetting the microprocessor



CAUTION

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

-  Some data remains. Be sure to read *Returning the navigation system to the default or factory settings* first.

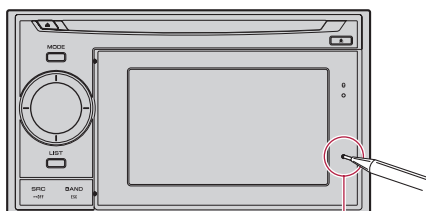
Introduction

- ➔ For detailed information about the items which would be erased, refer to *Returning the navigation system to the default or factory settings* on page 121.

The microprocessor must be reset under the following conditions:

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

- **Press the RESET button with a pen tip or other pointed implement.**

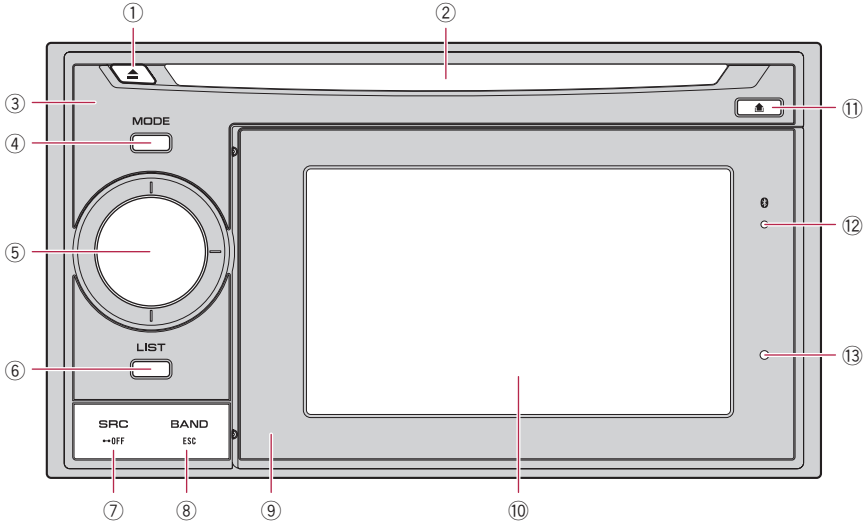


RESET button



Checking part names and functions

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



① ▲ button

Press to eject the disc from the disc loading slot.

② Disc loading slot

Insert a disc to play.

➔ For details of the operation, refer to *Inserting and ejecting a disc* on the next page.

③ Head unit

④ MODE button

- Press to switch between the map screen and the audio operation screen.
- Press to display the map screen while the navigation function screen is displayed.

⑤ MULTI-CONTROL*

- **Rotating;**
Adjusts the audio source volume.
- **Pressing MULTI-CONTROL left or right;**
Allows you to change the frequency one

step at a time; operates track search controls.

- **Pressing and holding MULTI-CONTROL left or right;**

Allows you to perform manual seek tuning, fast forward or reverse.

⑥ LIST button*

⑦ SRC/OFF button*

⑧ BAND/ESC button*

⑨ Detachable device

➔ For details, refer to *Removing the detachable device* on page 17.

⑩ LCD screen

⑪ 🏠 button

Press to remove the detachable device from the head unit.

➔ For details, refer to *Removing the detachable device* on page 17.

Before you start

- ⑫ **Bluetooth connection status indicator**
Lights up when your phone is paired to the navigation system by Bluetooth wireless technology.
- ⑬ **RESET button**
- ➔ For details, refer to *Resetting the micro-processor* on page 8.
- Buttons marked with an asterisk (*) are used only for audio functions.
- ➔ For more details, refer to the descriptions from Chapter 15 to Chapter 22.
- ➔ For details on the drawer of AVIC-F3210BT, refer to *How to use the drawer* on page 14.

Protecting your product from theft

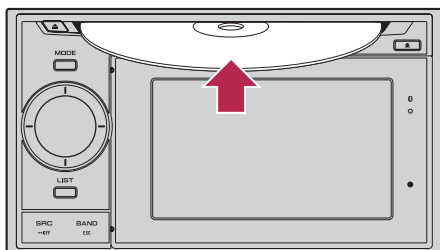
The detachable device can be removed from the head unit to discourage theft.

- ➔ For details, refer to *Removing the detachable device* on page 17.

Inserting and ejecting a disc

Inserting a disc

- Insert a disc into the disc loading slot.



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

Ejecting a disc

- Press the **▲** button.
The disc is ejected.

Inserting and ejecting an SD memory card

⚠ CAUTION

- Ejecting an SD memory card during data transfer can damage the SD memory card. Be sure to eject the SD memory card by following the procedure described in this manual.
 - If data loss or corruption occurs on the storage device for any reason, it is usually not possible to recover the data. Pioneer accepts no liability for damages, costs or expenses arising from data loss or corruption.
- This system is not compatible with Multi Media Card (MMC).
- Compatibility with all SD memory cards is not guaranteed.
- This unit may not achieve optimum performance with some SD memory cards.
- Do not insert anything other than SD memory cards.
- If data related to map data, such as customised POI data, is stored on the SD memory card, the navigation system restarts.

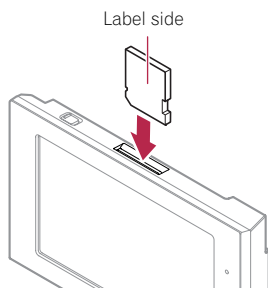
Inserting an SD memory card

1 Remove the detachable device from the head unit.

- ➔ For details, refer to *Removing the detachable device* on page 17.

2 Insert an SD memory card into the SD card slot.

Insert the card with the contact end first into the top of the detachable device and press the card until it clicks and completely locks.



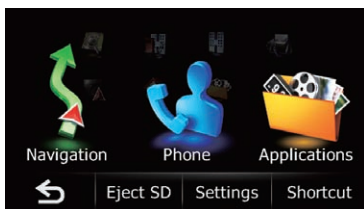
3 Attach the detachable device to the head unit.

Ejecting an SD memory card

1 Touch [Home] on the map screen.

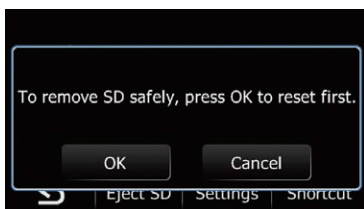
The "Top Menu" screen appears.

2 Touch [Eject SD].



A message confirming whether to restart the navigation system appears.

3 Touch [OK].

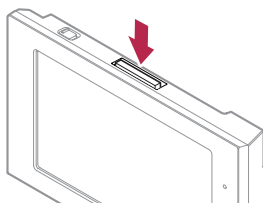


The navigation system restarts, and a message prompting you to remove the SD memory card appears.

4 Remove the detachable device from the head unit.

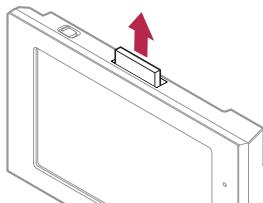
➤ For details, refer to *Removing the detachable device* on page 17.

5 Press the middle of the SD memory card gently until it clicks.



The SD memory card is ejected.

6 Pull the SD memory card out straight.



7 Attach the detachable device to the head unit.

➤ For details, refer to *Attaching the detachable device* on page 17.

8 Touch [Restart].



The navigation system restarts. □

Before you start

Plugging and unplugging a USB storage device

⚠ CAUTION

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

- ❑ Compatibility with all USB storage devices is not guaranteed.

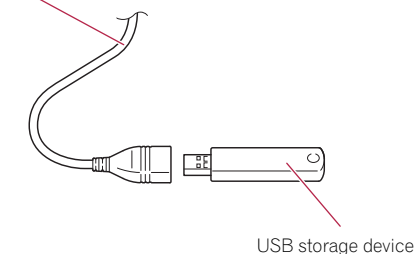
This navigation system may not achieve optimum performance with some USB storage devices.

- ❑ Connection via a USB hub is not possible.

Plugging in a USB storage device

- Plug a USB storage device into the USB connector.

USB connector



Unplugging a USB storage device

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

Connecting and disconnecting an iPod

⚠ CAUTION

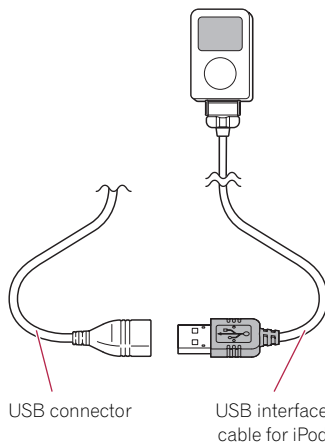
- To prevent data loss and damage to the storage device, never remove it from this navigation system while data is being transferred.
- If data loss or corruption occurs on the storage device for any reason, it is usually not possible to recover the data. Pioneer accepts no liability for damages, costs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

Connecting your iPod

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

- ❑ A USB interface cable for iPod (CD-IU50) (sold separately) is required for connection.
- ❑ For details about iPod compatibility with this navigation system, refer to the information on our website.
- ❑ Connection via a USB hub is not possible.

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



- 2 Connect your iPod.

Disconnecting your iPod

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

How to use the drawer

AVIC-F3210BT has a drawer.

Inside the drawer is a USB cable that lets you connect the USB storage device. You can also use the iPod cable (supplied) to connect an iPod.

Connected devices can also be stored inside the drawer.

The drawer can hold the following devices.

- iPod nano first generation
 - iPod nano second generation
 - iPod nano third generation
 - iPod nano fourth generation
 - iPod nano fifth generation
 - iPod classic 80GB
 - iPod classic 120GB
 - iPod classic 160GB (2007/2009)
 - iPod touch first generation
 - iPod touch second generation
 - iPod fifth generation
 - USB storage devices up to 14 mm (H) x 66 mm (W)
- ▣ Do not place other than above inside the drawer.
- ▣ If your iPod is enclosed in a case, it may not fit inside the drawer. If so, remove the iPod from its case before placing it inside the drawer.

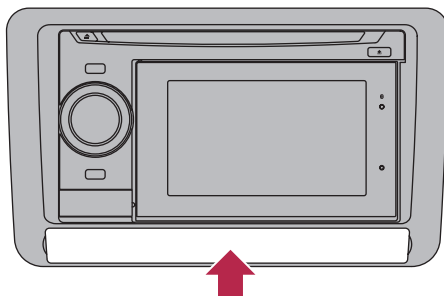
⚠ CAUTION

- Never put items that produce an open flame (cigarettes, lighters, etc.) inside the drawer.
- Do not use this product with the drawer left open. If the drawer is left open, it may result in injury in the event of an accident.
- Do not forcibly pull the drawer out, as it may not be removed from the front.
- Media devices (such as an iPod, a USB storage device) will function properly under nor-

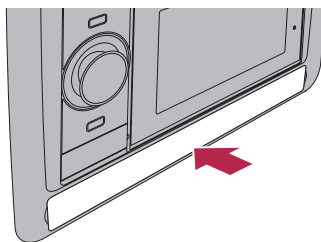
mal operating conditions. Higher temperatures within the drawer may however cause malfunctioning of or damage to your media device. Therefore please take caution when using the drawer.

- When disconnecting a device, pull the connector. Do not pull the cable, as the main body or the cable may break.
- If the drawer cannot be opened, insert an object with a flat head (e.g. a flathead screwdriver) into the slot beside the drawer and open it. Or contact the authorised Pioneer Service Station.

1 Press the centre of the drawer to open it.



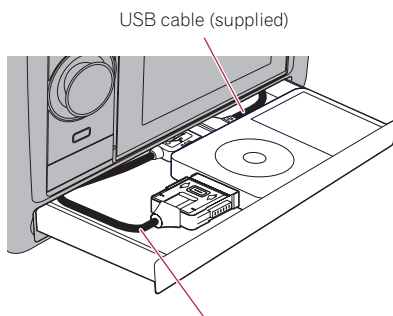
2 Pull the drawer out.



3 Connect the device to the cable inside the drawer.

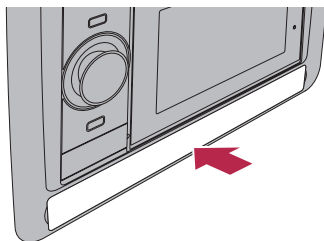
Before you start

4 Place the device inside the drawer.



When placing an iPod in the drawer, make sure that the iPod and cable connection is on the left side.

5 Press the centre of the drawer to close it.



Protecting your product from theft

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

➔ For details, refer to *Removing the detachable device* on page 17.

CAUTION

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

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

Flow from startup to termination

1 Start the engine to boot up the system.

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

2 Turn off the vehicle engine to terminate the system.

The navigation system is also turned off. ▣

On first-time startup

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

1 Start the engine to boot up the system.

After a short pause, the navigation splash screen appears.

2 Touch the language that you want to use on the screen.

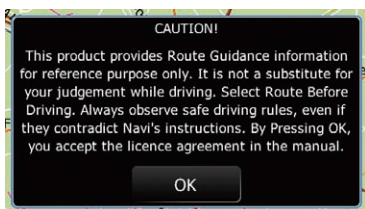


- 3 Touch the language that you want to use for the voice guidance.

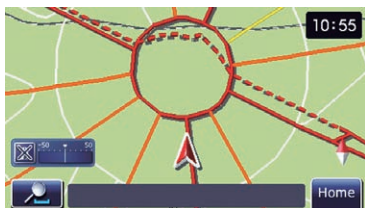


The navigation system will now restart.

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



The map screen appears.



Regular startup

- **Start the engine to boot up the system.**
 - The screen shown will differ depending on the previous conditions.
 - When there is no route, the disclaimer appears after the navigation system reboots. Read the disclaimer carefully, checking its details, and then touch [OK] if you agree to the conditions. □

How to use the detachable device

Removing the detachable device from the head unit enables you to set routes and search locations even when you are out of your vehicle.

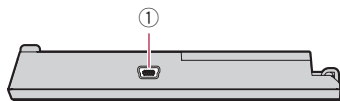
Also, you can connect the detachable device to your PC using the supplied USB cable. This chapter describes how to use the detachable device when not attached to the head unit.

⚠ CAUTION

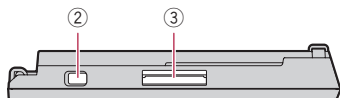
- Never grip the display and the buttons tightly or use force when removing or attaching.
- Avoid subjecting the detachable device to excessive shocks.
- Keep the detachable device out of direct sunlight and high temperatures.
- After removing the detachable device, keep it in a safe place so it is not scratched or damaged.

Checking part names and functions

Bottom side



Top side



- ① **USB port (Mini-B)**
Use to connect with your PC.
- ② **Power switch**
Use to turn the detachable device on and off.
- ③ **SD card slot**
➔ For more detailed information, refer to *Inserting an SD memory card* on page 11.

Removing and attaching the detachable device

Removing the detachable device

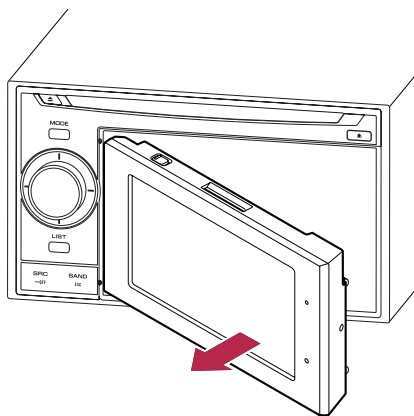
- ❑ The head unit cannot be operated while the detachable device is removed from the head unit.
- ❑ Removing the detachable device automatically turns the audio source off.

1 Hold the detachable device in order not to drop.

Take care not to drop the detachable device and protect it from contact with water or other fluids to prevent permanent damage.

2 Press the button to release the detachable device.

3 Gently grip the right side of the front panel and slowly pull it outward.



4 Put the detachable device into the supplied case for safe keeping.

Attaching the detachable device

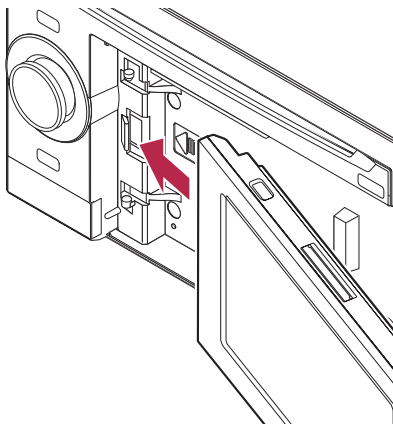
- ❑ If the detachable device is turned on before it is attached to the head unit, it will not turn off when the ignition switch is turned off (ACC OFF). The detachable device will also lose battery power.

How to use the detachable device

1 Turn off the power switch of detachable device.

2 Slide the detachable device to the left until it clicks.

The detachable device and the head unit are jointed on the left side. Make sure that the detachable device has been jointed to the head unit.



3 Press the centre on the right side of the detachable device until it is firmly seated.

If you fail to successfully attach the detachable device to the head unit, try again but be careful not to force it as the device could be damaged. ▣

Installing the battery

! CAUTION

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

Disposing of the battery

! WARNING

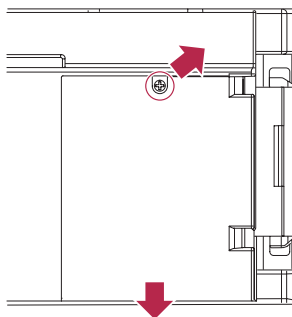
- Keep the battery pack out of the reach of small children to prevent them from accidentally swallowing it.
- Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.

! CAUTION

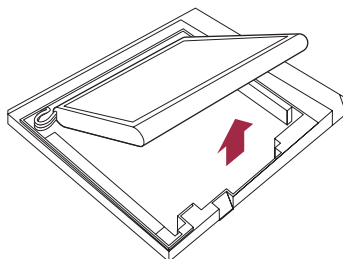
When disposing of used batteries, please comply with governmental regulations or environmental public institutions' rules that apply in your country/area.

Do not open the cover except when you dispose the battery.

1 Remove the screw in the back of the detachable device and then slide the cover off.

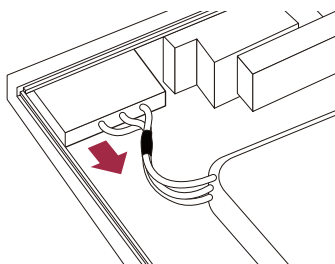


2 Remove the battery.



How to use the detachable device

3 Detach the cable to disconnect the battery.



Turning on the detachable device

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

1 Detach the detachable device from the head unit.

- ➔ For details, refer to *Removing the detachable device* on page 17.

2 Turn on the power switch of detachable device.

- ☐ The following functions are not available in "Detach mode".
 - GPS positioning and time synchronisation (Vehicle position and current time on the screen are not updated.)
 - Route guidance
 - Hands-free phoning
 - Audio functions ☐

Charging the battery of detachable device

Charging cannot be done when the temperature is outside of the charging temperature range.

- The operating temperature range of the battery is from -20°C to $+60^{\circ}\text{C}$.

- The charging temperature range of the battery is from 0°C to $+55^{\circ}\text{C}$.

The battery of the detachable device is charged in the following situations.

- When the detachable device is attached to the head unit while the ignition switch is turned on (ACC ON).
- When the detachable device is connected to your PC.
 - ☐ Before charging the detachable device by connecting it to your PC, turn off the power switch of detachable device to reduce the drain on battery power. If the power is on, the battery may not be charged.
 - ☐ To ensure proper charging, adjust the screen brightness to a low level and set the power-saving function to save the battery discharging.
 - ➔ For details, refer to *Adjusting the screen brightness* on page 112.
 - ➔ For details, refer to *Setting the power-saving function* on page 111. ☐

Monitoring the battery status

You can check the battery status of the detachable device.

1 Attach the detachable device to the head unit.

- ➔ For details, refer to *Attaching the detachable device* on page 17.

2 Press the MODE button to display the navigation map screen.

3 Touch [Home] on the map screen.

The "Top Menu" screen appears.

4 Touch [Settings].

The "Settings Menu" screen appears.

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

Battery status indicator

Fully charged




Sufficient power



Charging

**Connecting with your PC**

You can connect the detachable device and your PC using the USB cable (supplied with the navigation system).

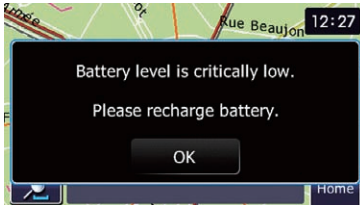
➔ For details, refer to *Using Applications* on page 75. 

Automatic shutdown of the navigation system

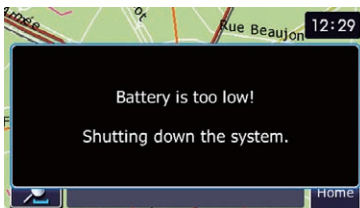
When the battery of detachable device nearly runs out, the navigation system automatically turns off.


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

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

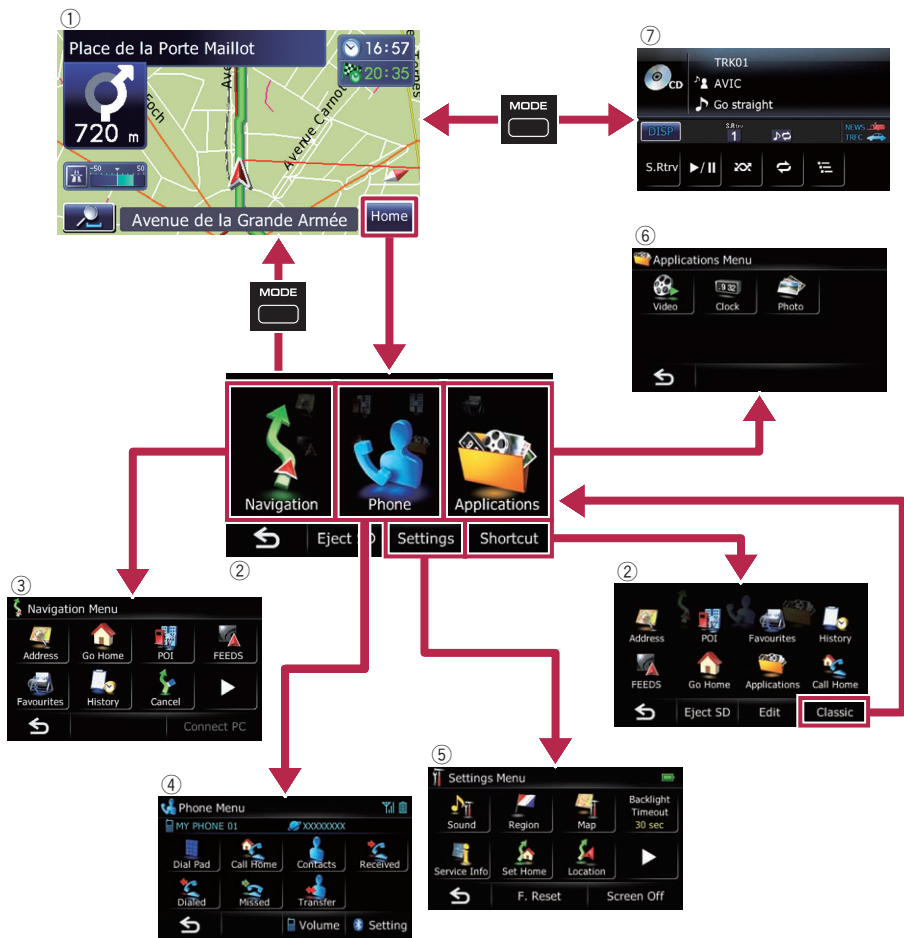


When the battery nearly runs out, a message appears and the navigation system automatically turns off.



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

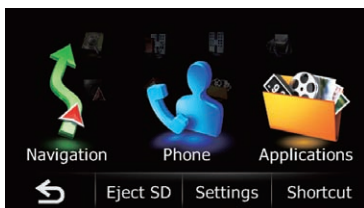
Screen switching overview



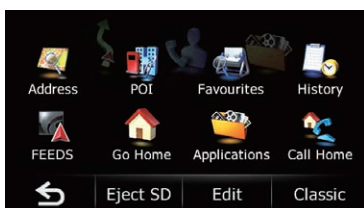
How to use the navigation menu screens

What you can do on each menu

- ① **Map screen**
Press the **MODE** button to display the navigation map screen.
- ② **Top Menu**
Touch [**Home**] on the map screen to display the “**Top Menu**” screen.
This is the starting menu to access the desired screens and operate the various functions. There are two types of the “**Top Menu**” screen.



Classic Menu



Shortcut Menu

- In this manual, Classic Menu will be referred to as “**Top Menu**”.
- ③ **“Navigation Menu” screen**
You can search for your destination on this menu. You can also check or cancel your set route from this menu.
Other features include useful functions to support your navigation.
 - ④ **“Phone Menu” screen**
You can access the screen that is related to hands-free phoning to see call histories and change the settings on the Bluetooth wireless technology connection.
 - ⑤ **“Settings Menu” screen**
You can access the screen to customise settings.

- ⑥ **“Applications Menu” screen**
You can launch applications downloaded to an SD memory card via the utility programme navigate FEEDS.
- ⑦ **Audio operation screen**
This is the screen that normally appears when you play the audio source.

Shortcut Menu

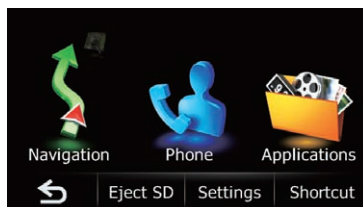
Registering your favourite menu items in shortcuts allows you to quickly jump to the registered menu screen by a simple touch on the Shortcut Menu screen.

Selecting the shortcut

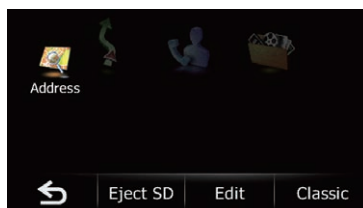
- Up to 8 menu items can be registered in shortcuts.

- 1 Touch [**Home**] on the map screen. The “**Top Menu**” screen appears.

- 2 Touch [**Shortcut**].

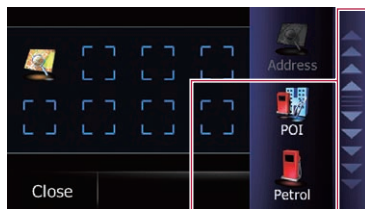


- When you use the navigation system for the first time or no items are set on shortcut, a message will appear. Touch [**Yes**] to start the shortcut selection.
- 3 Touch [**Edit**].



How to use the navigation menu screens

4 Touch the tab on the right edge or scroll the bar to display the icon that you want to set to shortcut.

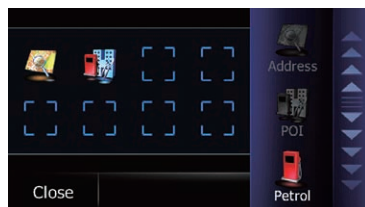


Scroll bar

5 Touch and hold the icon that you want to add to shortcut.

6 Move the icon to the left side of the screen, and then release it.

The selected item is added to shortcut.



7 To finish the selection, touch [Close].

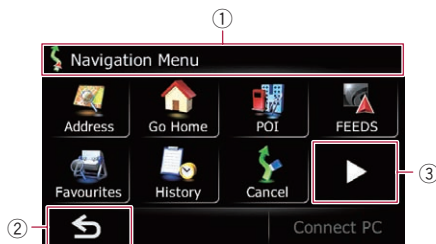
Canceling the shortcut

1 Touch and hold the icon that you want to cancel the shortcut.

2 Move the icon to the right side of the screen, and then release it.

3 To finish the selection, touch [Close].

Operating menu screens (e.g. "Navigation Menu" screen)



① **Screen title**

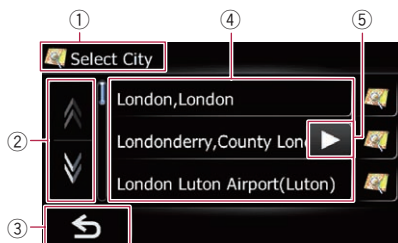


The previous screen returns.



Shows the next or previous page.

Operating list screens (e.g. city list)



① **Screen title**



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



The previous screen returns.

④ **Listed items**

Touching an item on the list allows you to narrow down the options and proceed to the next operation.






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

How to use the navigation menu screens

Operating the on-screen keyboard




- ① **Text box**
Displays the characters that are entered. If there is no text in the box, an informative guide with text appears.
- ② **Keyboard**
Touch the keys to enter the characters.
- ③ 
The previous screen returns.
- ④ **0-9, Sym., Others**
You can enter other characters of alphabet. You can also enter text with marks such as [&] or numbers. Touch to toggle the selection.
 - When you use any of “A”, “Ä”, “Å”, “Æ”, the displayed result is the same.
- ⑤ **OK**
Confirms the entry and allows you to proceed to the next step.
- ⑥ 
Deletes the input text one letter at a time, beginning at the end of the text. Continuing to touch the button deletes all of the text.
 - You can select the type of keyboard to be used for inputting characters.
 - ➔ For details, refer to *Setting the keyboard layout* on page 106.
 - When you select Cyrillic keyboard, touch  allows you to see remaining characters.

Most of the information provided by your navigation system can be seen on the map. You need to become familiar with how the information appears on the map.

How to read the map screen

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



- Information with an asterisk (*) appears only when the route is set.
 - Depending on the conditions and settings, some items may not be displayed.
- ① **Name of the street to be used (or next guidance point)***
Touching this item enables you to hear the next guidance again.
 - ② **Next direction of travel***
When you approach a guidance point, this appears in green. Touching this item enables you to hear the next guidance again.
 - ③ **Distance to the guidance point***
Shows the distance to the next guidance point.
 - ④ **Eco-Meter**
Displays a graph comparing the past average fuel mileage and the average fuel mileage since the navigation system was last started. Touching this item displays the "Eco Graph" screen.
➔ For details, refer to *Displaying "Eco Graph"* on page 31.
 - ⑤ **Map control**
- Touching  displays touch panel keys for changing the map scale and the map orientation.
- ⑥ **Street name (or city name) that your vehicle is travelling along**
➔ For details, refer to *Setting the current street name display* on page 110.
 - ⑦ **Current position**
Indicates the current location of your vehicle. The apex of the triangular mark indicates your orientation and the display moves automatically as you drive.
 The apex of the triangular mark is the proper current position.
 - ⑧ **Home key**
Touch [Home] on the map screen to display the "Top Menu" screen.
➔ For details of the operations, refer to *Screen switching overview* on page 22.
 - ⑨ **Map orientation indicator**
 - When "North up" is selected,  is displayed.
 - When "Heading up" is selected,  is displayed.

How to use the map

- ❑ The red arrow indicates north.
- ➔ For details, refer to *Switching the map orientation* on the next page.

⑩ Direction line*

The direction towards your destination (next waypoint, or cursor) is indicated with a straight line.

⑪ Current route*

The route currently set is highlighted in colour on the map. If a waypoint is set on the route, the route after the next waypoint is highlighted in another colour.

⑫ Multi-Info window

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

- **Distance to the destination (or distance to waypoint)***
- **Estimated time of arrival at your destination or waypoint***

The estimated time of arrival is an ideal value calculated based on the value set for "Speed" and the actual driving speed. The estimated time of arrival is only a reference value, and does not guarantee arrival at that time.

- **Travel time to your destination or waypoint***

⑬ Current time

Meaning of guidance flags



Destination

The checked flag indicates your destination.



Waypoint

The blue flags indicate your waypoints.



Guidance point

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

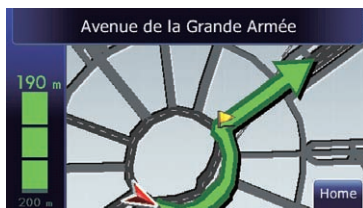
Audio information bar

If you do any operation for the audio source, the audio information bar appears on the bottom of the map screen. The bar informs you the status of audio source.



Enlarged map of the intersection

When "Close Up View" in the "Map" screen is "On", an enlarged map of the intersection appears.



- ➔ For details, refer to *Setting the auto-zoom display* on page 109.

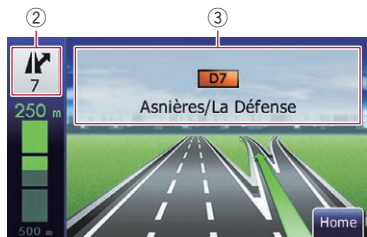
Display during motorway driving

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



How to use the map

While driving on the motorway, motorway exit numbers and motorway signs may be displayed when in the vicinity of interchanges and exits.



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

Types of the road stored in the map database

Roads included in the route guidance

Turn by Turn Routable Roads contain full attribute data and can be used for full Route Guidance. Pioneer Navigation will display full route guidance, including turn-by-turn voice directions and arrow icons.

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.

Non routable roads (pink colour road)

Map display is possible, but it cannot be used for route calculation. Please review and obey all local traffic rules along this route. (For your safety.)


Operating the map screen

Changing the scale of the map

You can change the map scale between 25 metres and 2 000 kilometres (25 yards and 1 000 miles).

1 Display the map screen.

2 Touch on the map screen.

 and  with the map scale appear.



3 Touch or to change the map scale.

- If you do not operate the function for a few seconds, the initial map screen automatically returns.

Switching the map orientation

You can switch how the map shows your vehicle's direction between "Heading up" and "North up".



- **Heading up:**
The map display always shows the vehicle's direction as proceeding toward the top of the screen.
 - **North up:**
The map display always has north at the top of the screen.
- The map orientation is fixed at "North up" when the map scale is 50 kilometres (25 miles) or more.
- The map orientation is fixed at "Heading up" when the 3D map screen is displayed.

How to use the map

1 Display the map screen.

2 Touch on the map screen.

 or  appears.

- When "North up" is selected,  is displayed.
- When "Heading up" is selected,  is displayed.



3 Touch or to switch the vehicle's direction.

Each time you touch the key changes that setting.

- If you do not operate the function for a few seconds, the initial map screen automatically returns.

Switching the map between 2D and 3D

2D map screen





3D map screen



1 Display the map screen.

2 Touch on the map screen.

 or  appears.

- When the 2D map screen is selected,  is displayed.
- When the 3D map screen is selected,  is displayed.



3 Touch or .

Each time you touch the key changes that setting.

- If you do not operate the function for a few seconds, the initial map screen automatically returns.

Displaying "Eco Graph"

"Eco Graph" shows the results of a comparison of past average mileage and current average mileage.

1 Display the map screen.

2 Touch on the map screen.

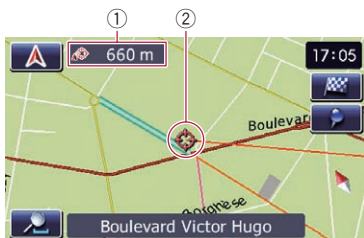
The "Eco Graph" screen appears.



- Touch  or press the **MODE** button to move from the "Eco Graph" screen to the map screen.
- ➔ For details, refer to Chapter 6.



Scrolling the map to the position you want to see

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



- ① Distance from the current position
- ② Cursor

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

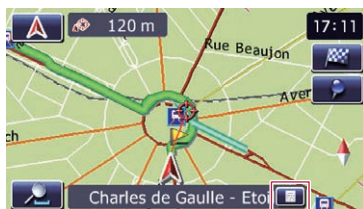
- ❑ The scrolling increment depends on your dragging length.
- Touch .
 - The map returns to the current position.
 - ❑ Pressing **MODE** button returns the map to the current position. .

Viewing information about a specified location

An icon appears at registered places (home location, specific places, **Favourites** 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 .





The “**Information List**” screen appears.

- 3 Touch the item that you want to check the detailed information.

Information for a specified location appears.



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

- For details, refer to *Setting the “Favourites” icon display* on page 109.
- For details, refer to *Displaying POI on the map* on page 107.
- For details, refer to *How to read traffic information on the map* on page 55.
- ❑ Touching  enables you to call the position if a telephone number is available. (Pairing with mobile phone featuring Bluetooth wireless technology is required.)
 - For details, refer to *Dialling from the map* on page 65. .

Eco-driving function

This navigation system is equipped with an Eco-driving function that can be used to estimate whether you are driving in an environmentally friendly way.

This chapter describes this function.

The fuel mileage calculated is based on a theoretical value determined from vehicle speed and position information from the navigation system. The fuel mileage displayed is only a reference value, and does not guarantee the mileage displayed can be obtained.

Displaying “Eco Graph”


This function estimates approximate fuel mileage based on your driving, compares that with your average fuel mileage in the past, and displays the results in a graph.

1 Touch [Home] on the map screen and then touch [Navigation].

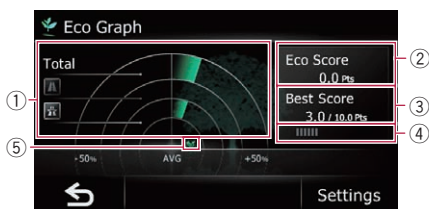
- ➔ For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch [Eco Graph].



- You can also touch  on the map screen to display the “Eco Graph”.

Reading the screen




① Average fuel mileage comparison graph

Displays a comparison of the average fuel mileage up to the point the navigation system was last stopped (past average fuel mileage) and the current average fuel mileage. The display is updated every 3 seconds. The more the value moves in the direction of **+**, the better the fuel mileage.

There are three different graph bars.

- **Total**

A comparison of the past average fuel mileage and the average fuel mileage from the location the navigation system was last started to the current driving location.

-  **Ordinary Road**

A comparison of the past average fuel mileage and the average fuel mileage for 90 seconds in the past, while the vehicle is driving on an ordinary road.

-  **Motorway**

A comparison of the past average fuel mileage and the average fuel mileage for 90 seconds in the past, while the vehicle is driving on a motorway.

② Eco Score

The result of the comparison of your past average fuel mileage and current average fuel mileage appears as a value from **0.0 Pts** (points) to **10.0 Pts**. The higher the value, the better the fuel mileage when compared to past route guidance.

- This is not displayed when “Eco Score” is set to “Off” or when no route is set.

③ Best Score

Displays the best score to date.

- This is not displayed when “Eco Score” is set to “Off” or when no route is set.

④ Eco-gauge



The green gauge indicates the current score, and the grey gauge indicates the best score to date.

The “Eco Score” is updated every 5 minutes.

- This is not displayed when “Eco Score” is set to “Off” or when no route is set.

⑤ Animal icons

The number of displayed animal icons increases or decreases according to the value of “Eco Score”.


- ❑ If you try to use the “**Eco Graph**” function immediately after you start using the navigation system for the first time,  may be displayed and the function may not be available.
 - ➔ For details, refer to *Troubleshooting* on page 124.
- ❑ The display settings can be changed.
 - ➔ For details, refer to *Changing the eco-function setting* on this page. 

Displaying Eco Drive Level guidance

This navigation system is equipped with the “**Eco Drive Level**” function that estimates how well you have driven in an environmentally friendly way.

The points of “**Eco Drive Level**” change according to “**Eco Score**” when the vehicle reaches the destination. When a certain number of points is reached, the level increases and a message appears.




- ① **Tree icon**
As the level increases, a tree icon changes from a young tree to a big tree.
- ❑ This is not displayed when “**Eco Drive Level**” is set to “**Off**”.
- ➔ For details, refer to *Changing the eco-function setting* on this page. 

Sudden start alert

If the speed of the vehicle exceeds 41 kmph (25.5 mph) within 5 seconds from the time it is started, a message appears and a warning sound beeps.



- ➔ For details, refer to *Changing the eco-function setting* on this page. 

Changing the eco-function setting

You can change the eco-function setting.

1 Touch [Home] on the map screen and then touch [Navigation].

- ➔ For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch [Eco Graph].



3 Touch [Settings].



The “**Eco Settings**” screen appears.

Eco-driving function

4 Touch the desired option.



Eco Score

- **On** (default):
Displays "**Eco Score**".
 - **Off**:
Hides "**Eco Score**".
- ➔ For details, refer to *Displaying "Eco Graph"* on page 31.

Eco Drive Level

- **On** (default):
After you arrive the destination, a message appears and a beep sounds if the level of "**Eco Drive Level**" have increased or decreased.
 - **Off**:
No message appears and no sound beeps when the vehicle reaches the destination.
- ➔ For details, refer to *Displaying Eco Drive Level guidance* on the previous page.

Rapid Start Warning

- **On**:
A message appears and a sound beeps when the vehicle experiences a sudden start.
- **Off** (default):
No message appears and no sound beeps when the vehicle experiences a sudden start.

Clear Record

Fuel consumption data are cleared.

5 Touch [OK].

The settings are completed.

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 handbrake before setting your route.

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

The basic flow of creating your route

- 1 Park your vehicle in a safe place and apply the handbrake.

↓
- 2 Display the "Top Menu" screen.
 - ☞ For details of the operations, refer to *Screen switching overview* on page 22.

↓
- 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.
 - ☞ For details, refer to *Setting a route to your destination* on page 43.

↓
- 6 The navigation system calculates the route to your destination, and then shows the route on the map.

↓
- 7 Check and decide the route.
 - ☞ For details, refer to *Setting a route to your destination* on page 43.

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

↓
- 9 After releasing the handbrake, drive in accordance with navigation guidance.



Searching for and selecting a location

Searching for a location by address

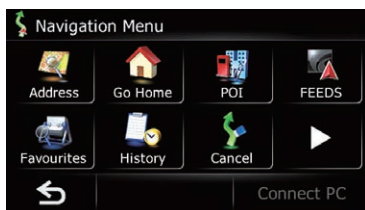
The most frequently used function is “**Address**”, in which the address is specified and the location is searched.

- Depending on the search results, some steps may be skipped.

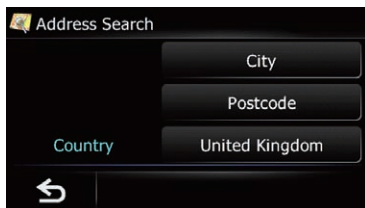
1 Touch [Home] on the map screen and then touch [Navigation].

- ➔ For details of the operations, refer to *Screen switching overview* on page 22.

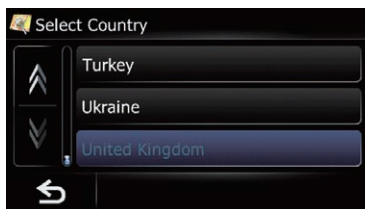
2 Touch [Address].



3 Touch the key next to “Country” to display the country list.



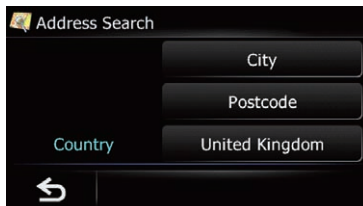
4 Touch one of the items on the list to set the country as search area.



The screen returns to the previous screen.

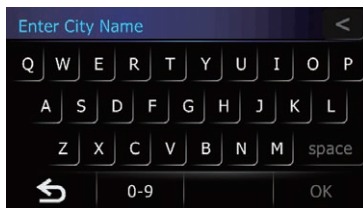
- Once the country has been selected, you only have to change countries when the location is outside of the country you selected.

5 Touch [City].



The “**Enter City Name**” screen appears.


6 Enter the city name and then touch [OK].



The “**Select City**” screen appears.

7 Touch the desired city name.

The “**Enter Street Name**” screen appears.

- Touch .
- The representative location of the city appears on the map screen.

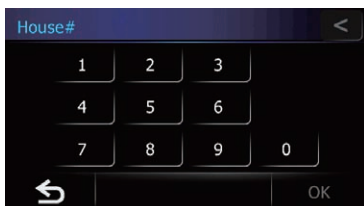
8 Enter the street name and then touch [OK].



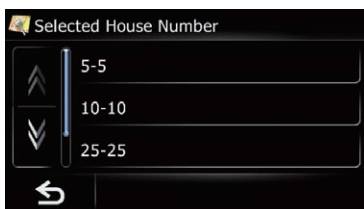
The “**Select Street**” screen appears.

9 Touch the street you want.

The “House#” screen appears.

10 Enter the house number and then touch [OK].

The “Selected House Number” screen appears.

11 Touch the desired house number range.

The searched location appears on the map screen.

- ➔ For the subsequent operations, refer to *Setting a route to your destination* on page 43.

Searching for a name by entering multiple keywords

You can search for a name (such as a city name or a street name) by entering multiple keywords.

- Up to three keywords can be entered.
- Enter a space between keywords.

The result of search depends on the number of entered keywords.

Entering a keyword

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

Entering two keywords

The names including the following words below are displayed as a result:

- First keyword you entered.
- The word beginning with the second keyword.

Entering three keywords

The names including the following words below are displayed as a result:

- The words that completely match with both first and second keywords you entered.
- The word beginning with the third keyword. e.g. Searching “**City of London**”.

Entered key-words	Search results
CITY L	
OF L	
CITY OF L	“City of London” is searchable.
OF LONDON C	
C O L	“City of London” is not searchable.
C OF LONDON	

Finding the location by specifying the postcode

If you know the postcode of the location that you want to find, you can use it to find the location.

1 Touch [Home] on the map screen and then touch [Navigation].

- ➔ For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch [Address].

The “Address Search” screen appears.

Searching for and selecting a location

3 Touch the key next to “Country” to display the country list.

- Once the country has been selected, you only have to change countries when the location is outside of the country you selected.

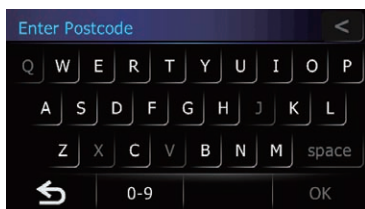
4 Touch one of the items on the list to set the country as search area.

The screen returns to the previous screen.

5 Touch [Postcode].

The “Enter Postcode” screen appears.

6 Input the postcode and then touch [OK].



A list of cities with the specified postcode is shown (except for the following cases).

British postcode:

The searched location appears on the map screen.

- ⇒ For the subsequent operations, refer to *Setting a route to your destination* on page 43.

Netherlands postcode:

- If you input a partial postcode (4 digits), and touch [OK], a list of cities is shown. Proceed to Step 7.
- If you input a complete postcode (6 digits), a list of streets is shown. Select the street. Proceed to Step 9.

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

The “Enter Street Name” screen appears.

- Touch

The representative location of the city appears on the map screen.

8 Enter the street name and then touch [OK].

The “Select Street” screen appears.

- ⇒ If there is no house number, the searched location appears on the map screen.

9 Touch the street you want.

The “House#” screen appears.

If the selected street has only one matching location, the searched location appears on the map screen.

10 Enter the house number and then touch [OK].

11 Touch the desired house number range.

The searched location appears on the map screen.

- ⇒ For the subsequent operations, refer to *Setting a route to your destination* on page 43.

Setting up a route to your home

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

1 Touch [Home] on the map screen and then touch [Navigation].

- ⇒ For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch [Go Home].

- If you have not registered your home location, a message appears. Touch [Register] to start registration.
- ⇒ For details, refer to *Registering and editing your home* on page 50.

Searching for Points of Interest (POI)

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

Searching for POIs by preset categories

You can search for POIs with a single touch from the preset category.

1 Touch [Home] on the map screen and then touch [Navigation].

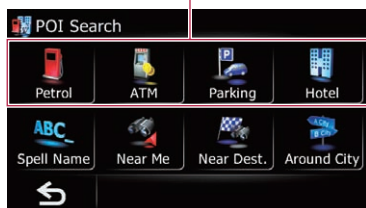
- ➔ For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch [POI].

The "POI Search" screen appears.

3 Touch the desired category.

Preset categories



The "POI List" screen appears.

4 Touch the POI you want.

The searched location appears on the map screen.

- ➔ For the subsequent operations, refer to *Setting a route to your destination* on page 43.

Searching for a POI directly from the name of the facilities

1 Touch [Home] on the map screen and then touch [Navigation].

- ➔ For details of the operations, refer to *Screen switching overview* on page 22.

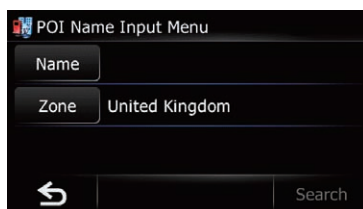
2 Touch [POI].

The "POI Search" screen appears.

3 Touch [Spell Name].

The "POI Name Input Menu" screen appears.

4 Touch [Zone].



The "Country List" screen appears.

If the location that you want to search for is in another country, this changes the country setting.

- ☐ Once the country has been selected, you only have to change countries when the location that you want to search for is outside of the country you selected.

5 Touch one of the items on the list to set the country as search area.

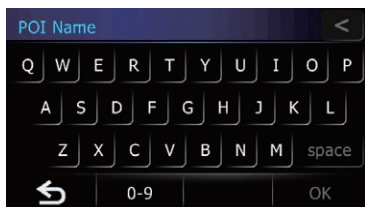
The "POI Name Input Menu" screen returns.

6 Touch [Name].

The "POI Name" screen appears.

Searching for and selecting a location

7 Enter the POI name and then touch [OK].



The “POI Name Input Menu” screen returns.

8 Touch [Search].



The “POI List” screen appears.

9 Touch the POI you want.

The searched location appears on the map screen.

▪ Touch [Sort].

Each time you touch [Sort] changes the sort order.

- Current order is indicated on the upper right of the screen.
 - : Sorts the items in the list in order by distance from the vehicle position.
 - : Sorts the items in the list alphabetically.
- ➞ For the subsequent operations, refer to *Setting a route to your destination* on page 43.

Searching for a nearby POI

You can search for POIs in your surroundings.

1 Touch [Home] on the map screen and then touch [Navigation].

- ➞ For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch [POI].

The “POI Search” screen appears.

3 Touch [Near Me].

POIs are divided into several categories.

4 Touch the category you want.

- If there are more detailed categories within the selected category, repeat this step as many times as necessary.

The “POI List” screen appears.

5 Touch the POI you want.

The searched location appears on the map screen.

- ➞ For the subsequent operations, refer to *Setting a route to your destination* on page 43.

Searching for POIs around the destination

- This function is available when the route is set.

1 Touch [Home] on the map screen and then touch [Navigation].

- ➞ For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch [POI].

The “POI Search” screen appears.

3 Touch [Near Dest.].

POIs are divided into several categories.

4 Touch the category you want.

- If there are more detailed categories within the selected category, repeat this step as many times as necessary.

The “POI List” screen appears.

5 Touch the POI you want.

The searched location appears on the map screen.

- ➞ For the subsequent operations, refer to *Setting a route to your destination* on page 43.

Searching for POIs around the city

You can search for POIs around a specified city.

Searching for and selecting a location

1 Touch [Home] on the map screen and then touch [Navigation].

- ➔ For details of the operations, refer to *Screen switching overview* on page 22.

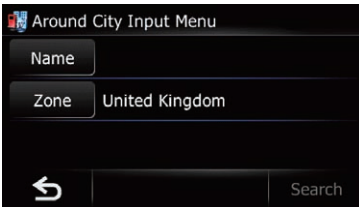
2 Touch [POI].

The “**POI Search**” screen appears.

3 Touch [Around City].

The “**Around City Input Menu**” screen appears.

4 Touch [Zone].



The “**Country List**” screen appears.

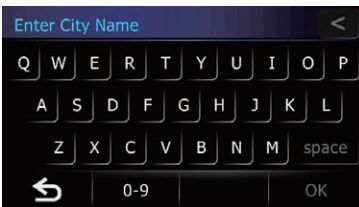
If the location that you want to search for is in another country, this changes the country setting.

- Once the country has been selected, you only have to change countries when the location that you want to search for is outside of the country you selected.

5 Touch [Name].

The “**Enter City Name**” screen appears.

6 Enter the city name and then touch [OK].




The “**Around City Input Menu**” screen returns.

7 Touch [Search].

The “**Select City**” screen appears.

8 Touch the desired city name.

POIs are divided into several categories.

- Touch .


The representative location of the city appears on the map screen.

9 Touch the category you want.

- If there are more detailed categories within the selected category, repeat this step as many times as necessary.

10 Touch the POI you want.

The searched location appears on the map screen.

- ➔ For the subsequent operations, refer to *Setting a route to your destination* on page 43. .

Selecting destination from “Favourites”

Storing locations you visit frequently saves time and effort.

Selecting an item from the list provides an easy way to specify the position.

- This function is not available if no locations have been registered in “**Favourites**”.
- ➔ For details, refer to *Storing a location in “Favourites”* on page 48.

1 Touch [Home] on the map screen and then touch [Navigation].

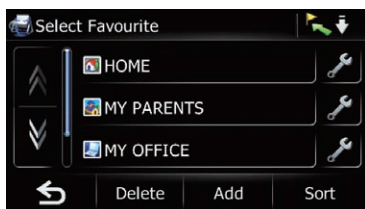
- ➔ For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch [Favourites].

The “**Select Favourite**” screen appears.

Searching for and selecting a location

3 Touch the entry you want.



The searched location appears on the map screen.

- For the subsequent operations, refer to *Setting a route to your destination* on page 43.

Searching for POIs by using the data on the SD memory card

Creating a customised POI is possible by using the utility programme navigate FEEDS which is available separately, on your PC. (navigate FEEDS will be available on our website.) Storing the customised POI properly and inserting the SD memory card enables the system to use the data for searches.

1 Use the utility programme navigate FEEDS to store customised POI data to an SD memory card.

2 Insert an SD memory card into the SD card slot.

- For details of the operation, refer to *Inserting an SD memory card* on page 11.

3 Touch [Home] on the map screen and then touch [Navigation].

- For details of the operations, refer to *Screen switching overview* on page 22.

4 Touch [FEEDS].

The “**Select List**” screen appears.

5 Touch the item you want.

The “**Select POI**” screen appears.

6 Touch the POI you want.

The searched location appears on the map screen.

- For the subsequent operations, refer to *Setting a route to your destination* on page 43.

Selecting a location you searched for recently

The places that you have set as destination or waypoint in the past are automatically stored in “**History**”.

- The location is also stored when you touch [**Scroll**] in the location confirmation screen.
- If no location is stored in Destination History, you cannot select [**History**]. (If you perform a route calculation, you can select [**History**].)
- “**History**” can store up to 100 locations. If the entries reach the maximum, the new entry overwrites the oldest one.

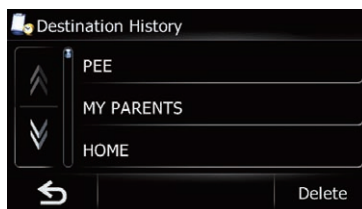
1 Touch [Home] on the map screen and then touch [Navigation].

- For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch [History].

The “**Destination History**” screen appears.

3 Touch the entry you want.



The searched location appears on the map screen.

- For the subsequent operations, refer to *Setting a route to your destination* on page 43.

Searching for a location by coordinates

Entering a latitude and longitude pinpoints the location.

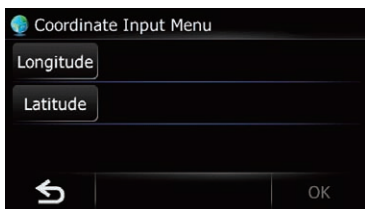
1 Touch [Home] on the map screen and then touch [Navigation].

- ➔ For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch [Coordinate].

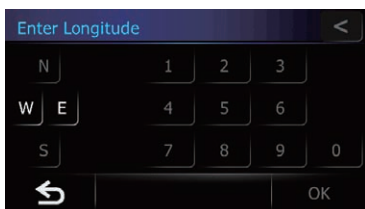
The “Coordinate Input Menu” screen appears.

3 Touch [Longitude].



The “Enter Longitude” screen appears.

4 Enter the longitude, and then touch [OK].



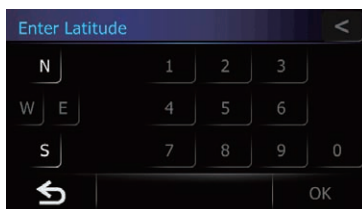
The screen returns to the previous screen.

- ☐ To enter W 50°1'2.5" for example, touch [W], [0], [5], [0], [0], [1], [0], [2], and [5].

5 Touch [Latitude].

The “Enter Latitude” screen appears.

6 Enter the latitude, and then touch [OK].



The screen returns to the previous screen.

- ☐ To enter N 5°1'2.5" for example, touch [N], [0], [5], [0], [1], [0], [2], and [5].

7 Touch [OK].

The searched location appears on the map screen.

- ➔ For details of the operations, refer to *Screen switching overview* on page 22. ☐

Searching for a location by scrolling the map

Specifying a location after scrolling the map enables you to set the position as destination, waypoint.

1 Display the map screen.

2 Touch and drag the screen to scroll the map to the position you want.

3 Touch .

- ➔ For details of the operations, refer to *Screen switching overview* on page 22. ☐

After the location is decided

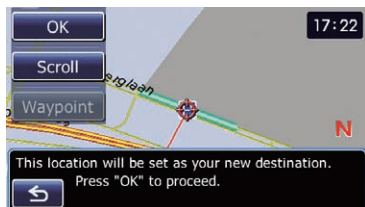
Setting a route to your destination

1 Searching for a location.

- For details, refer to Chapter 7.
After searching for the destination, the Location confirmation screen appears.

2 Touch [OK].

Location confirmation screen



The destination is set, and then route calculation starts.

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

- ☐ If you press the **MODE** button during route calculation, the calculation is cancelled and the map screen appears.
- Touch [**Scroll**].

The map display changes to the scroll mode. You can fine-tune the location in the scroll mode, and then you can set the location as your destination or do various operations.

- Touch [**Waypoint**].

The location is added to the “Waypoints List” screen.

- ☐ If a destination is not set, [**Waypoint**] is not available.

3 Touch [OK].

Route confirmation screen



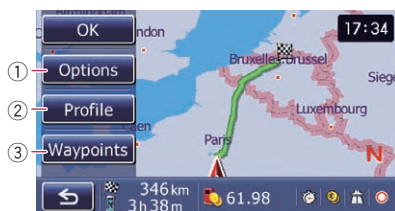
Sets the displayed route as your route, and starts the route guidance.

- ① Distance to the destination
- ② Travel time to your destination
- ③ Estimated fuel cost to your destination
 - For details, refer to *Inputting the fuel consumption information for calculating the fuel cost* on page 72.
- ④ Route calculation condition

- Touch [↩].

The message confirming whether to cancel the calculated route appears.

Touch [**Yes**] to cancel the calculated route, and then the map screen appears.



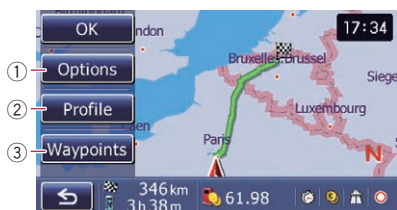
- ① **Options**
 - For details, refer to *Modifying the route calculation conditions* on the next page.
- ② **Profile**
 - For details, refer to *Checking the current itinerary* on page 45.
- ③ **Waypoints**
 - For details, refer to *Editing waypoints* on page 45. ☐

Displaying the “Route info” screen

1 Touch [Home] on the map screen and then touch [Navigation].

- For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch [Route info].



① **Options**

- For details, refer to *Modifying the route calculation conditions* on this page.

② **Profile**

- For details, refer to *Checking the current itinerary* on the next page.

③ **Waypoints**

- For details, refer to *Editing waypoints* on the next page.

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

3 Touch [OK].

Modifying the route calculation conditions

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

1 Display the “Route info” screen.

- For details, refer to *Displaying the “Route info” screen* on this page.

2 Touch [Options].

The “Route Options” screen appears.

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



The route is recalculated, and the Route confirmation screen appears.

Items that users can operate

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

Route Condition

This setting controls how the route should be calculated by taking into account the time, distance or main road.

Determines which condition takes priority for route calculation.

Fast*:

Calculates a route with the shortest travel time to your destination as a priority.

Short:

Calculates a route with the shortest distance to your destination as a priority.

Main:

Calculate a route that passes major arterial road as a priority.

Checking and modifying the current route

Avoid Toll Road

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

Off*:

Calculates a route that may include toll roads (including toll areas).

On:

Calculates a route that avoids toll roads (including toll areas).

- The system may calculate a route that includes toll roads even if “On” is selected.

Avoid Ferry

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

Off*:

Calculates a route that may include ferries.

On:

Calculates a route that avoids ferries.

- The system may calculate a route that includes ferries even if “On” is selected.

Avoid Motorway

This setting controls whether motorways may be included in the route calculation.

Off*:

Calculates a route that may include motorways.

On:

Calculates a route that avoids motorways.

- The system may calculate a route that includes motorways even if “On” is selected.

Time restrictions

This setting controls whether streets or bridges that have traffic restrictions during a certain time should be taken into account.

- If you want to set your route to avoid raised draw bridges, select “On”.

On*:

Calculates a route while avoiding streets or bridges with traffic restrictions during a certain time.

Off:

Calculates 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 105).

Checking the current itinerary

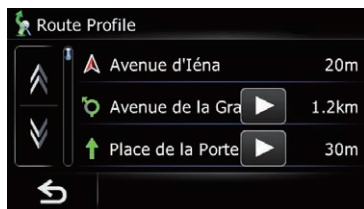
You can check the route details.

1 Display the “Route info” screen.

- ➔ For details, refer to *Displaying the “Route info” screen* on the previous page.

2 Touch [Profile].

The “Route Profile” screen appears.



Editing waypoints

You can edit waypoints (locations you want to visit on the way to your destination) and recalculate the route so that it passes through these locations.

Adding a waypoint

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

Checking and modifying the current route

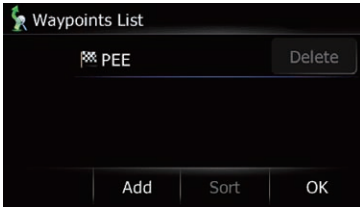
1 Display the “Route info” screen.

- For details, refer to *Displaying the “Route info” screen* on page 44.

2 Touch [Waypoints].

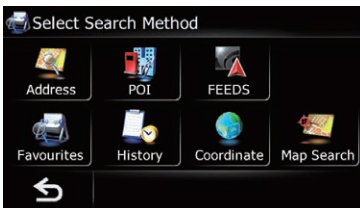
The “Waypoints List” screen appears.

3 Touch [Add].



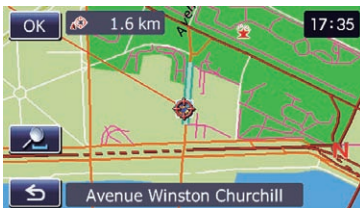
The “Select Search Method” screen appears.

4 Search for a location.

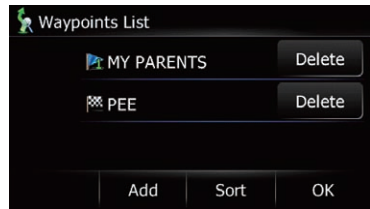


- For details, refer to Chapter 7.

5 Touch [OK].



6 Touch [OK] on the “Waypoints List” screen.



The route is recalculated, and the Route confirmation screen appears.

- If you set waypoints, you cannot display multiple routes.

Deleting a waypoint

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

1 Display the “Route info” screen.

- For details, refer to *Displaying the “Route info” screen* on page 44.

2 Touch [Waypoints].

The “Waypoints List” screen appears.

3 Touch [Delete] next to the waypoint that you want to delete.

The touched waypoint will be deleted from the list.

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

The route is recalculated, and the Route confirmation screen appears.

5 Touch [OK].

The map of the current position appears.

Sorting waypoints

You can sort waypoints and recalculate the route.

- You cannot sort waypoints that you have already passed.

Checking and modifying the current route

1 Display the “Route info” screen.

- For details, refer to *Displaying the “Route info” screen* on page 44.

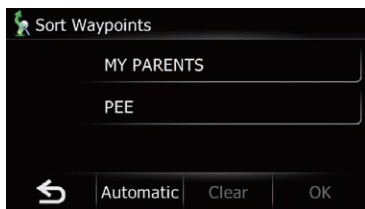
2 Touch [Waypoints].

The “Waypoints List” screen appears.

3 Touch [Sort].

The “Sort Waypoints” screen appears.

4 Touch the waypoint or destination.



Put them in the desired order.

- Touch [Automatic].

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

- Touch [Clear].

Waypoint sort is cancelled.

5 Touch [OK].

The “Waypoints List” screen appears.

6 Touch [OK] on the “Waypoints List” screen.

The route is recalculated, and the Route confirmation screen appears.

7 Touch [OK].

The map of the current position appears. ◻

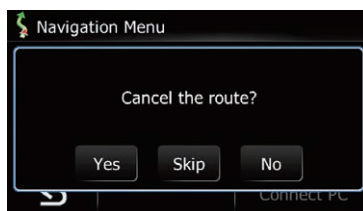
1 Touch [Home] on the map screen and then touch [Navigation].

- For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch [Cancel].

A message confirming the cancellation of the current route appears.

3 Touch [Yes].



The current route is deleted, and a map of your surroundings reappears.

- Touch [Skip].

The next waypoint along the route is skipped. A new route to your destination through all remaining waypoints, except for the skipped waypoint, is calculated.

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

- ◻ [Skip] is available only when a waypoint is set.

- Touch [No].

The previous screen returns without deleting the route. ◻

Canceling the route guidance

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

Storing a location in “Favourites”

Storing your favourite locations as “**Favourites**” provides you with the opportunity to save the time and effort of re-entering this information. Stored items can be made available on “**Favourites**” later.

Registering a location by “Favourites”

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

- “**Favourites**” can store up to 400 locations.
- Home location is counted as one of the items in “**Favourites**”.

1 Touch [Home] on the map screen and then touch [Navigation].

- ⇒ For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch [Favourites].

The “**Select Favourite**” screen appears.

3 Touch [Add].

The “**Select Search Method**” screen appears.

4 Search for a location.

- ⇒ For details, refer to *Searching for and selecting a location* on page 34.

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

The location is registered, and then the “**Edit Favourite**” screen appears.

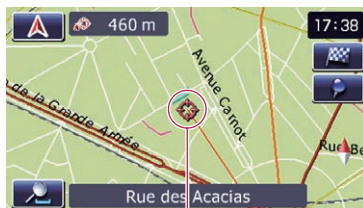
- ⇒ For details, refer to *Editing the entry in the “Favourites” list* on this page.

6 Touch [OK].

The registration is completed.

Registering a location by scroll mode

1 Touch and drag the screen to scroll the map to the position that you want to register.



Cursor

2 Touch [Pin].

The location is registered, and then the “**Edit Favourite**” screen appears.

- ⇒ For details, refer to *Editing the entry in the “Favourites” list* on this page.

3 Touch [OK].

The registration is completed. □

Editing registered locations

Editing the entry in the “Favourites” list

1 Touch [Home] on the map screen and then touch [Navigation].

- ⇒ For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch [Favourites].

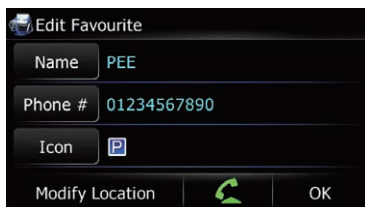
The “**Select Favourite**” screen appears.



3 Touch [Pin] next to the location that you want to edit.

The “**Edit Favourite**” screen appears.

Registering and editing locations

- 4 Touch the item that you want to change the setting.



- Up to 17 characters can be input for the name.
 - Touch **[Name]**.
You can enter the desired name.
 - Touch **[Phone #]**.
You can edit the registered phone number. To dial the number, touch .
The maximum digits you can enter for the phone number is 15.
 - Touching  enables you to call the position if a telephone number is available. (Pairing with mobile phone featuring Bluetooth wireless technology is required.)
 - ➔ For details, refer to *Dialling from the map* on page 65.
 - Touch **[Icon]**.
You can change the symbol displayed on the map and “Favourites”.
 - Touch **[Modify Location]**.
You can change the registered location by scrolling the map.

- 5 Touch **[OK]**.

The registration is completed.

Editing your home

- 1 Touch **[Home]** on the map screen and then touch **[Navigation]**.

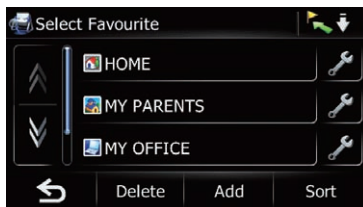
➔ For details of the operations, refer to *Screen switching overview* on page 22.

- 2 Touch **[Favourites]**.

The “Select Favourite” screen appears.

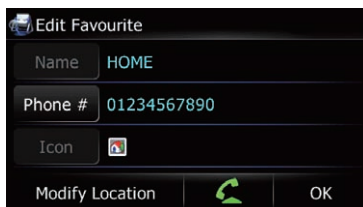
- Home location is displayed on the top of the list.



- 3 Touch  next to the home location.



The “Edit Favourite” screen appears.

- 4 Touch the item that you want to change the setting.



- Touch **[Phone #]**.
You can edit the registered phone number. To dial the number, touch .
 - Touching  enables you to call the position if a telephone number is available. (Pairing with mobile phone featuring Bluetooth wireless technology is required.)
 - ➔ For details, refer to *Dialling from the map* on page 65.
- Touch **[Modify Location]**.
You can change the registered location by scrolling the map.
 - For home information, **[Name]** and **[Icon]** are not editable.

- 5 Touch **[OK]**.

The registration is completed.

Sorting the entry in the “Favourites” list

- 1 Touch **[Home]** on the map screen and then touch **[Navigation]**.




➔ For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch [Favourites].

The “Select Favourite” screen appears.

3 Touch [Sort].

Each time you touch **[Sort]** changes the sort order.

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

Deleting the entry from the “Favourites” list**1 Touch [Home] on the map screen and then touch [Navigation].**

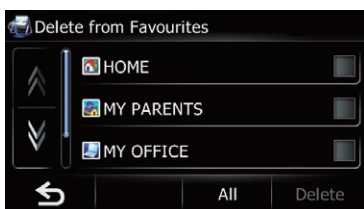
- For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch [Favourites].

The “Select Favourite” screen appears.

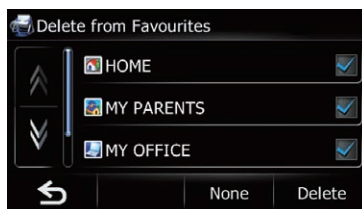
3 Touch [Delete].

The “Delete from Favourites” screen appears.

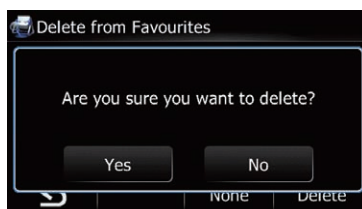
4 Select the location you want to delete.

A tick mark appears next to the selected location.

- Touch **[All]** or **[None]**.
Selects or deselects all entries.

5 Touch [Delete].

A message will appear asking you to confirm the deletion.

6 Touch [Yes].

The data you selected is deleted.

- Touch **[No]**.
Cancels the deletion. □

Registering and editing your home

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

Registering your home**1 Touch [Home] on the map screen.**

The “Top Menu” screen appears.

2 Touch [Settings].

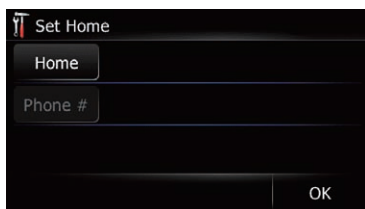
The “Settings Menu” screen appears.

3 Touch [Set Home].

The “Set Home” screen appears.

Registering and editing locations

4 Touch [Home].



The “**Select Search Method**” screen appears.

5 Search for a location.

After searching for a point, display it on a map, then touch [OK].

The location is registered, and then the “**Set Home**” screen appears.

- For details, refer to *Searching for and selecting a location* on page 34.

6 Touch [Phone #].

You can register your home phone number.

7 Touch [OK].

The registration is completed.

Editing your home

1 Touch [Home] on the map screen and then touch [Navigation].

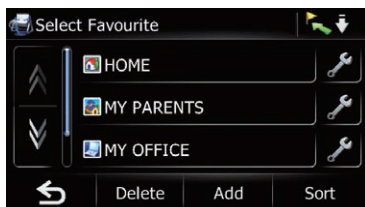
- For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch [Favourites].

The “**Select Favourite**” screen appears.

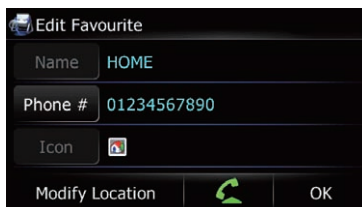
- Home location is displayed on the top of the list.

3 Touch next to the home location.





The “**Edit Favourite**” screen appears.

4 Touch the item that you want to change the setting.



▪ Touch [Phone #].

You can edit the registered phone number. To dial the number, touch .

- Touching  enables you to call the position if a telephone number is available. (Pairing with mobile phone featuring Bluetooth wireless technology is required.)

- For details, refer to *Dialling from the map* on page 65.

▪ Touch [Modify Location].

You can change the registered location by scrolling the map.

- For home information, [Name] and [Icon] are not editable.

5 Touch [OK].

The registration is completed.

Deleting the entry from the “History” list

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

1 Touch [Home] on the map screen and then touch [Navigation].

- For details of the operations, refer to *Screen switching overview* on page 22.

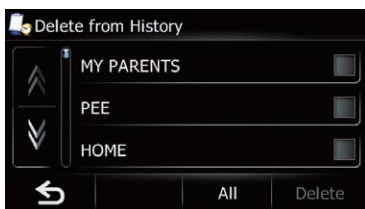
2 Touch [History].

The “**Destination History**” screen appears.

3 Touch [Delete].

The “**Delete from History**” screen appears.

4 Select the location you want to delete.

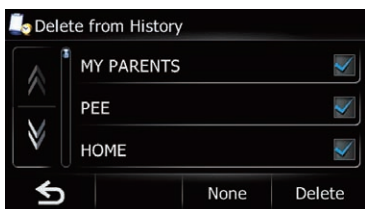


A tick mark appears next to the selected location.

- Touch **[All]** or **[None]**.

Selects or deselects all entries.

5 Touch **[Delete]**.



A message will appear asking you to confirm the deletion.

6 Touch **[Yes]**.

The data you selected is deleted.

- Touch **[No]**.

Cancels the deletion.

Exporting and importing “Favourites” items

Exporting “Favourites” items

Exporting the “Favourites” data to an SD memory card for editing is possible by using the utility programme *navgate FEEDS* which is available separately, on your PC.

- The utility programme *navgate FEEDS* is available from our website. For details, refer to the information on our website.
- If there is previous data in the SD memory card, the data is overwritten with new data when current data is exported.

1 Insert an SD memory card into the SD card slot.

- For details of the operation, refer to *Inserting an SD memory card* on page 11.

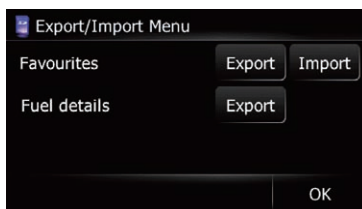
2 Touch **[Home]** on the map screen and then touch **[Navigation]**.

- For details of the operations, refer to *Screen switching overview* on page 22.

3 Touch **[Data In/Out]**.

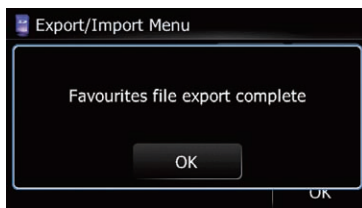
The “**Export/Import Menu**” screen appears.

4 Touch **[Export]** next to “Favourites”.



Data export starts.

After the data is exported, the completion message appears.



5 Touch **[OK]**.

The “**Navigation Menu**” screen appears.

Importing the “Favourites” items edited on *navgate FEEDS*

You can import the locations that you have edited on the utility programme *navgate FEEDS* which is available separately to “Favourites”.

- When a location that is already registered in “Favourites” is imported, the location is overwritten.

Registering and editing locations

- ❑ The utility programme navigate FEEDS is available from our website. For details, refer to the information on our website.

1 Store the item into the SD memory card by using the navigate FEEDS.

2 Insert an SD memory card into the SD card slot.

- ➔ For details of the operation, refer to *Inserting an SD memory card* on page 11.

3 Touch [Home] on the map screen and then touch [Navigation].

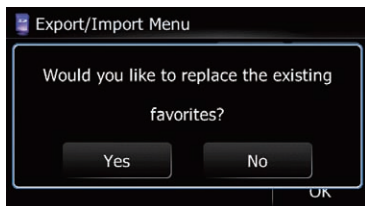
- ➔ For details of the operations, refer to *Screen switching overview* on page 22.

4 Touch [Data In/Out].

The “**Export/Import Menu**” screen appears.

5 Touch [Import] next to “Favourites”.

The following message appears.



6 Touch [Yes].

Data import starts.

After the data is imported, the “**Navigation Menu**” screen appears. ❑

You can check real-time traffic information transmitted by the Traffic Message Channel (TMC) of the FM Radio Data System (RDS) on the screen. Such traffic information is updated periodically. When the navigation system receives updated traffic information, the navigation system will overlay the traffic information on your map and also display detailed text information when available. When you are travelling along a route and there is traffic information on your current route, the system will detect it and ask you if you would like to be rerouted, or suggest another route automatically.

❑ The system acquires the traffic information up to 150 km in radius from the vehicle position. (If there is a lot of traffic information around your vehicle, the radius will be shorter than 150 km.)

❑ The navigation system provides the following functions by using the information from RDS-TMC service:

- Displaying a list of traffic information
- Displaying traffic information on a map
- Suggesting a route to avoid traffic jams by using traffic information

❑ The term “traffic jam” in this section indicates the following types of traffic information: slow, queuing and stationary traffic and closed/blocked roads. This information is always taken into consideration when checking your route, and the information related with these events cannot be turned off. If you select other traffic information in “**Traffic Settings**”, the information can be displayed in a list or on a map.

➡ For details, refer to *Selecting traffic information to display* on page 57.

Checking all traffic information

All traffic information on the current route is displayed on screen in a list.

1 Touch [Home] on the map screen and then touch [Navigation].

➡ For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch [Traffic].

The “**Traffic Menu**” screen appears.

3 Touch [Traffic List].



The “**Traffic Event List**” screen appears.

The list with received traffic information is shown.

4 Select an incident you want to view in detail.



The details of the selected incident are displayed.

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

▪ Touch [Sort].

You can sort the traffic information.

Each time you touch the key changes that setting.



-  :

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

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

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.


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

Current order is indicated on the upper right of the screen.

- Touch [**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.

- Touch .

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

- 5 Touch .

The previous screen returns. .

Checking traffic information on the route

All traffic information on the current route is displayed on screen in a list.


- 1 Touch [**Home**] on the map screen and then touch [**Navigation**].

➔ For details of the operations, refer to *Screen switching overview* on page 22.

- 2 Touch [**Traffic**].

The “**Traffic Menu**” screen appears.

- 3 Touch [**Traffic On Route**].

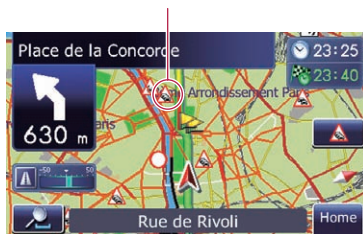
The “**Traffic On Route List**” screen appears. The method for checking the content displayed on the screen is the same for *Checking all traffic information* on the previous page. .






How to read traffic information on the map

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

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

Traffic event icon



-  with yellow line: Stop-and-go traffic
-  with red line: Stopped traffic
-  with black line: Closed/blocked roads
-  etc.: Accidents, constructions, etc. .

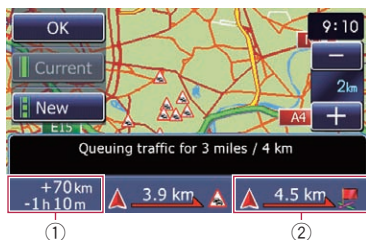
Setting an alternative route to avoid traffic jams

The navigation system checks at regular intervals whether or not there is the traffic information on your route. If the navigation system detects any traffic jams on your current route, the system tries to find a better route in the background.

- The following types of traffic incidents on the route will be checked: slow, queuing and stationary traffic, and closed/blocked roads.

Checking for traffic jams automatically

If there is information about traffic jams 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.



- ① Difference in distance and travel time between the existing route and new route.
 - ② Distance from the current position of your vehicle to the point of entry into the new route.
- There is no action if the system cannot find any traffic jam information on your route or the system cannot find an alternative.

1 Touch [New].

The recommended route is displayed on the screen.

- Touch [**Current**].

The current route is displayed on the screen.

2 Touch [OK].

The displayed route is set.

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

Checking traffic information manually

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

- The notification icon is not available if your vehicle deviates from the route.

1 Set [Traffic Incident] to "View".

- For details, refer to *Displaying the traffic notification icon* on page 110.

2 Display the map screen.

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

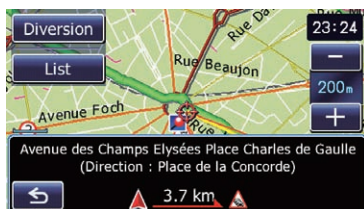
3 Touch the icon while the icon is displayed.

Notification icon



Traffic information on the current route is displayed on the map screen.

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



After touching [**Diversion**], the route is recalculated taking all traffic jams on your current route into account.

- [**Diversion**] will be available only when the system can find traffic jams.
- Notification icon shows the nearest traffic information on the route. However, if you touch [**Diversion**], the route is recalculated by taking into account not only this information, but also all traffic jam information on the route.

For the subsequent operations, refer to *Checking for traffic jams automatically*.


- For details, refer to *Checking for traffic jams automatically* on this page.

Using traffic information

- Touch **[List]**.

The **"Traffic On Route List"** screen appears.

- Touch **[↵]**.

The message disappears, and the map screen returns. 

Selecting traffic information to display

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

1 Touch **[Home]** on the map screen and then touch **[Navigation]**.

- ➔ For details of the operations, refer to *Screen switching overview* on page 22.

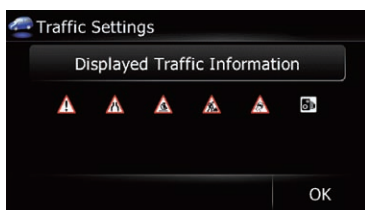
2 Touch **[Traffic]**.

The **"Traffic Menu"** screen appears.

3 Touch **[Traffic Settings]**.

The **"Traffic Settings"** screen appears.

4 Touch **[Displayed Traffic Information]**.



The **"Traffic Type Settings"** screen appears.

5 Touch the traffic information item to display.



A tick mark appears next to the selected traffic information.

- Touch **[All]** or **[None]**.
Selects or deselects all entries.

6 Touch **[OK]**.



The selected traffic information icon is added to the screen.

7 Touch **[OK]**.

Selecting preferred RDS-TMC service provider manually

A default preferred TMC service provider for each country has been set. The navigation system tunes to the radio station with good reception among the preferred RDS-TMC service providers. If you want to set another preferred RDS-TMC service provider, you can manually select one from available RDS-TMC service providers.

1 Touch **[Home]** on the map screen and then touch **[Navigation]**.


- ➔ For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch **[Traffic]**.

The **"Traffic Menu"** screen appears.

3 Touch **[Select TMC Provider]**.

4 Touch the desired service provider on the list.

After touching a service provider, the system starts tuning to the selected RDS-TMC service provider. When the tuning is successful, the system returns to the map display. 

CAUTION

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

If your mobile phone features Bluetooth technology, this navigation system can be connected to your mobile 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 mobile phone to the navigation system. This section describes how to set up a Bluetooth connection and how to operate a mobile phone featuring Bluetooth technology on the navigation system.

For details about the connectivity with the devices featuring Bluetooth wireless technology, refer to the information on our website.

Preparing communication devices

This navigation system has a built-in function to use mobile phones featuring Bluetooth wireless technology.

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

- ➔ For details, refer to *Notes for hands-free phoning* on page 71.
- ❑ When the navigation system is turned off, the Bluetooth connection is also disconnected. When the system restarts, the system automatically attempts to reconnect the previously connected mobile phone. Even when the connection is severed for some reason, the system automatically reconnects the specified mobile phone (except when the connection is severed due to mobile phone operation). ❑

Displaying the Phone Menu

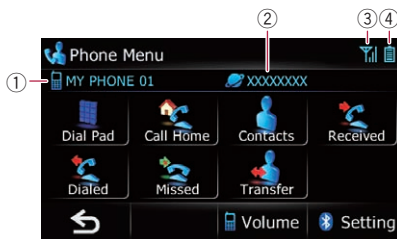
Use the **"Phone Menu"** if you connect the mobile phone to the navigation system for utilisation.

1 Touch [Home] on the map screen.

The **"Top Menu"** screen appears.

2 Touch [Phone].

The **"Phone Menu"** screen appears.



- ① Name of connected mobile phone
- ② Network name of the mobile phone company
- ③ Reception status of the mobile phone
- ④ Battery status of the mobile phone

Registering your mobile phone

You need to register your mobile phone featuring Bluetooth wireless technology when you connect it for the first time. A total of 3 phones can be registered. Three registration methods are available:

- Searching for nearby phones
- Pairing from your mobile phone
- Searching for a specified phone
- ❑ The default device name displayed on the mobile phone is **"PIONEER NAVI"**. The PIN code is **"1111"**.

Using hands-free phoning

Searching for nearby phones

The system searches for available mobile phones near the navigation system, displays them in a list, and registers them for connection.

1 Activate the Bluetooth wireless technology on your mobile phone.

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

2 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the Phone Menu* on the previous page.

3 Touch [Setting] on the “Phone Menu” screen.

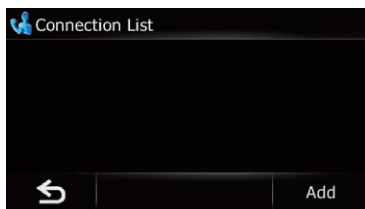
The “Bluetooth Settings” screen appears.

4 Touch [Connections].



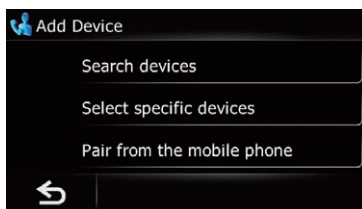
The “Connection List” screen appears.

5 Touch [Add].



The “Add Device” screen appears.

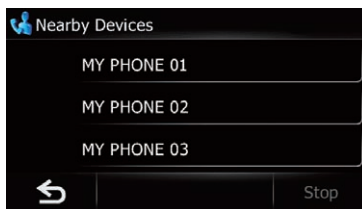
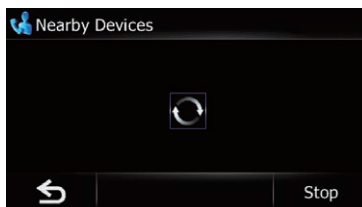
6 Touch [Search devices].



The “Nearby Devices” screen appears. The system searches for mobile phones featuring Bluetooth technology that are ready for the connection and displays them in the list if the device has been found.

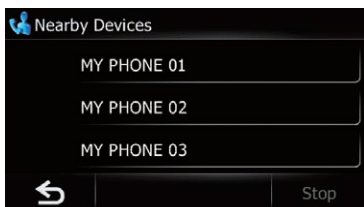
- Up to 15 mobile phones will be listed in the order that the mobile phone is found.

7 Wait until your mobile phone appears in the list.

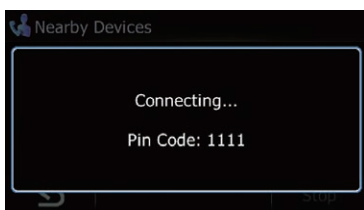


- If you cannot find the mobile phone you want to connect, check that the mobile phone is ready for the Bluetooth wireless technology connection.

8 Touch the mobile phone name you want to register.



A message prompting you to enter a PIN code appears.



9 Enter the PIN code "1111" using the mobile phone.

When a connection is successfully established, a connection complete message appears. The screen returns to the **"Bluetooth Settings"** screen by touching **[OK]**.

Pairing from your mobile phone

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

1 Activate the Bluetooth wireless technology on your mobile phone.

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

2 Display the "Phone Menu" screen.

- ➔ For details of the operations, refer to *Displaying the Phone Menu* on page 58.

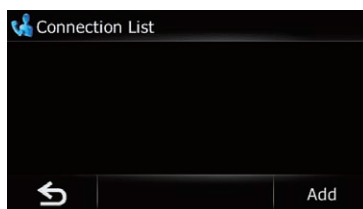
3 Touch [Setting] on the "Phone Menu" screen.

The **"Bluetooth Settings"** screen appears.

4 Touch [Connections].

The **"Connection List"** screen appears.

5 Touch [Add].



The **"Add Device"** screen appears.

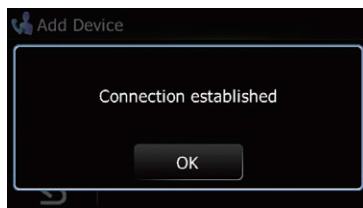
6 Touch [Pair from the mobile phone].

The navigation system waits for a Bluetooth wireless technology connection.



7 Register the navigation system on your mobile phone.

If your mobile phone asks you to enter a password, enter the PIN code (password) of the navigation system. After the registration is completed, the following screen appears.



Using hands-free phoning

- ❑ If registration fails, repeat the procedure from the beginning.

8 Touch [OK].

Searching for a specified phone

If you cannot connect your phone using [Search devices] and [Pair from the mobile phone], try this method if your phone is found in the list.

1 Activate the Bluetooth wireless technology on your mobile phone.

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

2 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the Phone Menu* on page 58.

3 Touch [Setting] on the “Phone Menu” screen.

The “Bluetooth Settings” screen appears.

4 Touch [Connections].

The “Connection List” screen appears.

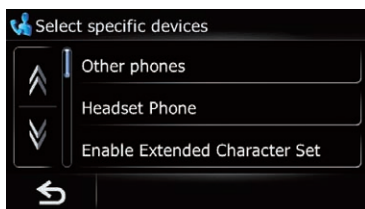
5 Touch [Add].

The “Add Device” screen appears.

6 Touch [Select specific devices].

The “Select specific devices” screen appears.

7 Touch the model name of the mobile phone to be connected.

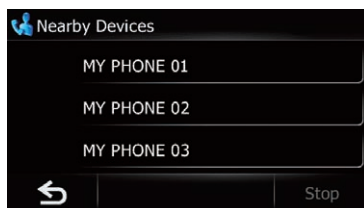
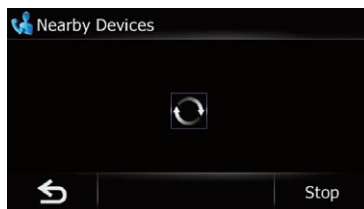


The system searches for mobile phones featuring Bluetooth technology that are ready for the

connection and displays them in the list if the device has been found.

- ❑ If you cannot find the desired model name on the list, touch [Other phones] to search the mobile phones available nearby.

8 Wait until your mobile phone appears in the list.



- ❑ If you cannot find the mobile phone you want to connect, check that the mobile phone is ready for the Bluetooth wireless technology connection.

9 Touch the mobile phone name you want to register.

A message prompting you to enter a PIN code appears.

10 Enter the PIN code “1111” using the mobile phone.

When a connection is successfully established, a connection complete message appears. The screen returns to the “Bluetooth Settings” screen by touching [OK].

Deleting a registered phone

If you no longer need to use a registered phone with the navigation system, you can delete it from the registration assignment to free this spot up for another phone.

- If a registered phone is deleted, all the phone book entries and call history lists that correspond to the phone will be also cleared.

1 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the Phone Menu* on page 58.

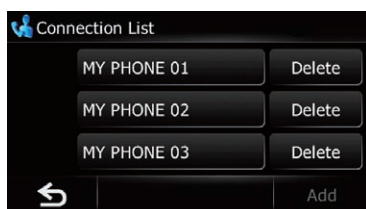
2 Touch [Setting].

The “**Bluetooth Settings**” screen appears.

3 Touch [Connections].

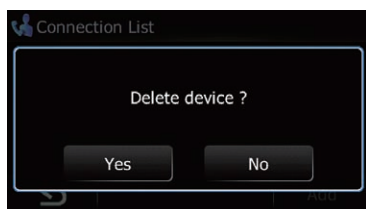
The “**Connection List**” screen appears.

4 Touch [Delete] next to the mobile phone name.



A message prompting you to delete a registered device appears.

5 Touch [Yes].



The registration is cancelled.

- Touch [**No**].
Cancels the deletion. □

Connecting and disconnecting a registered mobile phone

Connecting a registered mobile phone

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

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

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

- ➔ For details, refer to *Setting automatic connection* on page 69.

1 Activate the Bluetooth wireless technology on your mobile phone.

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

2 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the Phone Menu* on page 58.

3 Touch [Setting].

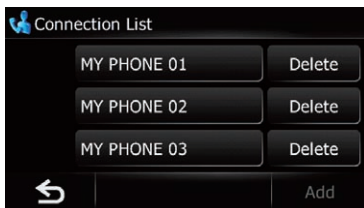
The “**Bluetooth Settings**” screen appears.

4 Touch [Connections].

The “**Connection List**” screen appears.

Using hands-free phoning

- 5 Touch the name of the mobile phone that you want to connect.



Connection starts.

When a connection is successfully established, a connection complete message appears. The screen returns to the **"Bluetooth Settings"** screen by touching **[OK]**.

- To cancel the connection to your mobile phone, touch **[Cancel]**.
- If connection fails, check whether your mobile phone is ready for a connection and then retry.

Disconnecting a mobile phone

- 1 Display the **"Phone Menu"** screen.

- For details of the operations, refer to *Displaying the Phone Menu* on page 58.

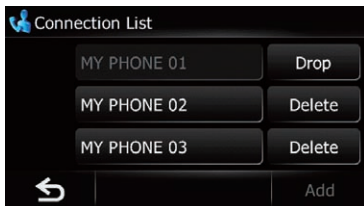
- 2 Touch **[Setting]**.

The **"Bluetooth Settings"** screen appears.

- 3 Touch **[Connections]**.

The **"Connection List"** screen appears.

- 4 Touch **[Drop]** next to the mobile phone name.



Making a phone call

You can make a phone call in many different ways.

Direct dialling

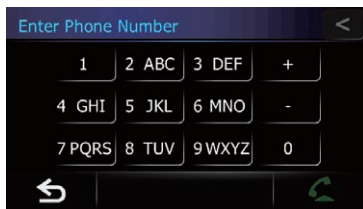
- 1 Display the **"Phone Menu"** screen.

- For details of the operations, refer to *Displaying the Phone Menu* on page 58.

- 2 Touch **[Dial Pad]**.

The **"Enter Phone Number"** screen appears.

- 3 Touch the number keys to enter the phone number.



The phone number that was input is displayed.

And is activated.

- Touch .

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

- Touch .

The previous screen returns.

- 4 Touch to make a call.

- To cancel the call after the system starts dialling, touch .

- 5 Touch to end the call.

Making a call home easily

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

Using hands-free phoning

1 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the Phone Menu* on page 58.

2 Touch [Call Home].

Dialling home starts.

- ❑ If you have not registered your home number, a message appears. Touch [Register] to start registration.
 - ➔ For details, refer to *Registering and editing your home* on page 50.

Calling a number in the “Contacts”

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

- ❑ Before using this function, you need to transfer the phone book entries stored in your mobile phone to the navigation system.
 - ➔ For details, refer to *Transferring the phone book* on page 66.

1 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the Phone Menu* on page 58.

2 Touch [Contacts].

The “Contacts” screen appears.

3 Switch the page of the list to display the desired entry.



- Touch  or .

Shows the next or previous alphabet tab.

Switching the alphabet tab also switches the list display.

- Touch alphabet tabs.

Makes the screen jump to the beginning of the page including the entry whose names start with any of selected letters or numbers.

Each touch of the alphabet tab cycles through the list by the first letter of the list item.

Touching [#ABCDE] also displays the page including the entry whose names start with primary symbols or numbers.

Touching [Others] displays the page including entries that are not assigned to any of the other tabs.

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

5 Touch to end the call.

Dialling from the history

The most recent calls made (dialled), received and missed are stored in the call history list.

You can browse the call history list and call numbers from it.

- ❑ Each call history saves 30 calls per registered mobile phone. If the number of calls exceeds 30, the oldest entry will be deleted.

1 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the Phone Menu* on page 58.


2 Touch [Received], [Dialed] or [Missed].

The selected call history list appears.

3 Touch an entry on the list.



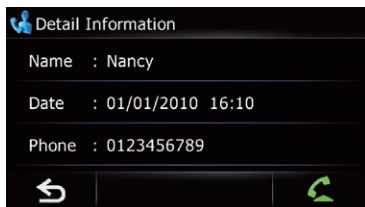
Dialling starts.

- ❑ To cancel the call after the system starts dialling, touch .

- Touch [Detail].

The “Detail Information” screen appears.

Using hands-free phoning



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

4 Touch  to end the call.

Dialling the entry stored in the "Favourites" list


You can make a call to the entry stored in the "Favourites" list.

1 Display the "Navigation Menu" screen.

- For details of the operations, refer to *Screen switching overview* on page 22.


2 Touch [Favourites].

The "Select Favourite" screen appears.

3 Touch  next to the location that you want to make a call.

The "Edit Favourite" screen appears.

4 Touch  to make a call.

To cancel the call after the system starts dialling, touch .

5 Touch  to end the call.

Dialling a facility's phone number

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

- You cannot make a call to locations or POIs that have no phone number data.

1 Display the "Navigation Menu" screen.

- For details of the operations, refer to *Screen switching overview* on page 22.


2 Touch [POI].

The "POI Search" screen appears.

3 Search for the POI.


The "POI List" screen appears.

- For details of the operation, refer to *Searching for Points of Interest (POI)* on page 38.

4 Touch  next to the POI that you want to call.

The "Detailed POI Information" screen appears.

5 Touch  to make a call.

To cancel the call after the system starts dialling, touch .

6 Touch  to end the call.

Dialling from the map

You can make a call by selecting the icon of a registered location or a POI icon from the map screen.


- You cannot make a call to locations or POIs that have no phone number data.

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

2 Touch .

Detailed information is displayed.

3 Touch  to make a call.

To cancel the call after the system starts dialling, touch .

4 Touch  to end the call.

Receiving a phone call

You can perform hands-free answering by using the navigation system.

Answering an incoming call

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

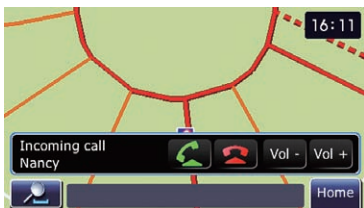
If "Auto Answer Preference" is set to "Off", answer the call manually. Answering is available if any screen is displayed, such as the map screen or the setting screen.


- ❑ You can set this navigation system to automatically answer incoming calls.
 - ➔ For details, refer to *Answering a call automatically* on page 68.

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

- ❑ The registered name appears if the phone number of the received call is already registered in "Contacts".
- ❑ Depending on the caller ID service, the phone number of the received call may not be displayed. "Unknown" appears instead.

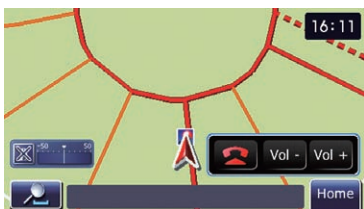
2 To answer an incoming call, touch .



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

- ❑ You can adjust volume when you are talking. To adjust volume, touch [Vol -] and [Vol +] displayed on the screen (like below) when you are talking.

3 Touch to end the call.



The call ends.

- ❑ If the voice on the other end of the call is too quiet to hear, you can adjust the volume of the received voice.
 - ➔ For details, refer to *Setting the phone volume* on page 68.
- ❑ You may hear a noise when you hang up the phone.


Rejecting an incoming call

You can reject an incoming call.

- ➔ For details, refer to *Setting the automatic rejection function* on page 69.

● When a call comes in, touch .

The call is rejected.

- ❑ The rejected call is recorded in the missed call history list.
 - ➔ For details, refer to *Dialling from the history* on page 64. .

Transferring the phone book

You can transfer the phone book entries from your mobile phone to the phone book of navigation system.

- ❑ Depending on the mobile phone, Phone Book may be called Contacts, Business card or something else.
- ❑ With some mobile phones, it may not be possible to transfer the entire phone book at once. In this case, transfer addresses one at a time from your phone book using your mobile phone.
- ❑ The maximum 400 entries can be transferred per mobile phone. If the entries exceed 400, the extra entries will not be transferred. If more than one number is registered for one person, such as work place and home, each number is counted separately.
- ❑ If the entry has multiple phone number data, those numbers are stored as a separate item.

Using hands-free phoning

- ❑ Depending on the mobile phone that is connected to this navigation system via Bluetooth technology, this navigation system may not be able to display the phone book correctly. (Some characters may be garbled.)
- ❑ If the phone book in the mobile phone contains image data, the phone book may not be correctly transferred.

1 Connect the mobile phone that has the phone book to transfer.

- ➔ For details, refer to *Connecting a registered mobile phone* on page 62.

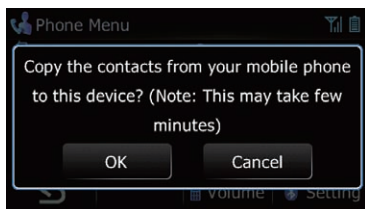
2 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the Phone Menu* on page 58.

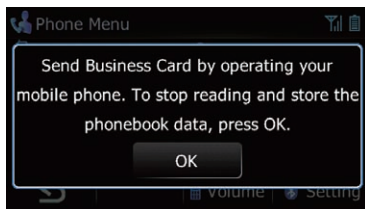
3 Touch [Transfer] on the “Phone Menu” screen.

The confirmation messages appear.

4 Touch [OK].



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



- ❑ You can send the phone book entries repeatedly before touching [OK]. If your cellular phone supports one-by-one transfer

only, send all the entries that you want to transfer and then touch [OK].

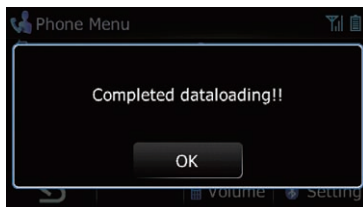
- ❑ If your phone has a capability for automatic transfer of phone book, this screen is skipped and transfer will start.
- ❑ The transferred data cannot be edited on the navigation system.

6 Touch [OK].



Transfer starts. It may take time depending on how many entries will be transferred.

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



Transfer ends. ◻

Clearing memory

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

1 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the Phone Menu* on page 58.

2 Touch [Setting].

The “Bluetooth Settings” screen appears.

3 Touch [Clear Memory].

The “Clear Memory” screen appears.



On this screen, you can select the following items:

- **Contacts:**
You can clear the registered phone book.
- **Received Calls:**
You can clear the received call history list.
- **Diald Calls:**
You can clear the diald call history list.
- **Missed Calls:**
You can clear the missed call history list.

▪ Touch [Clear All].

It clears all the data that correspond to the connected mobile phone.

4 Touch [Yes].

Data on the selected item is cleared from this navigation system’s memory.

- ☐ If you do not want to clear the memory that you have selected, touch [No]. ☐

Changing the phone settings

Setting the phone volume

The volume level for hands-free phoning can be adjusted.

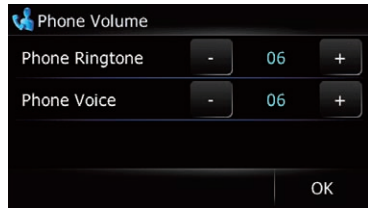
1 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the Phone Menu* on page 58.

2 Touch [Volume] on the “Phone Menu” screen.

The “Phone Volume” screen appears.

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



• **Phone Ringtone:**

This setting controls the incoming ring tone volume.

• **Phone Voice:**

This setting controls the incoming voice volume.

- ☐ Phone volume varies depending on the incoming caller’s phone, volume setting and other conditions.
 - ➔ For details concerning operations, refer to *Answering an incoming call* on page 65.

Stopping Bluetooth wave transmission

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

1 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the Phone Menu* on page 58.

2 Touch [Setting].

The “Bluetooth Settings” screen appears.

3 Touch [Bluetooth On/Off].

Touching [Bluetooth On/Off] switches between “On” and “Off”.

Answering a call automatically

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

Using hands-free phoning

1 Display the "Phone Menu" screen.

- For details of the operations, refer to *Displaying the Phone Menu* on page 58.

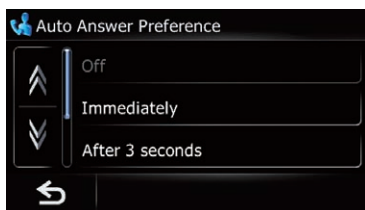
2 Touch [Setting].

The "Bluetooth Settings" screen appears.

3 Touch [Auto Answer Preference].

The "Auto Answer Preference" screen appears.

4 Touch the desired option.



On this screen, you can select the following items:

- **Off:**
No automatic response. Respond manually.
- **Immediately:**
Answers immediately.
- **After 3 seconds:**
Answers after three seconds.
- **After 6 seconds:**
Answers after six seconds.
- **After 10 seconds:**
Answers after ten seconds.

Setting the automatic rejection function

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

1 Display the "Phone Menu" screen.

- For details of the operations, refer to *Displaying the Phone Menu* on page 58.

2 Touch [Setting].

The "Bluetooth Settings" screen appears.

3 Touch [Refuse All Calls].

Touching [Refuse All Calls] switches between "On" and "Off".

- If both "Refuse All Calls" and "Auto Answer Preference" are activated, "Refuse All Calls" takes priority and all incoming calls are automatically rejected.
- If "Refuse All Calls" is set to "On", rejected incoming calls will be stored in the missed call list.

Echo cancelling and noise reduction

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

1 Display the "Phone Menu" screen.

- For details of the operations, refer to *Displaying the Phone Menu* on page 58.

2 Touch [Setting].

The "Bluetooth Settings" screen appears.

3 Touch [Echo Cancel].

Touching [Echo Cancel] switches between "On" and "Off".

Setting automatic connection

When automatic connection is active, the navigation system will automatically establish a connection with a registered phone when it comes into range. Using this feature avoids all of the processes for establishing a connection.

- With some mobile phones, it may not be possible to perform automatic connection.

1 Display the "Phone Menu" screen.

- For details of the operations, refer to *Displaying the Phone Menu* on page 58.

2 Touch [Setting].

The "Bluetooth Settings" screen appears.

3 Touch [Auto Connect].

Touching [Auto Connect] switches between "On" and "Off".

- ❑ Automatic connection is performed in the registration number order.

Editing the device name

You can change the device name to be displayed on your mobile phone. (Default is "PIONEER NAVI".)

1 Display the "Phone Menu" screen.

- ➔ For details of the operations, refer to *Displaying the Phone Menu* on page 58.

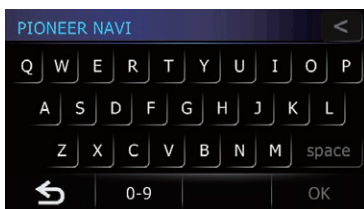
2 Touch [Setting].


The "Bluetooth Settings" screen appears.

3 Touch [Edit Name].

The keyboard to enter the name appears.

4 Enter the new name by using the keyboard.



- Touch  to delete the current name, and enter the new name by using the keyboard. Deletes the input text one letter at a time, beginning at the end of the text. Continuing to touch the button deletes all of the text.

5 Touch [OK].

The name is changed.

- ❑ Up to 16 characters can be entered for a device name.

Updating the Bluetooth wireless technology software

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

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

1 Insert an SD memory card into the SD card slot.

- ➔ For details of the operation, refer to *Inserting an SD memory card* on page 11.

2 Display the "Phone Menu" screen.

- ➔ For details of the operations, refer to *Displaying the Phone Menu* on page 58.

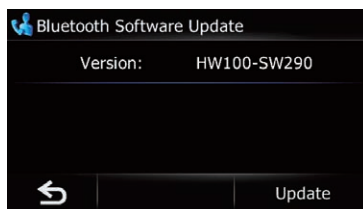
3 Touch [Setting].

The "Bluetooth Settings" screen appears.

4 Touch [Bluetooth Software Update].

The current version is displayed.

5 Touch [Update].



A message confirming whether to start updating the software appears. Update starts.

6 To finish the update, touch [OK].

Update is completed. 

Using hands-free phoning

Notes for hands-free phoning

General notes

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



Registration and connection

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

Making and receiving calls

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


tered in the phone book. When one phone number is registered under different names, the name that comes first in the phone book is displayed.

- If the phone number of the received call is not registered in the phone book, the phone number of the received call appears.
- During incoming and outgoing calls or talking on a phone, you can only do the following operations:
 - Touching , , [Vol +], and [Vol -].
 - Displaying the map screen.
 - Switching the audio sources.

The received call history and the dialled number history

- Calls made or editing performed only on your mobile phone will not be reflected to the dialled 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 mobile phone, the dialled number history data will be recorded as "**Unknown**" in the navigation system.

Phone book transfers

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

Using the “Fuel details” function

Inputting the fuel consumption information for calculating the fuel cost

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

➔ For details, refer to *Setting a route to your destination* on page 43.

1 Touch [Home] on the map screen and then touch [Navigation].

➔ For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch [Fuel details].

The “Fuel details” screen appears.

3 Enter the fuel consumption information.

Enter the following items:

- **Ordinary road:**

Enter the fuel cost when you drive on ordinary roads.

 - ☐ How the fuel cost is entered depends on the “Fuel Unit” setting.
 - When “Fuel Unit” is set to “Litre”.

Enter how much fuel you need to travel 100 kilometres (60 miles).
 - When “Fuel Unit” is set to “Gallon”.

Enter how many kilometres (miles) you get to a gallon.
- **MW mileage:**

Enter the fuel cost when you drive on the motorway.

 - ☐ How the fuel cost is entered depends on the “Fuel Unit” setting.
 - When “Fuel Unit” is set to “Litre”.

Enter how much fuel you need to travel 100 kilometres (60 miles).
 - When “Fuel Unit” is set to “Gallon”.

Enter how many kilometres (miles) you get to a gallon.
- **Fuel Price/Unit:**

Enter the fuel unit price.

- **Fuel Unit:**

Set the fuel unit.
- **Currency:**

Set the unit of currency.

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

Calculating the fuel consumption

When you enter the fuelling information to the navigation system, and export the data to SD memory cards, you can check the fuel consumption information by using the utility programme *navgate FEEDS*, which is available separately, on your PC.

- ☐ Up to 24 sets of data can be stored. You can also export the data, as described below.

If the entries reach the maximum number, a new entry will overwrite the oldest one.

These calculations are based only on the information that you provide and not on any data from the vehicle. The fuel mileage displayed is only a reference value, and does not guarantee the fuel mileage displayed can be obtained.

1 Touch [Home] on the map screen and then touch [Navigation].

➔ For details of the operations, refer to *Screen switching overview* on page 22.

2 Touch [Fuel details].

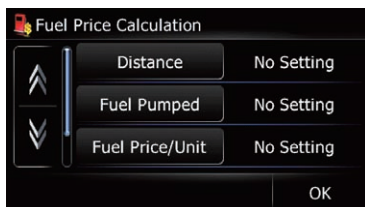
The “Fuel details” screen appears.

3 Touch [Fuel Price].

The “Fuel Price Calculation” screen appears.

Fuel cost management

4 Enter the fuel consumption information.



Enter the following items:

- **Distance:**
Enter the distance travelled since the previous fuelling.
 - The distance is entered automatically only when the distance travelled since the previous fuelling is recorded.
- **Fuel Pumped:**
Enter the amount of fuel pumped.
- **Fuel Price/Unit:**
Enter the fuel unit price.

When all the items are entered, the fuel consumption is displayed next to “Fuel details”.

5 Touch [OK].



The “Fuel details” screen appears.

Exporting the data of fuel cost information

Exporting the fuel cost data to an SD memory card is possible.

- The data stored in this navigation system will be cleared as exporting it to the SD memory card.
- If there is previous data in the SD memory card, the data is overwritten with new data when current data is exported.

1 Insert an SD memory card into the SD card slot.

- ☞ For details of the operation, refer to *Inserting an SD memory card* on page 11.

2 Touch [Home] on the map screen and then touch [Navigation].

- ☞ For details of the operations, refer to *Screen switching overview* on page 22.

3 Touch [Fuel details].

The “Fuel details” screen appears.

4 Touch [Export].



After a message confirming whether to export the data appeared, exporting the data to the SD memory card starts.

The “Fuel details” screen appears when it is done.

Exporting the data of “Fuel details” from “Export/Import Menu” screen

1 Insert an SD memory card into the SD card slot.

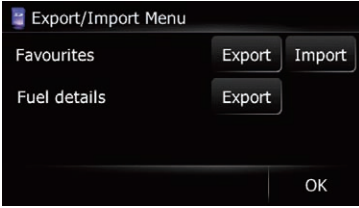
- ☞ For details of the operation, refer to *Inserting an SD memory card* on page 11.

2 Touch [Home] on the map screen and then touch [Navigation].

- ☞ For details of the operations, refer to *Screen switching overview* on page 22.

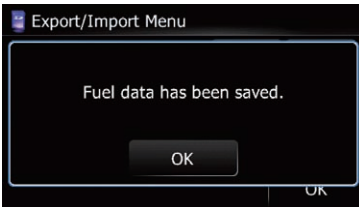
3 Touch [Data In/Out].

The “Export/Import Menu” screen appears.

4 Touch [Export] next to “Fuel details”.

Data export starts.

After the data is exported, the completion message appears.

**5 Touch [OK].**

The “**Navigation Menu**” screen appears. □

Using Applications

This product enables you to use applications downloaded via the utility programme *navigate FEEDS*, providing for navigation functions a wide variety of entertainment functions.

Preparing in advance

Before downloading any applications using the utility programme *navigate FEEDS*, you need to store the model information to an SD memory card.

After that, use *navigate FEEDS* to download the application to the SD memory card containing model information.

- ❑ The utility programme *navigate FEEDS* is available from our website. For details, refer to the information on our website.

To save model information to an SD memory card, connect your PC to a detachable device loaded with an SD memory card and switch to "PC Mode".

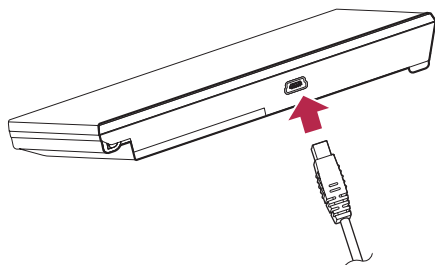
Switching to "PC Mode"

1 Detach the detachable device from the head unit.

- ➔ For details, refer to *Removing the detachable device* on page 17.

2 Turn off the power switch of detachable device.

3 Connect the supplied USB cable to USB port (Mini-B).



4 Connect the supplied USB cable to your PC.

Connect the detachable device and your PC using the USB cable.

5 Insert an SD memory card into the SD card slot.

- ➔ For details of the operation, refer to *Inserting an SD memory card* on page 11.

6 Turn on the power switch of detachable device.

7 Touch [Home] on the map screen and then touch [Navigation].

- ➔ For details of the operations, refer to *Screen switching overview* on page 22.

8 Touch [Connect PC].

A message confirming whether to restart the navigation system appears.

9 Touch [OK].

The navigation system restarts.

The navigation system switches to **PC Mode** and model information is stored to the SD memory card.

Cancelling "PC Mode"

1 Disconnect the detachable device from your PC.

2 Touch [End].

"PC Mode" is cancelled, and then the system restarts. ■

Launching the application

You can launch applications downloaded to an SD memory card via the utility programme *navigate FEEDS*.

- ❑ Navigation functions are unavailable when an application is running. Close the application to use navigation functions.

- ❑ When an application is running, you may not use the hands-free phoning function to place a call.
You may answer the telephone when you receive a call.
- ❑ The navigation system can recognise a maximum of 8 applications.
- ❑ The navigation system can run one application at a time.
- ❑ When running an application that outputs sound, set the audio source to **“Off”**.
- ❑ For details of applications, refer to the utility programme *navgate FEEDS*.

1 Use the utility programme *navgate FEEDS* to download an application to an SD memory card.

2 Insert an SD memory card into the SD card slot.

- ➔ For details of the operation, refer to *Inserting an SD memory card* on page 11.

3 Touch [Home] on the map screen to display the “Top Menu” screen.

- ➔ For details of the operations, refer to *Screen switching overview* on page 22.


4 Touch [Applications].

The “**Applications Menu**” screen appears.

5 Touch the application that you want to launch.

A message confirming whether to restart the navigation system appears.

6 Touch [OK].

The navigation system restarts, and the application is launched. 

Basic operations of the audio source

This chapter describes the basic operations of the audio source.

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

- TUNER (FM, MW/LW)
- CD
- ROM (MP3, AAC, WAV, WMA)
- USB
- iPod
- AUX (auxiliary device)

- **Press and hold the SRC/OFF button until the audio source turns off.**

The audio source is switched off.

- To return to the display of each source, press the **SRC/OFF** button. □

Switching the audio source

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

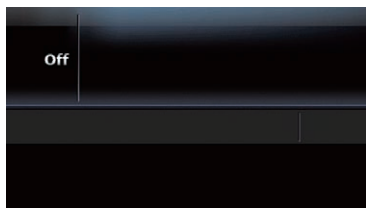
The audio operation screen appears.

- 2 **Press the SRC/OFF button repeatedly to switch between the following sources.**

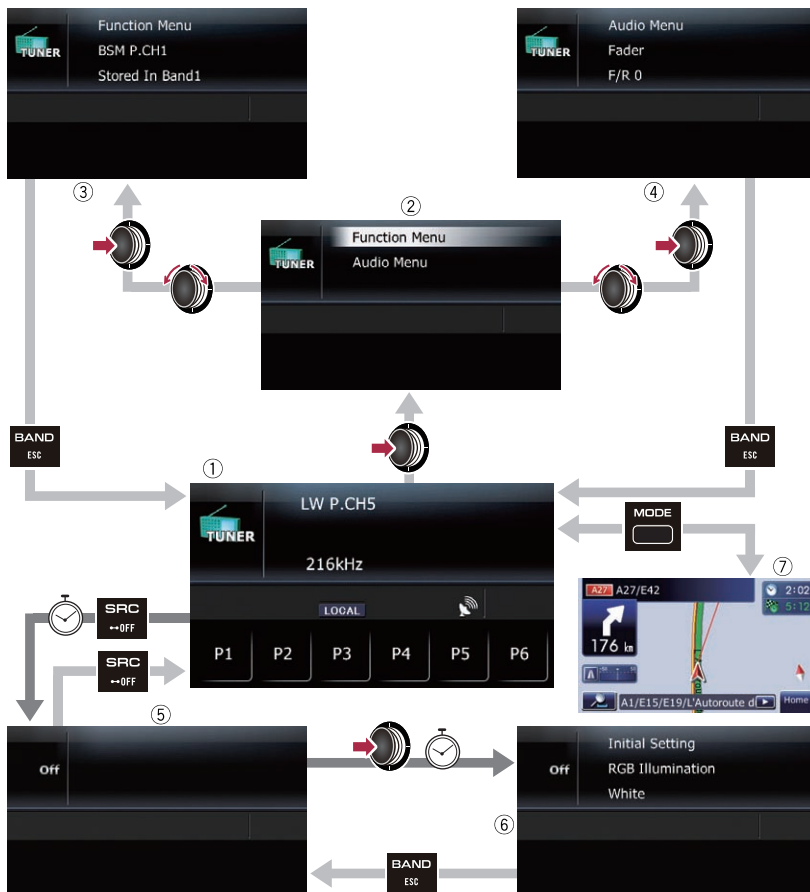
TUNER (tuner) — **CD** (built-in CD player) — **USB** (USB storage device) or **iPod** (iPod connected using USB input) — **AUX** (auxiliary device)





- 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 "AUX" in the "Initial Setting" screen is set to "Off".
 - ➔ For details, refer to *Switching the auxiliary setting* on page 115. □

Turning off the audio source




Audio screen switching overview



-  Press the button.
-  Press and hold the button for a few seconds.
-  Press the centre of **MULTI-CONTROL**
-  Turn **MULTI-CONTROL** to select the item.




What you can do on each menu

- ① **Audio operation screen**
When you play an audio source, this screen appears.
- ② **Function select screen**
You can select either "Function Menu" or "Audio Menu".
Depending on the audio source, "Function Menu" may not exist.
- ③ **"Function Menu" screen**
You can change additional function settings.
- ④ **"Audio Menu" screen**
You can make various sound effects to audio sources.
- ⑤ **Source off screen**
- ⑥ **"Initial Setting" screen**
You can make various settings for the hardware control.
- ⑦ **Map screen**
Press the **MODE** button to display the navigation map screen. 

Displaying the "Function Menu" screen

Advanced functions for each audio source are put on the "Function Menu" screen. To use those functions, display the "Function Menu" screen.

- Depending on the audio source, "Function Menu" may not exist.

- 1 Press the centre of **MULTI-CONTROL** when the audio screen is displayed.
- 2 Turn **MULTI-CONTROL** to select "Function Menu".
- 3 Press the centre of **MULTI-CONTROL** to enter the "Function Menu" screen. 

Using the radio (TUNER)

You can listen to the radio by using the navigation system. This section describes operations for radio.

The functions related to RDS (Radio Data System) are available only in areas with FM stations broadcasting RDS signals. Even if the navigation system is receiving an RDS station, not all the functions related with RDS will be available.

1 Press the SRC/OFF button to display the "TUNER" screen.

- ➔ For details, refer to *Switching the audio source* on page 77.

2 Press BAND/ESC button repeatedly until the desired band is selected.

If you want to select MW/LW, press **BAND/ESC** button repeatedly until "MW/LW" appears in the display.

Shows the programme service name (station name) of the current station. If the programme service name (station name) cannot be received, the frequency will be displayed instead.

⑥ NEWS indicator*

Shows when the set news programme is received.

⑦ TRFC indicator*

Shows when a TP station (a station that broadcasts traffic information) is tuned in.

⑧ Signal level indicator

⑨ LOCAL indicator

Shows when local seek tuning is on.

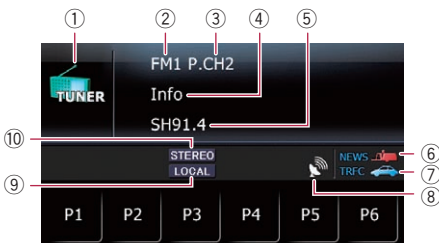
- ➔ For details, refer to *Tuning in strong signals* on page 82.

⑩ STEREO indicator

Shows when the selected frequency is being broadcast in stereo.

- ☐ (*) These functions are only active when your radio is tuned to an RDS station. ☐

Reading the screen



① Source icon

Shows which source has been selected.

② Band

Shows which band the radio is tuned to: **FM1**, **FM2**, **FM3** or **MW/LW**.

③ Preset number indicated next to "P.CH"

Shows what preset item has been selected.

④ PTY*

Shows the programme type of the current station (when available).

⑤ Programme service name*

Using the touch panel keys



① P1 to P6:

Recalls radio stations.

- ➔ For details, refer to *Storing and recalling broadcast frequencies* on the next page. ☐

Using the radio (TUNER)

Operating by hardware buttons

Pressing the BAND/ESC button

Band can be selected from among **FM1**, **FM2**, **FM3**, or **MW/LW**.

Pressing MULTI-CONTROL up or down

You can recall radio stations assigned to preset tuning keys **p1** to **p6**.

Pressing MULTI-CONTROL left or right


The frequencies move up or down step by step.

Pressing and holding MULTI-CONTROL left or right

The tuner will scan the frequencies until a broadcast strong enough for good reception is found.

- ☐ You can cancel seek tuning by pressing **MULTI-CONTROL** left or right.

Pressing the centre of MULTI-CONTROL

The function select screen appears. 

Storing and recalling broadcast frequencies


With a touch of any of the preset tuning keys **p1** to **p6**, you can easily store up to six broadcast frequencies for later recall (also with the touch of a key).

1 When you find a frequency that you want to store in memory, keep touching a preset tuning key **p1** to **p6** until the preset number (e.g., **P.CH1**) stops flashing.

The selected radio station has been stored in memory.

- ☐ Up to 18 FM stations, six for each of the three FM bands, as well as six MW/LW stations, can be stored in memory.

2 Touch the same preset tuning key **p1** to **p6**.

The radio station frequencies are recalled from memory. 


Using the function menu

1 Display the “Function Menu” screen.

- ☉ For details of the operation, refer to *Displaying the “Function Menu” screen* on page 79.

2 Turn MULTI-CONTROL to select a function.

Turning **MULTI-CONTROL** switches between the functions in the following order:

- FM:
 - BSM** (best stations memory) — **Regional** (regional) — **Local** (local seek tuning) — **PTY Search** (programme type selection) — **Traffic Announce** (traffic announcement standby) — **Alternative FREQ** (alternative frequencies search) — **News Interrupt** (news programme interruption)
- MW/LW:
 - BSM** (best stations memory) — **Local** (local seek tuning) 

Storing the strongest broadcast frequencies

“BSM” (best stations memory) lets you automatically store the six strongest broadcast frequencies under the preset tuning keys **p1** to **p6** and, once stored there, you can tune in to these frequencies with the touch of a key.

1 Display the “Function Menu” screen.

- ☉ For details of the operation, refer to *Displaying the “Function Menu” screen* on page 79.

2 Turn MULTI-CONTROL to display “BSM”.

Using the radio (TUNER)

3 Press the centre of MULTI-CONTROL to begin a search.

“Searching” begins to flash. While “Searching” is flashing, the six strongest broadcast frequencies will be stored under the preset tuning keys **P1** to **P6** in order of their signal strength. When this is complete, “Searching” stops flashing.

- To cancel the storage process, press the centre of **MULTI-CONTROL** again.
- Storing broadcast frequencies with BSM may replace broadcast frequencies you have already saved by using **P1** to **P6**.

Limiting stations to regional programming

When AF is used to automatically retune frequencies, the regional function limits the selection to stations broadcasting regional programmes.

1 Display the “Function Menu” screen.

- ➔ For details of the operation, refer to *Displaying the “Function Menu” screen* on page 79.

2 Turn MULTI-CONTROL to display “Regional”.

3 Press the centre of MULTI-CONTROL to switch the setting to “On”.

Each press of the centre of **MULTI-CONTROL** switches the setting between on and off.

- Regional programming and regional networks are organised differently depending on the country (i.e., they may change according to the time, country or broadcast area).
- The preset number may disappear on the display if the tuner tunes in a regional station that differs from the originally set station.
- The regional function can be turned on or off independently for each FM band.

Tuning in strong signals

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

1 Display the “Function Menu” screen.

- ➔ For details of the operation, refer to *Displaying the “Function Menu” screen* on page 79.

2 Turn MULTI-CONTROL to display “Local”.

3 Press the centre of MULTI-CONTROL.

Each press of the centre of **MULTI-CONTROL** switches the setting between on and off.

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

- FM: **Level 1** — **Level 2** — **Level 3** — **Level 4**
- MW/LW: **Level 1**—**Level 2**
- The highest level setting allows reception of only the strongest stations, while lower settings let you receive weaker stations.

Searching for an RDS station by PTY information

You can search for general types of broadcasting programmes.

- ➔ For details, refer to *PTY list* on page 85.

1 Display the “Function Menu” screen.

- ➔ For details of the operation, refer to *Displaying the “Function Menu” screen* on page 79.

2 Turn MULTI-CONTROL to display “PTY Search”.

3 Press MULTI-CONTROL left or right to select a programme type.


There are four programme types:

News&Information — **Popular** — **Classics** — **Others**

Using the radio (TUNER)

4 Press the centre of MULTI-CONTROL to begin a search.

The tuner searches for a station broadcasting that programme type.

- ❑ To stop the search, press the centre of **MULTI-CONTROL**.
- ❑ The programmes of some stations may differ from that indicated by the transmitted PTY.
- ❑ If no station is broadcasting the type of programme you searched for, "Not Found" is displayed for about two seconds and then the tuner returns to the original station. 

Receiving traffic announcements

TA (traffic announcement standby) lets you receive traffic announcements automatically, no matter what source you are listening to. TA can be activated for both a TP station (a station that broadcasts traffic information) or another enhanced network's TP station (a station carrying information that cross-references TP stations).

1 Tune in a TP station or another enhanced network's TP station.

When you are tuned into a TP station or another enhanced network's TP station,

 indicator will light.

2 Display the "Function Menu" screen.

- ➔ For details of the operation, refer to *Displaying the "Function Menu" screen* on page 79.

3 Turn MULTI-CONTROL to display "Traffic Announce".

4 Press the centre of MULTI-CONTROL to switch the setting to "On".

Each press of the centre of **MULTI-CONTROL** switches the setting between on and off.


- ❑ You can also cancel the announcement by changing the audio source or pressing **MULTI-CONTROL** left or right.

5 Use MULTI-CONTROL to adjust the TA volume when a traffic announcement begins.

The newly set volume is stored in memory and recalled for subsequent traffic announcements.

6 Press the BAND/ESC button while a traffic announcement is being received to cancel the announcement.

The tuner returns to the original source but remains in standby mode until turning the traffic announcement standby off.

- ❑ Pressing the **SRC/OFF** button enables you to perform the equivalent operation.
- ❑ The system switches back to the original source following traffic announcement reception.
- ❑ Only TP stations and other enhanced networks' TP stations are tuned in during seek tuning or BSM when the TA function is on. 

Tuning into alternative frequencies

If you are listening to a broadcast and the reception becomes weak or there are other problems, the navigation system will automatically search for a different station in the same network that is broadcasting a stronger signal.

1 Display the "Function Menu" screen.

- ➔ For details of the operation, refer to *Displaying the "Function Menu" screen* on page 79.

2 Turn MULTI-CONTROL to display "Alternative FREQ".

3 Press the centre of MULTI-CONTROL to switch the setting to "On".

Each press of the centre of **MULTI-CONTROL** switches the setting between on and off.

Using the radio (TUNER)


- ❑ Only RDS stations are tuned in during seek tuning or BSM when AF (alternative frequencies) is on.
- ❑ When you recall a preset station, the tuner may update the preset station with a new frequency from the station's AF list. (This is only available when using presets on **FM1** or **FM2** bands.) No preset number appears on the display if the RDS data for the station received differs from that for the originally stored station.
- ❑ Sound may be temporarily interrupted by another programme during an AF frequency search.
- ❑ AF can be turned on or off independently for each FM band.

PI Seek operation

If the unit fails to find a suitable alternative frequency, or if you are listening to a broadcast and the reception becomes weak, the navigation system will automatically search for a different station with the same programming. During the search, "**PI Seek**" is displayed and the output is muted. Muting is discontinued after completion of the PI Seek, whether or not a different station is found.

Activating the Auto PI seek for preset stations

When preset stations cannot be recalled, as when travelling long distances, the unit can be set to perform PI Seek during preset recall.

- ❑ The default setting for Auto PI Seek is off.
- ➡ For details, refer to *Using Auto PI Seek for preset stations* on page 115. 

Using news programme interruption

When a news programme is broadcast from a PTY code news station, the navigation system can switch from any station to the news broadcast station. When the news programme

ends, reception of the previous programme resumes.

- 1 **Display the "Function Menu" screen.**
 - ➡ For details of the operation, refer to *Displaying the "Function Menu" screen* on page 79.

- 2 **Turn MULTI-CONTROL to display "News Interrupt".**

- 3 **Press the centre of MULTI-CONTROL to switch the setting to "On".**


Each press of the centre of **MULTI-CONTROL** switches the setting between on and off.

- ❑ A news programme can be cancelled by pressing the **BAND/ESC** or **SRC/OFF** button. 


Interruption icon status

The indication of the status icon changes according to the situation as shown below.

NEWS indicator

Indicator	Meaning
	Shows when the set news programme is received.
(No display)	Information interruption is deactivated. Information interruption is activated, but you will not receive data since there is none.

TRFC indicator

Indicator	Meaning
	Shows when a TP station (a station that broadcasts traffic information) is tuned in.
(No display)	Information interruption is deactivated. Information interruption is activated, but you will not receive data since there is none.



Using the radio (TUNER)

PTY list

General	Specific	Type of programme
News&Information	News	News
	Affairs	Current affairs
	Info	General information and advice
	Sport	Sports
	Weather	Weather reports/meteorological information
	Finance	Stock market reports, commerce, trading, etc.
Popular	Pop Mus	Popular music
	Rock Mus	Contemporary modern music
	Easy Mus	Easy listening music
	Oth Mus	Non categorised music
	Jazz	Jazz
	Country	Country music
	Nat Mus	National music
	Oldies	Oldies music, golden oldies
	Folk Mus	Folk music
Classics	L. Class	Light classical music
	Classics	Serious classical music
Others	Educate	Educational programmes
	Drama	All radio plays and serials
	Culture	National or regional culture
	Science	Nature, science and technology
	Varied	Light entertainment
	Children	Children's
	Social	Social affairs
	Religion	Religion affairs or services
	Phone In	Phone In
	Touring	Travel programmes, not for announcements about traffic problems
	Leisure	Hobbies and recreational activities
	Document	Documentaries



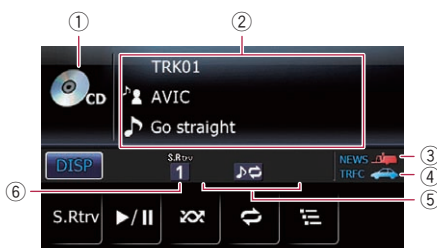
You can play a normal music CD using the built-in drive of the navigation system. This section describes how.

● **Insert the disc you want to play into disc-loading slot.**

Playback starts from the first track of the CD.

- If the disc is already inserted, press the **SRC/OFF** button to display the “CD” screen.
- ➔ For details, refer to *Switching the audio source* on page 77.

Reading the screen



① **Source icon**

Shows which source has been selected.

② **Text display area**

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 not displayed.

- **Track number indicated next to “TRK”**

Shows the number of the track currently playing.

- **Play time**

Shows the elapsed playing time within the current track.

- **Artist name of the disc***

Shows the artist name of the disc currently playing (when available).

- **Artist name of the track***

Shows the artist name of the track currently playing (when available).

- **Disc title***

Shows the title of the disc currently playing (when available).

- **Track title***

Shows the title of the track currently playing (when available).

③ **NEWS indicator**

Shows when the set news programme is received.

④ **TRFC indicator**

Shows when a TP station (a station that broadcasts traffic information) is tuned in.

⑤ **Playback condition indicator**

Indicates the current playback condition.

Playing tracks in random order

Indicator:	Meaning
No indicator	Does not play tracks in random order.
	Plays all tracks in the current disc in random order.

Setting a repeat play range

Indicator:	Meaning
No indicator	Repeats the current disc.
	Repeats just the current track.

Scanning tracks of a CD

Indicator:	Meaning
No indicator	Cancels the scan play.
	Plays the beginning of each track in the current repeat play range for about 10 seconds.

⑥ **Sound Retriever indicator**

➔ For details, refer to *Using Sound Retriever* on page 88.

Playing audio CDs

Using the touch panel keys



- ① **DISP**:
Switches the combination of displayed items in the text display area.
- ② **S.Rtrv**:
Sets Sound Retriever function.
➔ For details, refer to **Using Sound Retriever** on the next page.
- ③ **Play/Pause**:
Playback and Pause
- ④ **Fast Reverse**:
Plays tracks in random order.
➔ For details, refer to **Playing tracks in random order** on the next page.
- ⑤ **Repeat**:
Repeats playback.
➔ For details, refer to **Setting a repeat play range** on the next page.
- ⑥ **List**:
Performs scan play of a CD.
➔ For details, refer to **Scanning tracks of a CD** on the next page.

Operating by hardware buttons

Pressing the BAND/ESC button

This operation is available only when playing a disc containing both CD-DA and compressed audio files.

- ➔ For details, refer to **Pressing the BAND/ESC button** on page 90.

Pressing MULTI-CONTROL right

Skips to the start of the next track.

Pressing and holding MULTI-CONTROL right

Performs fast forward.

Pressing MULTI-CONTROL left

Skips to the start of the current track.

Pressing it twice continuously will skip to the previous track.

Pressing and holding MULTI-CONTROL left

Performs fast reverse.

- Fast reverse stops when it reaches the beginning of the first track on the disc.

Pressing the centre of MULTI-CONTROL

The function select screen appears.

Pressing the LIST button

Shows the list to select a track.

- This function is available only when the CD-TEXT disc is played.
- ➔ For details, refer to **Selecting a track from the list** on this page.

Selecting a track from the list

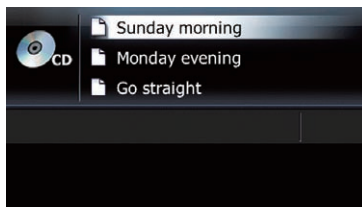
Track title list lets you see the list of track titles on a CD-TEXT disc and select one of them to play back.

1 Press the LIST button.

The list of track titles appears.

- To return to the previous screen, press the **BAND/ESC** or **LIST** button.

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



Playing audio CDs

- ❑ Pressing **MULTI-CONTROL** up or down enables you to perform the equivalent operation.




3 Press the centre of **MULTI-CONTROL** to play the selected track.

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

Setting a repeat play range

The repeat play range can be changed by touching only one key.

● Touch repeatedly until the desired repeat range indicator appears.

- : Repeats just the current track.
- No indicator (disc repeat): Repeats the current disc.
- ❑ If you skip a track forward or backward while the repeat play range is set to , the repeat play range changes to disc repeat automatically. 





Playing tracks in random order

All of the tracks in the disc can be played at random by touching only one key.

● Touch .

Random play begins.

When you turn random play on,  appears.

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







Scanning tracks of a CD

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

● Touch .

Scan play begins.



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

- ❑ To turn scan play off, touch  again.
- ❑ If you touch  while the repeat play range is set to , the repeat play range changes to disc repeat automatically and scanning tracks will begin.
- ❑ If you skip a track forward or backward during scan play, the scan play is automatically cancelled.
- ❑ If you touch  during scan play, the scan play is automatically cancelled and playback of the current track will be repeated.
- ❑ If you touch  during scan play, the scan play is automatically cancelled and tracks will be played in random order. 

Playback and Pause

● Touch .

Playback of the current track pauses, and "Pause" is displayed.




- ❑ To turn pause off, touch  again. 

Using Sound Retriever

Sound Retriever function automatically enhances compressed audio and restores rich sound.

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

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

- : Sound Retriever function (level 1) is activated.
- : Sound Retriever function (level 2) is activated.
- No indicator: Sets to off.
- ❑ **S.Rtrv2** has a stronger effect than **S.Rtrv1** and is more effective when playing back highly compressed audio data. 

Playing music files on ROM

You can play a disc that contains compressed audio files using the built-in drive of the navigation system. This section describes these operations.

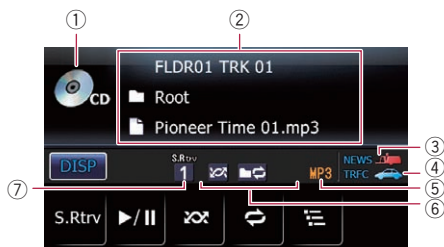
- In the following description, the MP3, WMA, AAC, WAV files are collectively referred to as “Compressed audio file”.

● Insert the disc you want to play into disc-loading slot.

Playback starts from the first file of the ROM.

- If the disc is already inserted, press the **SRC/OFF** button to display the “CD” screen.
- ➔ For details, refer to *Switching the audio source* on page 77.
- When playing a disc containing a mixture of various media file types, you can switch between media file types to play.
- ➔ For details, refer to *Pressing the BAND/ESC button* on the next page.

Reading the screen



- ① **Source icon**
Shows which source has been selected.
- ② **Text display area**
 - **Folder number indicated next to “FLDR”**
Shows the folder number currently playing.
 - **Track number indicated next to “TRK”**
Shows the track number currently playing.
 - **Play time**

Shows the elapsed playing time within the current track.

- **Comment**
Shows the comment of the file currently playing (when available).
- **Folder name**
Shows the folder name currently playing.
- **File name**
Shows the file name currently playing.
- **Track title**
Shows the title of the track currently playing. (when available.)
- **Artist name**
Shows the artist name for the current song. (when available.)
- **Album title**
Shows the title of the album for the current song. (when available.)
- The item is blank if there is no corresponding information.

③ NEWS indicator

Shows when the set news programme is received.

④ TRFC indicator

Shows when a TP station (a station that broadcasts traffic information) is tuned in.

⑤ File type indicator

Shows the type of audio file currently playing.

⑥ Playback condition indicator

Indicates the current playback condition.



Playing files in random order

Indicator:	Meaning
No indicator	Does not play tracks in random order.
	Plays all audio files in the current repeat play range in random order.

Setting a repeat play range

Indicator:	Meaning
No indicator	Repeats all compressed audio files.
	Repeats just the current file.
	Repeats the current folder.

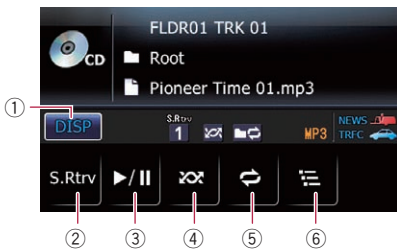
Scanning folders and files




Indicator:	Meaning
No indicator	Cancels the scan play.
	Plays the first audio files of each folder for about 10 seconds when the repeat range is set to all repeat. Plays the beginning of each audio file in the current folder for about 10 seconds when the repeat range is set to  .

⑦ Sound Retriever indicator

- ➔ For details, refer to **Using Sound Retriever** on page 92. 


Using the touch panel keys



- ① **DISP**:
Switches the combination of displayed items in the text display area.
- ② **S.Rtrv**:
Sets Sound Retriever function.
➔ For details, refer to **Using Sound Retriever** on page 92.
- ③ :
Playback and Pause
- ④ :
Plays tracks in random order.
➔ For details, refer to **Playing tracks in random order** on the next page.
- ⑤ :
Repeats playback.
➔ For details, refer to **Setting a repeat play range** on the next page.

⑥ :

Scans folders and tracks.

- ➔ For details, refer to **Scanning folders and tracks** on page 92. 

Operating by hardware buttons

Pressing the BAND/ESC button

Switches between CD (audio data (CD-DA)) and ROM (compressed audio file).

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

Pressing and holding the BAND/ESC button

Playback returns to the root folder.

Pressing MULTI-CONTROL up or down

Selects the previous or next folder and plays the first track on the folder.

- You cannot select a folder that does not have a compressed audio file recorded in it.

Pressing MULTI-CONTROL right

Skips to the start of the next track.

Pressing and holding MULTI-CONTROL right

Performs fast forward.

Pressing MULTI-CONTROL left

Skips to the start of the current track.

Pressing it twice continuously will skip to the previous track.

Pressing and holding MULTI-CONTROL left

Performs fast reverse.

- Fast reverse stops when it reaches the beginning of the first track on the disc.


Playing music files on ROM

Pressing the centre of MULTI-CONTROL

The function select screen appears.

Pressing the LIST button

Shows the list to select a track.

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

Selecting a track from the list

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

1 Press the LIST button.

The list of track titles and folder names appears.

- To return to the previous screen, press the **BAND/ESC** or **LIST** button.
- If the selected folder does not contain any playable file, the file list is not displayed.

2 Turn MULTI-CONTROL to select the desired folder or track.




- Pressing **MULTI-CONTROL** up or down enables you to perform the equivalent operation.

3 Press the centre of MULTI-CONTROL to display the content of the folder or play the selected track.

When a folder is selected, the content of the lower folder is displayed.








When a track is selected, it is played.

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

- When a folder is selected, the first track of the selected folder is played by pressing and holding the centre of **MULTI-CONTROL**.
- When the lower folder is listed, the list returns to the upper folder by pressing **MULTI-CONTROL** left.
 - If the root folder is listed, this operation is not available.
- The content of the root folder is displayed by pressing and holding **MULTI-CONTROL** left.
 - If the root folder is listed, this operation is not available. 

Setting a repeat play range

● Touch repeatedly until the desired repeat range indicator appears.

- : Repeats just the current track.
- : Repeats the folder currently playing.
- No indicator (all repeat): Repeats all.
- If you return to the root folder while the repeat play range is set to  or , the repeat play range changes to disc repeat automatically.
- If you skip a track forward or backward while the repeat play range is set to , the repeat play range changes to  automatically. 

Playing tracks in random order





You can play in a selected repeat range, in random order.

● Touch .

Random play begins.

When you turn random play on,  appears.

- To turn random play off, touch  again.

- ❑ If you touch  while the repeat play range is set to , the repeat play range changes to  automatically and tracks will be played in random order. 









Scanning folders and tracks

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

● Touch .

Scan play begins.



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

- ❑ To turn scan play off, touch  again.
- ❑ If you touch  while the repeat play range is set to , the repeat play range changes to  automatically and scanning tracks will begin.
- ❑ If you touch  while the repeat play range is set to disc, scan play is performed for only the first tracks of each folder.
- ❑ If you skip a track forward or backward, or return to the root folder during scan play, the scan play is automatically cancelled.
- ❑ If you touch  during scan play, the scan play is automatically cancelled and playback of the current track will be repeated.
- ❑ If you touch  during scan play, the scan play is automatically cancelled and tracks will be played in random order. 

Playback and Pause

● Touch .

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




- ❑ To turn pause off, touch  again. 

Using Sound Retriever

Sound Retriever function automatically enhances compressed audio and restores rich sound.

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

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

- :
Sound Retriever function (level 1) is activated.
 - :
Sound Retriever function (level 2) is activated.
 - No indicator:
Sets to off.
- ❑ **S.Rtrv2** has a stronger effect than **S.Rtrv1** and is more effective when playing back highly compressed audio data. 

Playing music files on USB

You can play the compressed audio files stored in the USB storage device.

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

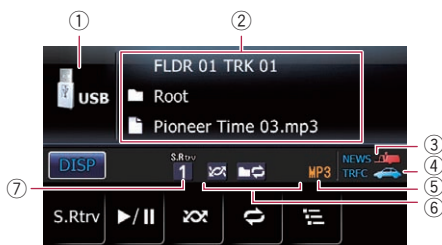
1 Plug the USB storage device into the USB connector.

- ➡ For details, refer to *Plugging in a USB storage device* on page 13.

2 Press the SRC/OFF button to display the “USB” screen.

- ➡ For details, refer to *Switching the audio source* on page 77.

Reading the screen



① Source icon

Shows which source has been selected.

② Text display area

- **Folder number indicated next to “FLDR”**

Shows the folder number currently playing.

- **Track number indicated next to “TRK”**

Shows the track number currently playing.

- **Play time**

Shows the elapsed playing time of the current file.

- **Comment**

Shows the comment of the file currently playing (when available).

- **❑ Folder name**

Shows the folder name currently playing.

- **❑ File name**

Shows the file name currently playing.

- **❑ Track title**

Shows the title of the track currently playing. (when available.)

- **❑ Artist name**

Shows the artist name currently playing (when available).

- **❑ Album title**

Shows the title of the album for the current track (when available).

- ❑ The item is blank if there is no corresponding information.

③ NEWS indicator

Shows when the set news programme is received.

④ TRFC indicator

Shows when a TP station (a station that broadcasts traffic information) is tuned in.


⑤ File type indicator

Shows the type of audio file currently playing.



⑥ Playback condition indicator

Indicates the current playback condition.



Playing files in random order

Indicator:	Meaning
No indicator	Does not play files in random order.
	Plays all audio files in the current repeat play range in random order.


Setting a repeat play range

Indicator:	Meaning
No indicator	Repeats all compressed audio files in the selected external storage device (USB, SD).
	Repeats just the current file.
	Repeats the current folder.

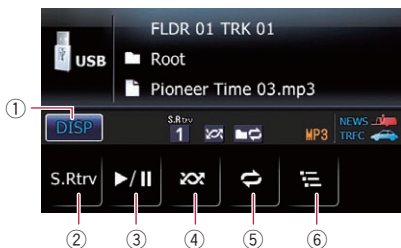
Scanning folders and files




Indicator:	Meaning
No indicator	Cancels the scan play.
	Plays the first audio files of each folder for about 10 seconds when the repeat range is set to all repeat. Plays the beginning of each audio file in the current folder for about 10 seconds when the repeat range is set to  .

⑦ Sound Retriever indicator

➔ For details, refer to **Using Sound Retriever** on page 96. 


Using the touch panel keys



- ① **DISP**:
Switches the combination of displayed items in the text display area.
- ② **S.Rtrv**:
Sets Sound Retriever function.
➔ For details, refer to **Using Sound Retriever** on page 96.
- ③ :
Playback and Pause
- ④ :
Plays files in random order.
➔ For details, refer to *Playing files in random order* on the next page.
- ⑤ :
Repeats playback.
➔ For details, refer to *Setting a repeat play range* on the next page.

⑥ 

Performs scan play of folders and files.

➔ For details, refer to *Scanning folders and files* on the next page. 


Operating by hardware buttons

Pressing and holding the BAND/ESC button

Playback returns to the root folder.

Pressing MULTI-CONTROL up or down

Plays the first playable file on the previous or next folder.

 The folders where there are no playable files are skipped.

Pressing MULTI-CONTROL right

Skips to the start of the next file.

Pressing and holding MULTI-CONTROL right

Performs fast forward.


Pressing MULTI-CONTROL left

Skips to the start of the current file.

Pressing it twice in a row will skip to the start of the previous file.

Pressing and holding MULTI-CONTROL left

Performs fast reverse.


 There is no sound on fast reverse or forward.

Pressing the centre of MULTI-CONTROL

The function select screen appears.

Pressing the LIST button

Shows the list to select a file.

➔ For details, refer to *Selecting a file from the list* on the next page. 

Playing music files on USB

Selecting a file from the list

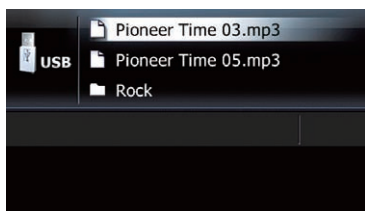
The list lets you see the file names or folder names. If you select a folder on the list, you can view its contents. If you select a file on the list, you can play the selected file.

1 Press the LIST button.

The list of file and folder names appears.

- To return to the previous screen, press the **BAND/ESC** or **LIST** button.
- If the selected folder does not contain any playable file, the file list is not displayed.

2 Turn MULTI-CONTROL to select the desired file name.



- Pressing **MULTI-CONTROL** up or down enables you to perform the equivalent operation.

3 Press the centre of MULTI-CONTROL to display the content of the folder or play the selected file.

When a folder is selected, the content of the lower folder is displayed.





When a file is selected, it plays the selected file.

- Pressing **MULTI-CONTROL** right enables you to perform the equivalent operation.
- When a folder is selected, the first file of the selected folder is played by pressing and holding the centre of **MULTI-CONTROL**.
- When the lower folder is listed, the list returns to the upper folder by pressing **MULTI-CONTROL** left.
 - If the root folder is listed, this operation is not available.

- The content of the root folder is displayed by pressing and holding **MULTI-CONTROL** left.
 - If the root folder is listed, this operation is not available.

Setting a repeat play range

● Touch repeatedly until the desired repeat range indicator appears.


- : Repeats just the current file.
- : Repeats the folder currently playing.
- No indicator (all repeat): Repeats all.
- If you perform returning to the root folder while the repeat play range is set to  or , the repeat play range changes to all repeat automatically.





Playing files in random order

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

● Touch .

Random play begins.

When you turn random play on,  appears.

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










Scanning folders and files

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

● Touch .

Scan play begins.



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

- ❑ To turn scan play off, touch  again.
- ❑ If you touch  while the repeat play range is set to , the repeat play range changes to  automatically and scanning files will begin.
- ❑ If you touch  while the repeat play range is set to all, scan play is performed for only the first files of each folder.
- ❑ If you skip a file forward, backward, or return to the root folder during scan play, the scan play is automatically cancelled.
- ❑ If you touch  during scan play, the scan play is automatically cancelled and play-back of the current file will be repeated.
- ❑ If you touch  during scan play, the scan play is automatically cancelled and files will be played in random order. 
- ❑ **S.Rtrv2** has a stronger effect than **S.Rtrv1** and is more effective when playing back highly compressed audio data. 

Playback and Pause

● Touch .

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



- ❑ To turn pause off, touch  again. 

Using Sound Retriever

Sound Retriever function automatically enhances compressed audio and restores rich sound.

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

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

- : Sound Retriever function (level 1) is activated.
- : Sound Retriever function (level 2) is activated.
- No indicator: Sets to off.

Using an iPod

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

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

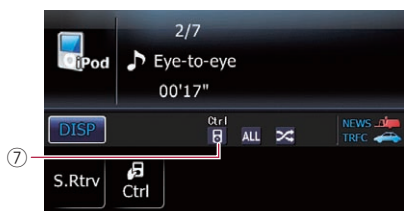
1 Connect your iPod.

- ➔ For details, refer to *Connecting your iPod* on page 13.

2 Press the SRC/OFF button to display the "iPod" screen.

- ➔ For details, refer to *Switching the audio source* on page 77.

Reading the screen



① Source icon

Shows which source has been selected.

② Text display area

• Song number

Shows the number of the song currently playing and total number of songs in the selected list.

• Play time

Shows the elapsed playing time within the current song.

• Song title (episode)

Shows the title of the current song.

When a podcast is played, the episode is displayed.

• Artist name

Shows the artist name for the current song.

• Album title (podcast title)

Shows the title of the album for the current song.

When a podcast is played, the podcast title is displayed.

③ NEWS indicator

Shows when the set news programme is received.

④ TRFC indicator

Shows when a TP station (a station that broadcasts traffic information) is tuned in.

⑤ Playback condition indicator

Indicates the current playback condition.

Setting a repeat play range

Indicator:	Meaning
	Repeats all songs in the selected list.
	Repeats just the current song.

Setting the shuffle play for music

Indicator:	Meaning
No indicator	Cancels the shuffle play.
	Plays back songs in random order within the selected list. Selects an album randomly, and then plays back all songs in that album in order.

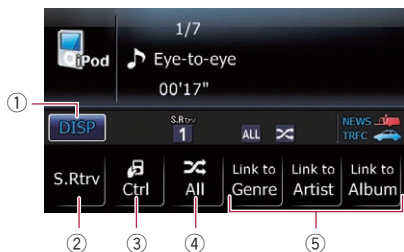
⑥ Sound Retriever indicator

- ➔ For details, refer to *Using Sound Retriever* on page 100.

⑦ iPod control mode indicator

- ➔ For details, refer to *Operating the functions from your iPod* on page 100. □

Using the touch panel keys



- ① **DISP:**
Switches the combination of displayed items in the text display area.
- ② **S.Rtrv:**
Sets advanced sound retriever function.
➔ For details, refer to **Using Sound Retriever** on page 100.
- ③ **Ctrl:**
Sets iPod control mode.
➔ For details, refer to *Operating the functions from your iPod* on page 100.
- ④ **All:**
Sets shuffle all.
➔ For details, refer to *Playing all songs in random order (shuffle all)* on page 100.
- ⑤ **Link to Genre:**
Link to Artist:
Link to Album:
Starts playing the list of songs related to the currently playing song.
➔ For details, refer to *Playing songs related to the currently playing song* on the next page. ■

Operating by hardware buttons

Pressing MULTI-CONTROL right

Skips to the start of the next song.

Pressing and holding MULTI-CONTROL right

Performs fast forward.

Pressing MULTI-CONTROL left

Skips to the start of the current song.

Pressing it twice continuously will skip to the previous song.

Pressing and holding MULTI-CONTROL left

Performs fast reverse.

Pressing the centre of MULTI-CONTROL

The function select screen appears.

Pressing the LIST button

Shows the list to select a song.

➔ For details, refer to *Selecting a song from the list* on this page. ■

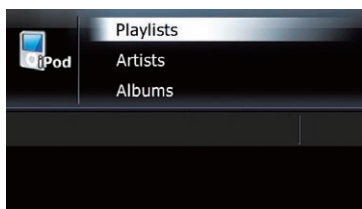
Selecting a song from the list

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

1 Press the LIST button to display the top category menu.

- To return to the previous screen, press the **BAND/ESC** button.

2 Turn MULTI-CONTROL to select a category.



- **Playlists** (playlists)
- **Artists** (artists)
- **Albums** (albums)
- **Songs** (songs)
- **Podcasts** (podcasts)
- **Genres** (genres)
- **Composers** (composers)
- **Audiobooks** (audiobooks)

Using an iPod

- Pressing **MULTI-CONTROL** up or down enables you to perform the equivalent operation.

3 Press the centre of **MULTI-CONTROL** to narrow down the content of the category.

When a category is selected, the content of the category will be narrowed down.

When a song is selected, it plays the selected song.

- Pressing **MULTI-CONTROL** right enables you to perform the equivalent operation.
- When a category is selected, the first song of the selected category is played by pressing and holding the centre of **MULTI-CONTROL**.
 - Pressing **MULTI-CONTROL** right enables you to perform the equivalent operation.
- When the lower tier of items are listed, the list returns to the uppermost tier of items by pressing and holding **MULTI-CONTROL** left.
 - If the uppermost tier of items are listed, this operation is not available.
- Selecting "**All**" on the list displays all options in the current category. For example, if you select "**All**" after selecting "**Artists**", you can proceed to the next screen with all artists in the list selected.

4 On the song (or episode) list, press the centre of **MULTI-CONTROL** to play the selected song (or episode).

Searching for applicable items alphabetically

Using the search control displays the page which includes the first applicable option.

- This function is available for the alphabetical list only.

1 Press the **LIST** button to display the top category menu.

- To return to the previous screen, press the **BAND/ESC** button.

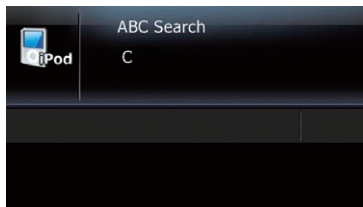
2 Turn **MULTI-CONTROL** to display the desired category.

3 Press the centre of **MULTI-CONTROL** to confirm the selected item.

The lower categories are displayed.

4 Press the **LIST** button to change the search mode to alphabetical search.

5 Turn **MULTI-CONTROL** to select the desired character.



6 Press the centre of **MULTI-CONTROL** to begin a search.

- An article listed below and space at the beginning of the artist name will be ignored and the next character will be taken into account for searching.
 - "A" or "a"
 - "AN", "An", or "an"
 - "THE", "The", or "the"
- If alphabetical search is aborted, **Not Found** is displayed.

7 On the song (or episode) list, press the centre of **MULTI-CONTROL** to play the selected song (or episode).

Playing songs related to the currently playing song

You can play songs related to the currently playing song, using of the following lists.

- Album list of currently playing genre
- Album list of currently playing artist
- Song list of currently playing album
- ☐ Depending on the number of files in the iPod, there may be a delay when displaying a list.


● **Touch [Link to Genre], [Link to Artist], or [Link to Album] to select a search mode.**

- **Link to Genre:**
Plays the album of currently playing genre.
- **Link to Artist:**
Plays the album of currently playing artist.
- **Link to Album:**
Plays the song of currently playing album.

“Searching” flashes while searching the list and then the playback of the list starts.

- ☐ The link play mode is cancelled by pressing the **BAND/ESC** or **LIST** button when “Searching” flashes.
- ☐ If the related albums or songs are not found, **Not Found** is displayed. ☐

Playing all songs in random order (shuffle all)


● **Touch  All to turn shuffle all on.**

All songs on the iPod will play randomly.

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

Operating the functions from your iPod


You can control the functions by using iPod itself while iPod is connected to the navigation system. Sound can be heard from the car’s speakers, and operation can be conducted from your iPod.


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

This function can be operated with the following iPod models:




- iPod nano second generation
- iPod nano third generation
- iPod nano fourth generation
- iPod classic
- iPod touch first generation
- iPod touch second generation
- iPhone
- iPhone 3G
- iPhone 3GS
- ☐ While this function is in use, even if the ignition key is turned off, the iPod will not be turned off. To turn off power, operate the iPod.

1 Touch Ctrl to switch the control mode.

Each touch of  Ctrl changes the settings as follows:

- :
This navigation system’s iPod function can be operated from the connected iPod.
- No indicator:
This navigation system’s iPod function can be operated from this navigation system.

2 When you select , operate the connected iPod to select a song and play.

- ☐ Switching the control mode to  pauses song playback. Operate the iPod to start playback.
- ☐ Even if the control mode is set to , following functions are available from this navigation system.
 - Adjusting the volume
 - Fast reverse or forward
 - Skip forward or backward
 - Playback and Pause
 - Sound Retriever 




Using Sound Retriever

Sound Retriever function automatically enhances compressed audio and restores rich sound.

Using an iPod

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

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

- : Sound Retriever function (level 1) is activated.
 - : Sound Retriever function (level 2) is activated.
 - No indicator: Sets to off.
- S.Rtrv2** has a stronger effect than **S.Rtrv1** and is more effective when playing back highly compressed audio data. 

Using the function menu



1 Display the “Function Menu” screen.

- For details of the operation, refer to *Displaying the “Function Menu” screen* on page 79.

2 Turn MULTI-CONTROL to select a function.

Turning **MULTI-CONTROL** switches between the functions in the following order:

Play Mode (play mode) — **Shuffle Mode** (shuffle mode) — **Pause** (pause) — **Audio-books** (audiobooks)

- Only **Pause** is available while the control mode is set to iPod .
- For details, refer to *Operating the functions from your iPod* on the previous page. 

Setting a repeat play range




1 Display the “Function Menu” screen.

- For details of the operation, refer to *Displaying the “Function Menu” screen* on page 79.

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

3 Press the centre of MULTI-CONTROL to set.

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

- **Repeat All:** Repeats all songs in the selected list.
 - **Repeat One:** Repeats just the current song.
- Icons below are displayed as the repeat play indicator.
- When the setting is “Repeat All”,  appears.
- When the setting is “Repeat One”,  appears. 

Playing songs in random order (shuffle)

This function shuffles songs or albums and plays them in random order.


1 Display the “Function Menu” screen.

- For details of the operation, refer to *Displaying the “Function Menu” screen* on page 79.


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

3 Press the centre of MULTI-CONTROL to set.

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

- **Shuffle Off:** Plays back songs in normal order.
- **Shuffle Songs:** Plays back songs in random order within the selected list.
- **Shuffle Albums:** Selects an album randomly, and then plays back all songs in that album in order. 

Playback and Pause


- 1 **Display the “Function Menu” screen.**
 - ➔ For details of the operation, refer to *Displaying the “Function Menu” screen* on page 79.
- 2 **Turn MULTI-CONTROL to select “Pause”.**
- 3 **Press the centre of MULTI-CONTROL to set.**
- 4 **Press the centre of MULTI-CONTROL to switch between “On” and “Off”.** 

Setting the audiobook play speed

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

- 1 **Display the “Function Menu” screen.**
 - ➔ For details of the operation, refer to *Displaying the “Function Menu” screen* on page 79.
- 2 **Turn MULTI-CONTROL to display “Audiobooks”.**
- 3 **Press the centre of MULTI-CONTROL repeatedly until the desired setting appears in the display.**

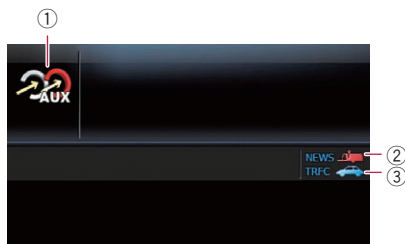
Each press of **MULTI-CONTROL** changes the settings as follows:

- **Normal:**
Plays back audiobooks in normal speed.
- **Faster:**
Plays back audiobooks faster than normal speed.
- **Slower:**
Plays back audiobooks slower than normal speed. 

Using the AUX source

A stereo mini plug cable lets you connect your navigation system to auxiliary equipment. For more details, refer to the stereo mini plug cable owner's manual.

Reading the screen



- ① **Source icon**
Shows which source has been selected.
- ② **NEWS indicator**
Shows when the set news programme is received.
- ③ **TRFC indicator**
Shows when a TP station (a station that broadcasts traffic information) is tuned in.

Selecting "AUX" as the source

- 1 **Turn on the "AUX" source.**
➔ For details, refer to *Switching the auxiliary setting* on page 115.
- 2 **Press the SRC/OFF button to display the "AUX" screen.**
➔ For details, refer to *Switching the audio source* on page 77.

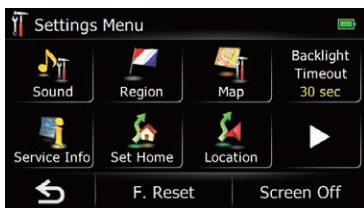
Displaying the “Settings Menu” screen

1 Touch [Home] on the map screen.

The “Top Menu” screen appears.

2 Touch [Settings].

The “Settings Menu” screen appears.



3 Touch the desired option.

- Touching or on the right of screen allows you to see the next or previous page.

Setting the volume for navigation system

The sound volume for the navigation can be set.

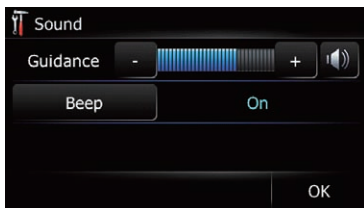
1 Display the “Settings Menu” screen.

- ⇒ For details of the operations, refer to *Displaying the “Settings Menu” screen* on this page.

2 Touch [Sound].

The “Sound” screen appears.

3 Touch [+] or [-] next to “Guidance”.



Controls the master volume of both the navigation guidance and beep. When set to , guidance is output. When set to , no guidance is output.

- Touch [Beep].

Each time you touch the key changes that setting.

- **On** (default):
A beep sounds.
- **Off**:
The beep sound is muted.

Customising the regional settings

Selecting the language

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

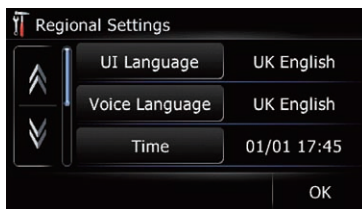
1 Display the “Settings Menu” screen.

- ⇒ For details of the operations, refer to *Displaying the “Settings Menu” screen* on this page.

2 Touch [Region].

The “Regional Settings” screen appears.

3 Touch [UI Language].



The “Select Program Language” screen appears.

4 Touch the desired language.

After the language is selected, the previous screen returns.

Customising preferences

5 Touch [Voice Language].

The “**Voice Language Selection**” screen appears.

6 Touch the desired language.

After the language is selected, the previous screen returns.

7 Touch [OK] on the “Regional Settings” screen.

The navigation system restarts.

Setting the time difference

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

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on the previous page.

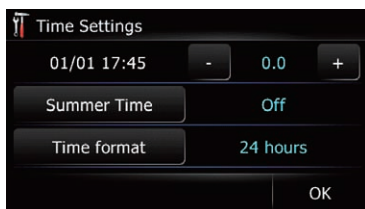
2 Touch [Region].

The “**Regional Settings**” screen appears.

3 Touch [Time].

The “**Time Settings**” screen appears.

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



The time difference between the time originally set in the navigation system (Central European Time) and the current location of your vehicle is shown. If necessary, adjust the time difference. Touching [+] or [-] changes the time difference display in half-hour increments.

The time difference can be set from **-4** to **+9** hours.

5 Touch [Summer Time].

If necessary, set to summer time. Summer time setting is off by default. Touch [Summer Time] to change the setting if you are in the summer time period.

6 Touch [Time format].

Each time you touch the key changes that setting.

- **24 hours** (default):
Changes the display to 24-hour format.
- **12 hour**:
Changes the display to 12-hour format with am/pm.

Changing the unit between km and miles

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

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on the previous page.

2 Touch [Region].

The “**Regional Settings**” screen appears.

3 Touch [km / mile].

Each time you touch the key changes that setting.

- **km** (default):
Shows distance in kilometres.
- **mile**:
Shows distance in miles.
- **Mile&Yard**:
Shows distance in miles and yards.

Changing the virtual speed of the vehicle

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

Customising preferences

- ❑ Changing “**km / mile**” settings clears and resets input values to the default setting.
- ➔ For details, refer to *Changing the unit between km and miles* on the previous page.

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 104.

2 Touch [Region].

The “**Regional Settings**” screen appears.

3 Touch [Speed].

The “**Average Speed Settings**” screen appears.

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



- ❑ The estimated time of arrival is not necessarily estimated based on this speed value.

5 Touch [OK].

The settings are completed.

Setting the keyboard layout

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

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 104.

2 Touch [Region].

The “**Regional Settings**” screen appears.

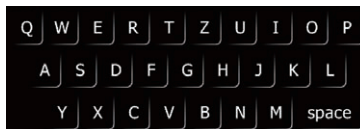
3 Touch [Keyboard].

Each time you touch the key changes that setting.

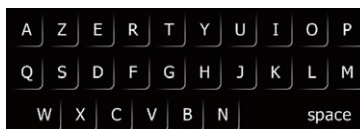
- [QWERTY] (default):



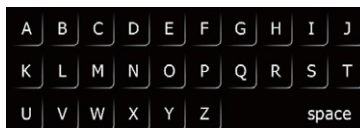
- [QWERTZ]:



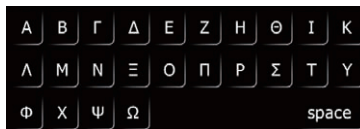
- [AZERTY]:



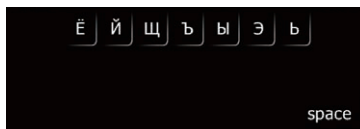
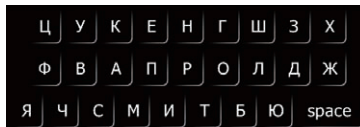
- [ABC]:



- [Greek]:



- [Cyrillic]:



Customising preferences

Customising the map screen settings

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

Displaying POI on the map

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

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

1 Display the "Settings Menu" screen.

- ➔ For details of the operations, refer to *Displaying the "Settings Menu" screen* on page 104.

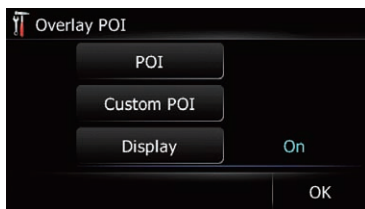
2 Touch [Map].

The map setting screen appears.

3 Touch [Overlay POI].

The "Overlay POI" screen appears.

4 Touch [Display] to change the setting to "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.)

5 Touch [POI].

The "Overlay POI (Main Category)" screen appears.

- Categories that are already set will have a blue tick mark.

6 Touch the main category you want.





A list of subcategories under the selected main category appears.


- Categories that are already selected will have a blue tick mark.

7 Touch the subcategory to display.



A red tick mark appears next to the selected category. To cancel the selection, touch the entry again.

If there are more detailed categories within the subcategory,  is active. If you select the subcategory that has more detailed categories, all detailed categories within the subcategory is selected and  becomes inactive.

- Touch .

The detailed category list is displayed. Touch the item and touch **[OK]** to complete selecting the detailed categories you want to display.

- When only a few types of the detailed categories are selected, blue tick marks will appear.

8 Touch [OK].





The “**Overlay POI (Main Category)**” screen returns.

If you want to select or deselect other items, repeat these steps as many as necessary.

9 To finish the selection, touch [OK] in the “Overlay POI (Main Category)” screen.

Switching the map between 2D and 3D

- You can touch  or  on the map screen to switch between 2D and 3D.
 - ➔ For details of the operations, refer to *Switching the map between 2D and 3D* on page 29.

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 104.

2 Touch [Map].

The map setting screen appears.

3 Touch [View Mode].

Each time you touch the key changes that setting.

- **2D** (default):
Displays the 2D map screen.
- **3D**:
Displays the 3D map screen.

Displaying manoeuvres

Selects whether to display or hide manoeuvres on the map.

- ➔ For details, refer to *How to read the map screen* on page 26.

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 104.

2 Touch [Map].

The map setting screen appears.

3 Touch [Show Manoeuvre].

Each time you touch the key changes that setting.

- **View** (default):
Displays manoeuvres on the map.
- **Hide**:
Hides manoeuvres on the map.

Changing the setting of navigation interruption screen

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

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 104.

2 Touch [Map].

The map setting screen appears.

3 Touch [AV Guide Mode].

Each time you touch the key changes that setting.

- **On** (default):
Switches from the AV operation screen to the navigation screen.
- **Off**:
Does not switch the screen.
- This setting is effective only when “**Close Up View**” is set to “**On**”.

Customising preferences

Setting the map colour 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 colour.

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 104.

2 Touch [Map].

The map setting screen appears.

3 Touch [Day/Night Display].

Each time you touch the key changes that setting.

- **Automatic** (default):
You can change the colours 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 colours.
- To use this function with “Automatic”, the orange/white lead of the navigation system must be connected correctly.

Changing the road colour

You can set the road colour to bluish or red-dish.

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 104.

2 Touch [Map].

The map setting screen appears.

3 Touch [Road Colour].

Each time you touch the key changes that setting.

- **Red** (default):
Changes to red based road colours.
- **Blue:**
Changes to blue based road colours.

Setting the auto-zoom display

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

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 104.

2 Touch [Map].

The map setting screen appears.

3 Touch [Close Up View].

Each time you touch the key changes that setting.

- **On** (default):
Switches to an enlarged map.
Displays the close up view with the 2D map.
- **Off:**
Does not switch to an enlarged map.

Setting the “Favourites” icon display

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

- “Favourites” icons are displayed when the map scale is 20 kilometres (10 miles) or less.
- ➔ For details, refer to *Editing the entry in the “Favourites” list* on page 48.

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 104.

2 Touch [Map].

The map setting screen appears.

3 Touch [Favourites Icon].

Each time you touch the key changes that setting.

- **On** (default):
Displays the “Favourites” icon on the map.
- **Off:**
Hides the “Favourites” icon on the map.

Setting the speed limit display

Selects whether to display or hide the speed limit of the current road.



Speed Limit

1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 104.

2 Touch [Map].

The map setting screen appears.

3 Touch [Show Speed Limit].

Each time you touch the key changes that setting.

- **View:**
Displays the speed limit on the map.
- **Hide (default):**
Hides the speed limit on the map.

Displaying the traffic notification icon

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 56.

1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 104.

2 Touch [Map].

The map setting screen appears.

3 Touch [Traffic Incident].

Each time you touch the key changes that setting.

- **View (default):**
Displays the icons on the map.
- **Hide:**
Hides the icons on the map.

Setting the current street name display

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

1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 104.

2 Touch [Map].

The map setting screen appears.

3 Touch [Current Street].

Each time you touch the key changes that setting.

- **View (default):**
Displays the street name (or city name) on the map.
- **Hide:**
Hides the street name (or city name) on the map.

Displaying the fuel consumption information

Selects whether to display Eco-Meter, indicating the fuel consumption information, on the map.

1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 104.

2 Touch [Map].

The map setting screen appears.

3 Touch [Eco Meter].

Each time you touch the key changes that setting.

- **On (default):**

Customising preferences

Displays Eco-Meter on the map.

- **Off:**
Hides Eco-Meter on the map.

Setting the power-saving function

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

- This setting can only be changed when the detachable device is removed from the head unit.

1 Display the "Settings Menu" screen.

- ➔ For details of the operations, refer to *Displaying the "Settings Menu" screen* on page 104.

2 Touch [Backlight Timeout].

Each time you touch the key changes that setting.

- **Never:**
Deactivates the power-saving feature of the screen backlight.
- **30 sec (default):**
Dims the backlight automatically if you do nothing for 30 seconds.

Checking the version information

1 Display the "Settings Menu" screen.

- ➔ For details of the operations, refer to *Displaying the "Settings Menu" screen* on page 104.

2 Touch [Service Info].

The "Service Information Screen" screen appears.

3 Check the version information.

Registering and editing your home

When registering your home location, touch [Set Home].

- ➔ For details, refer to *Registering and editing your home* on page 50.

Correcting the current location

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

1 Display the "Settings Menu" screen.

- ➔ For details of the operations, refer to *Displaying the "Settings Menu" screen* on page 104.

2 Touch [Location].

3 Scroll to the position where you want to set, then touch [OK].

Checking the connections of leads

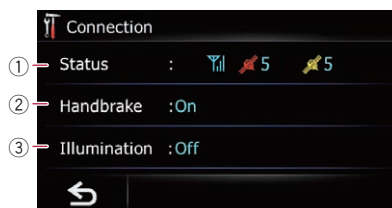
Check that leads are properly connected between the navigation system and the vehicle. Please also check whether they are connected in the correct positions.

1 Display the "Settings Menu" screen.

- ➔ For details of the operations, refer to *Displaying the "Settings Menu" screen* on page 104.

2 Touch [Connection].

The "Connection" screen appears.



① Status


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

Colour	Signal communication	Used in positioning
Orange	Yes	Yes
Yellow	Yes	No

② Handbrake

When the handbrake is applied, "On" is displayed. When the handbrake is released, "Off" is displayed.

③ 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.) 

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

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

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

Stylus (supplied with the navigation system)

**1 Display the "Settings Menu" screen.**

- For details of the operations, refer to *Displaying the "Settings Menu" screen* on page 104.

2 Touch [Calibrate].


A message confirming whether to start the calibration appears.

3 Touch and hold the target that point to the centre and corners of the LCD screen.

The target indicates the order.

4 Touch anywhere on the screen.

The adjusted position data will be saved.

- Do not turn off the engine while saving the adjusted position data. 

Adjusting the screen brightness

You can set the screen brightness for each of the following situations.

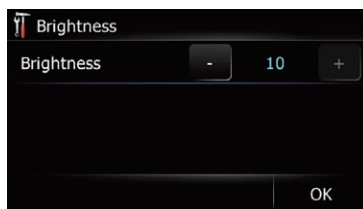
- When the detachable device is attached to the head unit and the vehicle lights are off.
- When the detachable device is attached to the head unit and the vehicle lights are on.
- When the detachable device is not attached to the head unit.

1 Display the "Settings Menu" screen.

- For details of the operations, refer to *Displaying the "Settings Menu" screen* on page 104.

2 Touch [Brightness].

The "Brightness" screen appears.

3 Touch [+] or [-] to adjust the brightness.

Customising preferences

Each time you touch **[+]** or **[-]** increases or decreases the level. **10** to **0** is displayed as the level is increased or decreased.

4 Touch [OK].

The adjustment is completed.

Recording your travel history

Activating the track logger enables you to record your driving history (called “track log” below). You can review the travel history later.

- If an SD memory card is inserted into the SD card slot, the track logs will be stored in the SD memory card.
- When the detachable device is removed from the head unit, this function is not available.

1 Insert an SD memory card into the SD card slot.

- ➔ For details of the operation, refer to *Inserting an SD memory card* on page 11.

2 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 104.

3 Touch [Drive Log].

The “**Drive Log**” screen appears.

4 Touch [Drive Log].

Each time you touch the key changes that setting.

- **On:**
You can export your track log to the SD memory card.
- **Off** (default):
You cannot export your track log to the SD memory card.

5 Touch [Type].

Each time you touch the key changes that setting.

- **Private** (default):
Changes the track log attribute to “**Private**”.
- **Business:**

Changes the track log attribute to “**Business**”.

- **Other:**
Changes the track log attribute to “**Other**”.
- While the setting is “**On**”, the navigation system continues to store the track logs in the inserted SD memory card.

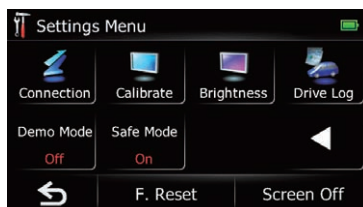
Using the demonstration guidance

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

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 104.

2 Touch [Demo Mode].



Each time you touch the key changes that setting.

- **On:**
Repeats demo drive.
- **Off** (default):
Demo Mode is set off.

Setting the safe mode

For safety reasons, you can limit the functions that are available while your vehicle is in motion.

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 104.

2 Touch [Safe Mode].

Each time you touch the key changes that setting.

- **On** (default):
Activates the safe mode function.
- **Off**:
Deactivates the safe mode function.

Restoring the default setting

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

- Some data remains. Be sure to read *Returning the navigation system to the default or factory settings* first.
 - ➔ For detailed information about the items which would be erased, refer to *Returning the navigation system to the default or factory settings* on page 121.

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 104.

2 Touch [F. Reset].

The message confirming whether to restore the settings appears.

3 Touch [Yes].

Turning off the screen

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

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 104.

2 Touch [Screen Off].

The screen is turned off.

- Touch anywhere on the screen to turn it back on.

Displaying the “Initial Setting” screen

To customise the initial settings, display the “Initial Setting” screen.

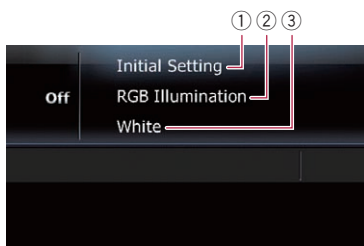
1 Press the MODE button when the map of the current location is displayed.

The audio operation screen appears.

2 Press and hold the SRC/OFF button until the audio source turns off.

- ➔ For details, refer to *Switching the audio source* on page 77.

3 Press the center of MULTI-CONTROL and hold until the initial setting screen appears.



- ① Screen title
- ② Function currently selected
- ③ Setting value

4 Turn MULTI-CONTROL to select one of the initial settings.

Turning **MULTI-CONTROL** switches between the functions in the following order:
RGB Illumination (illumination setting) — **FM Step** (FM tuning step) — **Auto PI** (auto PI seek) — **AUX** (auxiliary input) — **S/W Control** (subwoofer controller) — **Preout** (rear output controller) — **Guidance** (sound muting/attenuation)

Customising preferences

Setting the illumination colour

The illumination colour can be selected from 10 different colours. Furthermore, the illumination colour can be switched between these 10 colours in order.


1 Display the "Initial Setting" screen.

- For details, refer to *Displaying the "Initial Setting" screen* on the previous page.

2 Turn MULTI-CONTROL to select "RGB Illumination".

3 Press MULTI-CONTROL left or right to select the desired colour.

White (white) — **Light Green** (light green) — **Green** (green) — **Light Blue** (light blue) — **Blue** (blue) — **Yellow** (yellow) — **Amber** (amber) — **Red** (red) — **Scan** (scan) — **Custom** (custom)

- **Scan:**
Shifts between the eight default colours in sequence gradually.
- **Custom:**
Sets your created colour which is installed from SD as the illumination colour. 

Setting the FM tuning step


Normally the FM tuning step employed by seek tuning is 50 kHz. When **AF** or **TA** is on, the tuning step automatically changes to 100 kHz. It may be preferable to set the tuning step to 50 kHz when **AF** is on.

1 Display the "Initial Setting" screen.

- For details, refer to *Displaying the "Initial Setting" screen* on the previous page.

2 Turn MULTI-CONTROL to select "FM Step".

3 Press the centre of MULTI-CONTROL to switch between "50kHz" and "100kHz".

- The tuning step remains at 50 kHz during manual tuning. 

Using Auto PI Seek for preset stations

The navigation system can automatically search for a different station with the same programming, even during preset recall.

1 Display the "Initial Setting" screen.

- For details, refer to *Displaying the "Initial Setting" screen* on the previous page.

2 Turn MULTI-CONTROL to select "Auto PI".

3 Press the centre of MULTI-CONTROL to switch between "On" and "Off".

Switching the auxiliary setting

It is possible to use auxiliary equipment with the navigation system as the one of sources. Activate the auxiliary setting when using auxiliary equipment connected to the navigation system.

1 Display the "Initial Setting" screen.

- For details, refer to *Displaying the "Initial Setting" screen* on the previous page.

2 Turn MULTI-CONTROL to select "AUX".

3 Press the centre of MULTI-CONTROL to switch between "On" and "Off".

Setting the rear output and subwoofer controller

The navigation system's rear output can be used for a full-range speaker or subwoofer connection. If you switch **S/W Control** to **Rear SP:S/W**, you can connect a rear speaker lead directly to a subwoofer without using an auxiliary amp.

Initially, the navigation system is set for a rear full-range speaker connection

(**Rear SP:F.Range**).

- Both rear speaker leads output and RCA rear output are switched simultaneously in this setting. (When you use the product without RCA rear output, this setting only applies to the rear speaker leads.)

1 Display the "Initial Setting" screen.

- ➔ For details, refer to *Displaying the "Initial Setting" screen* on page 114.

2 Turn MULTI-CONTROL to select "S/W Control".

3 Press the centre of MULTI-CONTROL to switch between "Rear SP:F.Range" and "Rear SP:S/W".

When no subwoofer is connected to the rear speaker leads directly, select "**Rear SP:F.Range**" and proceed to the next operation.

When a subwoofer is connected to the rear speaker leads directly, select "**Rear SP:S/W**" and finish the setting.

4 Turn MULTI-CONTROL to select "Pre-out".

5 Press the centre of MULTI-CONTROL to switch between "Subwoofer" and "Rear".

When no subwoofer is connected or you want to control the subwoofer sound with the external amplifier, select "**Rear**".

When a subwoofer is connected to the RCA output, select "**Subwoofer**".

Switching the sound muting/attenuation

You can select the muting method when the voice guidance is output.

- When you use a mobile phone connected with Bluetooth technology (dialling, talking, incoming call), the audio source volume is always muted independently of this setting.

1 Display the "Initial Setting" screen.

- ➔ For details, refer to *Displaying the "Initial Setting" screen* on page 114.

2 Turn MULTI-CONTROL to select "Guidance".

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

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

- **ATT:**
The audio source is attenuated automatically when the voice guidance is output.
- **Mute:**
The audio source is muted automatically when the voice guidance is output.
- **Normal:**
The audio source volume does not change.
- AV source volume returns to normal when the corresponding action is ended.

Displaying the "Audio Menu" screen

To customise the audio settings, display the "**Audio Menu**" screen.

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

The audio operation screen appears.

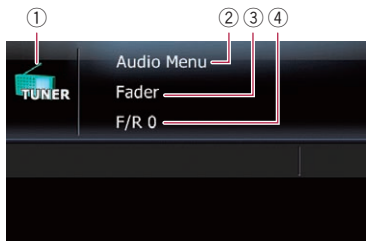
2 Press the centre of MULTI-CONTROL to display the function select screen.

- ➔ For details, refer to *Switching the audio source* on page 77.

Customising preferences

3 Turn **MULTI-CONTROL** to select “Audio Menu”.

4 Press the centre of **MULTI-CONTROL**. The “Audio Menu” screen appears.



- ① **Source icon**
Shows which source has been selected.
- ② **Screen title**
- ③ **Function currently selected**
- ④ **Setting value**

5 Turn **MULTI-CONTROL** to select one of the initial settings.

Turning **MULTI-CONTROL** switches between the functions in the following order:

Fader (balance adjustment) — **Preset Equalizer** (equaliser adjustment) — **PEQ Setting1** (equaliser band and the level of equaliser band) — **PEQ Setting2** (frequency and Q factor) — **Loudness** (loudness) — **Sub-Woofe1** (phase of subwoofer output) — **Sub-Woofe2** (subwoofer setting) — **Bass Booster** (bass booster) — **HPF** (high pass filter) — **SLA** (source level adjustment)

- When “**Rear SP:F.Range**” is selected in “**S/W Control**” and “**Rear**” is selected in “**Preout**”, **SubWoofe1** cannot be adjusted.
- When “**SubWoofe1**” is turned off, “**Sub-Woofe2**” cannot be adjusted.

Using balance adjustment

You can select a fader/balance setting that provides an ideal listening environment in all occupied seats.

- When “**Rear SP:S/W**” is selected in “**S/W Control**”, front/rear speaker balance cannot be adjusted.
 - ➔ For details, refer to *Setting the rear output and subwoofer controller* on the previous page.

1 **Display the “Audio Menu” screen.**

- ➔ For details, refer to *Displaying the “Audio Menu” screen* on the previous page.

2 **Turn **MULTI-CONTROL** to select “Fader”.**

- If the balance setting has been previously adjusted, **Balance** will be displayed.

3 **Press **MULTI-CONTROL** up or down to adjust front/rear speaker balance.**

Each time **MULTI-CONTROL** is pressed up or down, the front/rear speaker balance moves towards the front or rear.

“**Front 15**” to “**Rear 15**” is displayed as the front/rear speaker balance moves from front to rear.

Setting “**F/R 0**” is correct when using a two speaker system.

4 **Press **MULTI-CONTROL** left or right to adjust left/right speaker balance.**

Each time **MULTI-CONTROL** is pressed left or right, the left/right speaker balance moves towards the left or right.

“**Left 15**” to “**Right 15**” is displayed as the left/right speaker balance moves from left to right.

Using the equaliser

The equaliser lets you adjust equalisation to match vehicle interior acoustic characteristics as desired.

Recalling equaliser curves

There are six stored equaliser curves that you can easily recall at any time. Here is a list of the equaliser curves:

Equaliser curve

SuperBass is a curve in which only low-pitched sound is boosted.

Powerful is a curve in which low-pitched and high-pitched sounds are boosted.

Natural is a curve in which low-pitched and high-pitched sounds are slightly boosted.

Vocal is a curve in which the midrange, which is the human vocal range, is boosted.

Custom is an adjusted equaliser curve that you create.

Flat is a flat curve in which nothing is boosted.

1 Display the "Audio Menu" screen.

- ➔ For details, refer to *Displaying the "Audio Menu" screen* on page 116.

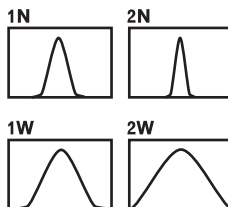
2 Turn MULTI-CONTROL to select "Preset Equalizer".

3 Press MULTI-CONTROL left or right to select an equaliser curve.

Adjusting the equaliser curves

You can adjust the currently selected equaliser curve setting as desired. Adjustments can be made with a 3-band parametric equaliser.

- ☐ If you make adjustments, **Custom** curve is updated.
- **Band:**
You can select the equaliser band.
- **Frequency:**
You can select which frequency to set as the centre frequency.
- **Level:**
You can select the decibel (dB) level of the selected EQ.
- **Q:**
You can select the details of the curve characteristics. (The following figure shows the characteristic image.)



1 Display the "Audio Menu" screen.

- ➔ For details, refer to *Displaying the "Audio Menu" screen* on page 116.

2 Turn MULTI-CONTROL to select "PEQ Setting1".

3 Press MULTI-CONTROL left or right to select the equaliser band to adjust.

Each time **MULTI-CONTROL** is pressed left or right, the equalisation band is selected in the following order:

Low — Mid — High

4 Press MULTI-CONTROL up or down to adjust the level of the equaliser band.

Each time **MULTI-CONTROL** is pressed up or down, the level of the equalisation band increases or decreases. "+6" to "-6" is displayed as the level is increased or decreased.

5 Turn MULTI-CONTROL to select "PEQ Setting2".

6 Press MULTI-CONTROL left or right to select the desired frequency.

Press **MULTI-CONTROL** left or right until the desired frequency appears in the display.

Low: 40 Hz — 80 Hz — 100 Hz — 160 Hz

Mid: 200 Hz — 500 Hz — 1 kHz — 2 kHz

High: 3 kHz — 8 kHz — 10 kHz — 12 kHz

7 Press MULTI-CONTROL up or down to select the desired Q factor.

Press **MULTI-CONTROL** up or down until the desired Q factor appears in the display.

2W — 1W — 1N — 2N

8 Repeat above adjustments.

If necessary, you can adjust other equalisation bands successively. ☐

Customising preferences

Adjusting loudness

Loudness compensates for deficiencies in the low- and high-sound ranges at low volume.

1 Display the “Audio Menu” screen.

- ➔ For details, refer to *Displaying the “Audio Menu” screen* on page 116.

2 Turn MULTI-CONTROL to select “Loudness”.

3 Press the centre of MULTI-CONTROL to turn loudness on.

Loudness level (e.g., **Mid**) appears in the display.

- To turn loudness off, press **MULTI-CONTROL** again.

4 Press MULTI-CONTROL left or right to select a desired level.

Each time **MULTI-CONTROL** is pressed left or right, level is selected in the following order:

Low — **Mid** — **High**

5 Turn MULTI-CONTROL to select “Sub-Woofer2”.

6 Press MULTI-CONTROL left or right to select cut-off frequency.

Each time **MULTI-CONTROL** is pressed left or right, frequencies are selected in the following order:

50 Hz — **63 Hz** — **80 Hz** — **100 Hz** — **125 Hz**

7 Press MULTI-CONTROL up or down to adjust the output level of the subwoofer.

Each time **MULTI-CONTROL** is pressed up or down, subwoofer level increases or decreases. “+ 6” to “- 24” is displayed as the level is increased or decreased.

Using subwoofer output

The navigation system is equipped with a subwoofer output mechanism, which can be turned on or off.

1 Display the “Audio Menu” screen.

- ➔ For details, refer to *Displaying the “Audio Menu” screen* on page 116.

2 Turn MULTI-CONTROL to select “Sub-Woofer1”.

3 Press the centre of MULTI-CONTROL to turn subwoofer output on.

- To turn subwoofer output off, press **MULTI-CONTROL** again.

4 Press MULTI-CONTROL left or right to set the phase of subwoofer output.

Each time **MULTI-CONTROL** is pressed left or right, the phase of subwoofer output is selected in the following order:

Reverse (Reverse phase) — **Normal** (Normal phase)

Enhancing bass (Bass Booster)

You can enhance bass sounds that are often muted by driving noise.

1 Display the “Audio Menu” screen.

- ➔ For details, refer to *Displaying the “Audio Menu” screen* on page 116.

2 Turn MULTI-CONTROL to select “Bass Booster”.

3 Press MULTI-CONTROL up or down to select a desired level.

“0” to “+6” is displayed as the level is increased or decreased.

Using the high pass filter

When you do not want low sounds from the subwoofer output frequency range to play from the front or rear speakers, activate **HPF** (high pass filter). Only frequencies higher than those in the selected range are output from the front or rear speakers.

1 Display the “Audio Menu” screen.

- ➔ For details, refer to *Displaying the “Audio Menu” screen* on page 116.

2 Turn MULTI-CONTROL to select “HPF”.

3 Press the centre of MULTI-CONTROL to turn high pass filter on.

- To turn high pass filter off, press **MULTI-CONTROL** again.

4 Press MULTI-CONTROL left or right to select cut-off frequency.

Each time **MULTI-CONTROL** is pressed left or right, frequencies are selected in the following order:

50 Hz — 63 Hz — 80 Hz — 100 Hz — 125 Hz

Adjusting source levels

SLA (source level adjustment) lets you adjust the volume level of each source to prevent radical changes in volume when switching between sources.

- Settings are based on the FM tuner volume level, which remains unchanged.

1 Compare the FM tuner volume level with the level of the source you wish to adjust.

2 Display the “Audio Menu” screen.

- ➔ For details, refer to *Displaying the “Audio Menu” screen* on page 116.

3 Turn MULTI-CONTROL to select “SLA”.

4 Press MULTI-CONTROL up or down to adjust the source volume.

Each time **MULTI-CONTROL** is pressed up or down, source volume increases or decreases. “+4” to “-4” is displayed as the source volume is increased or decreased.

- The different source volume level can be set between **iPod** and **USB**.
- The source volume level for **MW/LW** can be set separately from **FM**.

Replicating the settings

You can import settings you have made on the utility programme *navgate FEEDS* which is available separately to the navigation system.

- The utility programme *navgate FEEDS* is available from our website. For details, refer to the information on our website.

1 Use *navgate FEEDS* to replicate the settings and store them on an SD memory card.

2 Insert an SD memory card into the SD card slot.

- ➔ For details of the operation, refer to *Inserting an SD memory card* on page 11.

3 Touch [Home] on the map screen and then touch [Navigation].

- ➔ For details of the operations, refer to *Screen switching overview* on page 22.

4 Touch [Cpy Setting].

A message confirming whether to update the settings appears.

5 Touch [Yes].

Update starts.

After the settings are updated, a message confirming whether to restart the navigation system appears.

6 Touch [OK].

The navigation system restarts. □

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.

- ➔ For details, refer to *Setting items to be deleted* on the next page.
- **Method 1: Press the RESET button.**
Pressing the **RESET** button clears almost all settings of the audio function.
➔ For details, refer to *Resetting the micro-processor* on page 8.
- **Method 2: Touch [F. Reset].**
➔ For details, refer to *Restoring the default setting* on page 114.
- **Method 3: Touch [Reset] on the “Clear Data/Setting” screen.**
➔ For details, refer to *Displaying the “Clear Data/Setting” screen* on page 123.
- **Method 4: Touch [Clear user information] on the “Clear Data/Setting” screen.**
➔ For details, refer to *Displaying the “Clear Data/Setting” screen* on page 123.

Setting items to be deleted

The items to be deleted vary depending on the reset method. The items listed in the following table return to the default or factory settings. Any items not listed below will be retained.

However, if you carry out [Clear user information], all the settings related to the navigation function including the items not listed below are deleted.

— : The setting will be retained.

✓: The setting will be cleared and returned to the default or factory settings.

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 info	—	✓	✓	✓
[Navigation]	Point registered in Favourites	—	—	—	✓
	Sorting order selected in [Favourites]	—	✓	✓	✓
	[History]	—	—	—	✓
	[Fuel details]	—	✓	✓	✓
	Traffic Settings in Traffic Menu	—	✓	✓	✓
	Driving data of Eco Graph	—	✓	✓	✓
	Eco Settings	—	✓	✓	✓
[Settings] menu	[UI Language], [Voice Language]	—	—	✓	✓
	[Time]	—	—	✓	✓
	Set Home	—	—	—	✓
	[Demo Mode]	✓	✓	✓	✓
Phone Menu (*1)	Other settings	—	✓	✓	✓
	[Contacts]	—	✓	✓	✓
	[Volume]	—	✓	✓	✓
	[Setting]	—	✓	✓	✓
	Call histories	—	✓	✓	✓

(*1) All stored data of 3 users is deleted.

Other functions

Audio functions		Method 1	Method 2	Method 3	Method 4
Volume setting for audio sources, TA volume		✓ (*2)	—	—	—
Initial Settings	All settings	✓ (*2)	—	—	—
Audio Menu	All settings	✓ (*2)	—	—	—
TUNER, iPod	All settings (*3)	✓ (*2)	—	—	—
CD, USB	All settings	✓ (*2)	—	—	—

(*2) Only when the detachable device is attached to the head unit, settings are cleared by the pressing the **RESET** button.

(*3) All settings including the setting on "**Function Menu**" are cleared.

Displaying the "Clear Data/Setting" screen

- ❑ Be sure to read "*Setting items to be deleted*" before you perform this operation.

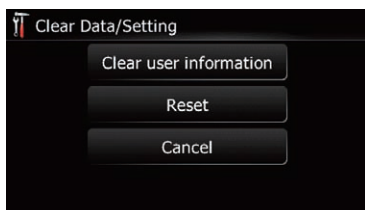
1 Display the "Settings Menu" screen.

- ➔ For details of the operations, refer to *Displaying the "Settings Menu" screen* on page 104.

2 Touch and hold [F. Reset].

The "Clear Data/Setting" screen appears.

3 Touch [Clear user information] or [Reset].



The message confirming whether to erase the data appears.

4 Touch [Yes].

The recorded contents are cleared.

- ❑ You can also display the "Clear Data/Setting" screen by pressing and holding the **MODE** button while splash screen appears. ■

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. If a solution to your problem cannot be found here, contact your dealer or the nearest authorised Pioneer service facility.

Problems with the navigation screen

Symptom	Cause	Action (Reference)
The 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 rating.
	Noise and other factors are causing the built-in microprocessor to operate incorrectly.	Press the RESET button. (Page 8)
The detachable device does not turn on.	The battery of the detachable device is run down.	Charge the battery.
When you use the detachable device removed from the head unit, the battery runs out more rapidly than before.	There's a possibility a new battery is needed.	Contact the nearest authorised Pioneer Service Station.
You cannot position your vehicle on the map without a significant positioning error.	The GPS aerial is in an unsuitable location.	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Check the GPS signal reception and the position of the GPS aerial if necessary.
	Obstacles are blocking signals from the satellites.	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Check the GPS signal reception and the position of the GPS aerial if necessary, or continue driving until reception improves. Keep the aerial clear.
	The position of satellites relative to your vehicle is inadequate.	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Continue driving until reception improves.
	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.)	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Wait until reception improves.

Appendix

Symptom	Cause	Action (Reference)
You cannot position your vehicle on the map without a significant positioning error.	If a vehicle phone or mobile phone is used near the GPS aerial, GPS reception may be lost temporarily.	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. When using a mobile phone, keep the aerial of the mobile phone away from the GPS aerial.
	Something covers the GPS aerial.	Do not cover the GPS aerial with spray paint or vehicle wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals.
"Eco Graph" is not available.	The navigation system is unable to obtain past average fuel mileage data, so "Eco Graph" cannot be displayed.	Drive about 10 km on a road without obstructions. Then park your vehicle in a safe place, turn off the navigation system and turn the power to the navigation system back on.
The map colour does not switch automatically between daytime and nighttime.	"Day/Night Display" is set to "Day".	Check "Day/Night Display" setting and make sure "Automatic" is selected. (Page 109)
	The orange/white lead is not connected.	Check the connection.
The screen is too bright.	An improper value has been set on "Brightness".	Check the settings. (Page 112)
The display is very dim.	An improper value has been set on "Brightness".	Check the settings. (Page 112)
No sounds of audio source are produced. The volume level will not rise.	The volume level is low.	Adjust the volume level.
	A speaker lead is disconnected.	Check the connection.
The volume of navigation guidance and beeps cannot be adjusted.	MULTI-CONTROL is used to adjust the volume.	Turn the volume up or down using [Sound] on the "Settings Menu" screen. (Page 104)
The person on the other end of the phone call cannot hear the conversation due to an echo.	The voice from the person on the other end of the phone call is output from the speakers and then picked up by the microphone again, creating an echo.	Use the following methods to reduce the echo: —Lower the volume on the receiver —Have both parties pause slightly before speaking
There's no picture.	The backlight of the LCD panel is turned off.	Turn on the backlight. (Page 114)
There is no response when the touch panel keys are touched, or a different key responds.	The touch panel keys deviate from the actual positions that respond to your touch for some reason.	Perform touch panel calibration. (Page 112)
The USB storage device cannot be used.	The USB storage device has been removed immediately after plugging it.	Park your vehicle in a safe place, and turn 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.
The USB storage device cannot be used.	The USB storage device has been removed immediately after plugging it.	Park your vehicle in a safe place, and turn 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.

Appendix

Problems in the audio screen

Symptom	Cause	Action (Reference)
CD playback is not possible.	The disc is inserted upside down.	Insert the disc with the label upward.
	The disc is dirty.	Clean the disc.
	The disc is cracked or otherwise damaged.	Insert a normal, round disc.
	The files on the disc are an irregular file format.	Check the file format.
	The disc format cannot be played back.	Replace the disc.
	The loaded disc is a type this system cannot play.	Check what type of disc it is. (For more cautions about handling each type of media, refer to Page 135.)
The audio skips.	The navigation system is not firmly secured.	Secure the navigation system firmly.
No sounds are produced. The volume level will not rise.	Cables are not connected correctly.	Connect the cables correctly.
	The system is paused or performing, fast reverse or forward during the audio playback.	There is no sound on fast reverse or forward.
iPod cannot be operated.	The iPod is frozen.	<ul style="list-style-type: none"> • Reconnect the iPod with the USB interface cable for iPod. • Update the iPod software version.
	An error has occurred.	<ul style="list-style-type: none"> • Reconnect the iPod with the USB interface cable for iPod. • Park your vehicle in a safe place, and apply the handbrake. Turn the power off and then turn the power on. If this does not solve the problem, press RESET button on the navigation system. • Update the iPod software version.

Problems with the phone screen

Symptom	Cause	Action (Reference)
Dialling is not possible because the touch panel keys for dialling are inactive.	Your phone is out of range for service.	Retry after re-entering the range for service.
	The connection between the mobile phone and the navigation system cannot be established now.	Perform the connection process.

If the screen becomes frozen...

Park your vehicle in a safe place, and apply the handbrake. Press **RESET** button on the navigation system.



Appendix

Messages and how to react to them

The following messages may be displayed by your navigation system. Refer to the table below to identify the problem, then take the suggested corrective action.

There are occasions when you may see error messages other than those shown here. In such a case, follow the instructions given on the display.

Messages for navigation functions

Message	When	What to do (Reference)
Preparing to start up system... please wait	When the navigation system starts, the message is displayed if the remaining battery power of the detachable device is low.	<ul style="list-style-type: none"> • Wait until the message "Ready to start up system." appears. After the message is displayed, the navigation system restarts. • Consult the nearest authorised Pioneer service station if this message persists.
Dataloading failed.	You may have transferred the data from your mobile phone in a format cannot be received by the navigation system.	<ul style="list-style-type: none"> • Select a suitable item and format, then retry. (Page 71) • Connect your mobile phone with another method again and retry. (Page 58)
Application startup failed. Check file on SD card. Press "OK" to exit Application Mode.	The application is not stored on the SD memory card.	Use the utility programme <i>navgate FEEDS</i> to confirm the proper solution.
	The application failed to download properly.	Use the utility programme <i>navgate FEEDS</i> to confirm the proper solution.
	A file required for application startup is not stored on the SD memory card or is damaged.	Use the utility programme <i>navgate FEEDS</i> to confirm the proper solution.
	The SD memory card is damaged.	Make sure there are no problems with the SD memory card.



Messages for audio functions

When problems occur in the audio source, a message may appear on the display. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists, contact your dealer or your nearest Pioneer Service Centre.

Built-in CD drive

Message	Cause	Action (Reference)
Error-11, 12, 17, 30	Dirty	Clean the disc.
	Scratched disc	Replace the disc.
Error10, 11, 12, 15, 17, 30, A0, CHK CDCORE	Electrical or mechanical	Turn the ignition switch OFF and back ON, or switch to a different source, then back to the CD player.
Error-15	The inserted disc does not contain any data.	Replace the disc.
Error-23	The CD format cannot be played back.	Replace the disc.

Appendix

Message	Cause	Action (Reference)
Error-22	The inserted disc does not contain any files that can be played back.	Replace the disc.
No Audio	The inserted disc does not contain any files that can be played back.	Replace the disc.
TRK Skipped	The inserted disc contains files that are protected by DRM.	Replace the disc.
Protect	All the files on the inserted disc are secured by DRM.	Replace the disc.
Heat	The temperature of the navigation system is out of the normal operating range.	Wait until the unit's temperature returns to within normal operating limits.

USB/iPod

Message	Cause	Action (Reference)
No Audio	The connected USB storage device does not contain any files that can be played back.	Store playable files.
Protect	All the files on the inserted external storage device are secured by DRM.	Store playable files.
TRK Skipped	The protected files are skipped.	Store playable files.
Check USB	The USB connector or USB cable is short-circuited.	Confirm that the USB connector or USB cable is not caught in something or damaged.
	The connected USB storage device consumes more than 500 mA (maximum allowable current).	Disconnect the USB storage device and do not use it. Turn the ignition switch to off, then to ACC or on and then connect the compliant USB storage device.
Error-A1	The connected USB storage device consumes more than 500 mA (maximum allowable current).	Disconnect the USB storage device and do not use it. Turn the ignition switch to off, then to ACC or on and then connect the compliant USB storage device.
CHK CDCORE	Electrical or mechanical	Turn the ignition switch OFF and back ON, or switch to a different source, then back to the USB source.
Error-19	Communication failure	<ul style="list-style-type: none"> • Disconnect the cable from iPod. Once iPod main menu is displayed, connect the cable again. • Disconnect the USB storage device and do not use it. Turn the ignition switch to off, then to ACC or on and then connect the compliant USB storage device. • If the message appears frequently, consult your dealer.

Appendix

Message	Cause	Action (Reference)
Error-16	The iPod is not compatible with this navigation system.	Use an iPod of a compatible version.
	Communication failure	<ul style="list-style-type: none"> • Disconnect the cable from iPod. Once iPod main menu is displayed, connect the cable again. • Disconnect the cable from iPod. Once iPod main menu is displayed, connect the cable again. • If the message appears frequently, consult your dealer.
N/A USB	The iPod is not compatible with this navigation system.	Use an iPod of a compatible version.
	Old version of iPod	Update the iPod version.
	The USB storage device connected to is not supported by this navigation system.	Connect a USB storage device that is USB Mass Storage Class compliant.
NO SONGS	No songs	Transfer songs to iPod.
STOP	No songs in the current list	Select a list that contains the songs.



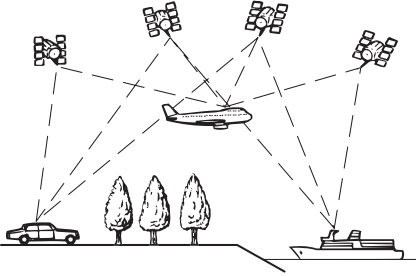
Appendix

Positioning technology

Positioning by GPS

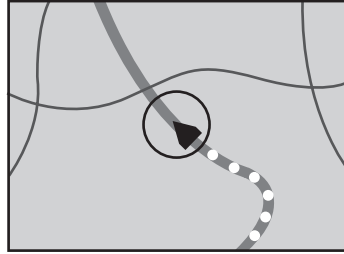
The Global Positioning System (GPS) uses a network of satellites orbiting the Earth. Each of the satellites, which orbit at a height of 21 000 km, continually broadcasts radio signals giving time and position information. This ensures that signals from at least three can be picked up from any open area on the earth's surface.

The accuracy of the GPS information depends on how good the reception is. When the signals are strong and reception is good, GPS can determine latitude, longitude and altitude for accurate positioning in three dimensions. But if signal quality is poor, only two dimensions, latitude and longitude, can be obtained and positioning errors are somewhat greater.

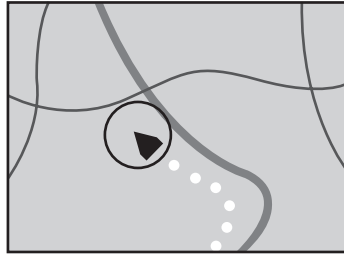


Map matching

As mentioned, the positioning systems used by this navigation system are susceptible to certain errors. Their calculations may, on occasion, place you in a location on the map where no road exists. In this situation, the processing system understands that vehicles travel only on roads, and can correct your position by adjusting it to a nearby road. This is called map matching.



With map matching



Without map matching



Handling large errors

Positioning errors are kept to a minimum by combining GPS and map matching. However, in some situations, these functions may not work properly, and the error may become bigger.

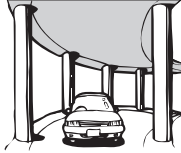
Appendix

When positioning by GPS is impossible

- GPS positioning is disabled if signals cannot be received from more than two GPS satellites.
- In some driving conditions, signals from GPS satellites may not reach your vehicle. In this case, it is impossible for the system to use GPS positioning.



In tunnels or enclosed parking garages



Under elevated roads or similar structures



When driving among high buildings



When driving through a dense forest or tall trees

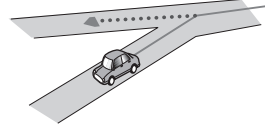
- If a car phone or mobile phone is used near this product, GPS reception may be lost temporarily.
- Do not cover this product with spray paint or vehicle wax, because this may block the reception of GPS signals.
- ☐ If a GPS signal have not been received for a long time, your vehicle's actual position and the current position mark on the map diverge considerably or do not be updated. In such case, once GPS reception is restored, accuracy will be recovered.

Conditions likely to cause noticeable positioning errors

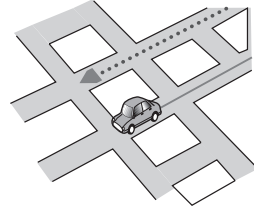
For various reasons, such as the state of the road you are travelling on and the reception status of the GPS signal, the actual position of

your vehicle may differ from the position displayed on the map screen.

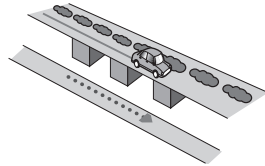
- If you make a shallow turn.



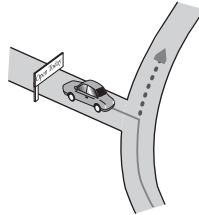
- If there is a parallel road.



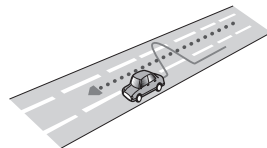
- If there is another road very nearby, such as in the case of an elevated motorway.



- If you take a recently opened road that is not on the map.

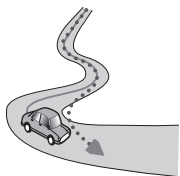


- If you drive in zigzags.

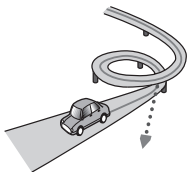


Appendix

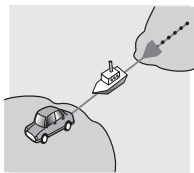
- If the road has a series of hairpin bends.



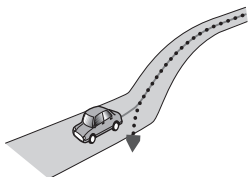
- If there is a loop or similar road configuration.



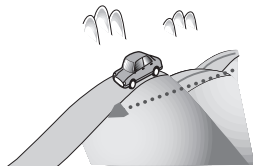
- If you take a ferry.



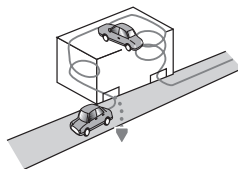
- If you are driving on a long, straight road or a gently curving road.



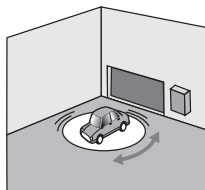
- If you are on a steep mountain road with many height changes.



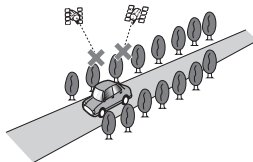
- If you enter or exit a multi-storey car park or similar structure using a spiral ramp.



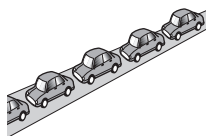
- If your vehicle is turned on a turntable or similar structure.



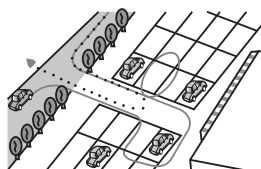
- If trees or other obstacles block the GPS signals for a considerable period.



- If you drive very slowly, or in a start-and-stop manner, as in a traffic jam.

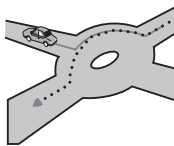


- If you join the road after driving around a large car park.



Appendix

- When you drive around a roundabout.



- When starting driving immediately after starting the engine. ■

Route setting information

Route search specifications

Your navigation system sets a route to your destination by applying certain built-in rules to the map data. This section provides some useful information about how a route is set.

CAUTION

When a route is calculated, the route and voice guidance for the route are automatically set. Also, for day or time traffic regulations, only information about traffic regulations applicable at the time when the route was calculated is considered. One-way streets and street closures may not be taken into consideration. For example, if a street is open during the morning only, but you arrive later, it would be against the traffic regulations so you cannot drive along the set route. When driving, please follow the actual traffic signs. Also, the system may not know some traffic regulations.

- The calculated route is one example of the route to your destination decided by the navigation system while taking the type of streets or traffic regulations into account. It is not necessarily an optimum route. (In some cases, you may not be able to set the streets you want to take. If you need to take a certain street, set a waypoint on that street.)
- If the destination is too far, there may be instances where the route cannot be set.
- During voice guidance, turns and intersections from the motorway are announced. However, if you pass intersections, turns,

and other guidance points in rapid succession, some may delay or not be announced.

- It is possible that guidance may direct you off a motorway and then back on again.
- In some cases, the route may require you to travel in the opposite direction to your current heading. In such cases, you are instructed to turn around, so please turn around safely by following the actual traffic rules.
- In some cases, a route may begin on the opposite side of a railway or river from your actual current location. If this happens, drive towards your destination for a while, and try route calculation again.
- When there is a traffic jam ahead, a detour route may not be suggested if driving through the traffic jam would still be better than taking the detour.
- There may be instances when the starting point, the waypoint and the destination point are not on the highlighted route.
- The number of roundabout exits displayed on the screen may differ from the actual number of roads.

Route highlighting

- Once set, the route is highlighted in bright colour on the map.
- The immediate vicinity of your starting point and destination may not be highlighted, and neither will areas with particularly complex road layouts. Consequently, the route may appear to be cut off on the display, but voice guidance will continue. ■

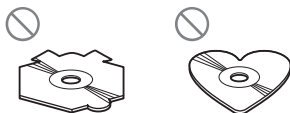
Handling and care of discs

Some basic precautions are necessary when handling your discs.

Appendix

Built-in drive and care

- Use only conventional, fully circular discs. Do not use shaped discs.



- Do not use cracked, chipped, warped, or otherwise damaged discs as they may damage the built-in drive.
- Do not touch the recorded surface of the discs.
- Store discs in their cases when not in use.
- Avoid leaving discs in excessively hot environments including under direct sunlight.
- Do not attach labels, write on or apply chemicals to the surface of the discs.
- To clean a disc, wipe it with a soft cloth, moving outward from the centre.



- Condensation may temporarily impair the built-in drive's performance. Leave it to adjust to the warmer temperature for about one hour. Also, wipe any damp discs with a soft cloth.
- Playback of discs may not be possible because of disc characteristics, disc format, recorded application, playback environment, storage conditions and so on.
- Road shocks may interrupt disc playback.
- Read the precautions for discs before using them.

Ambient conditions for playing a disc

- At extremely high temperatures, a temperature cutout protects this product by switching it off automatically.
- Despite our careful design of the product, small scratches that do not affect actual

operation may appear on the disc surface as a result of mechanical wear, ambient conditions for use or handling of the disc. This is not a sign of the malfunction of this product. Consider it to be normal wear and tear. ■

Playable discs

CD discs that display the logos shown below generally can be played on this built-in CD drive.



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.
- 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 to 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. ■

Appendix

Detailed information for playable media

Compatibility

Common notes about disc compatibility

- Compatibility with all discs is not guaranteed.
- Playback of discs may become impossible with direct exposure to sunlight, high temperatures, or depending on the storage conditions in the vehicle.

CD-R/CD-RW discs

- Unfinalised discs cannot be played back.
- It may not be possible to playback CD-R/CD-RW discs recorded on a music CD recorder or a personal computer because of disc characteristics, scratches or dirt on the disc, or dirt, scratches or condensation on the lens of the built-in drive.
- Playback of discs recorded on a personal computer may not be possible, depending on the recording device, writing software, their settings, and other environmental factors.
- Please record with the correct format. (For details, please contact manufacturer of media, recorders, or writing software.)
- Titles and other text information recorded on a CD-R/CD-RW disc may not be displayed by this product (in the case of audio data (CD-DA)).
- Read the precautions with CD-R/CD-RW discs before using them.

Common notes about the external storage device (USB, SD)

- Do not leave the external storage device (USB, SD) in any location with high temperatures.
- Depending on the kind of the external storage device (USB, SD) you use, this navigation system may not recognize the storage device or files.

Notes about the USB storage device

- Depending on the kind of the USB storage device you use, this navigation system may not recognise the storage device or files may not be played back properly.
- The text information of some audio files may not be correctly displayed.
- File extensions must be used properly.
- There may be a slight delay when starting playback of files on a USB storage device with complex folder hierarchies.
- Operations may vary depending on the kind of a USB storage device.
- It may not be possible to play some music files from USB because of file characteristics, file format, recorded application, playback environment, storage conditions, and so on.
- Copyright protected files cannot be played back.

USB storage device compatibility

- ➔ For details about USB storage device compatibility with this navigation system, refer to *Specifications* on page 146.

Protocol: bulk

- You cannot connect a USB storage device to this navigation system via a USB hub.
- Partitioned USB memory is not compatible with this navigation system.
- Firmly secure the USB storage device when driving. Do not let the USB storage device fall onto the floor, where it may become jammed under the brake or accelerator pedal.
- There may be a slight delay when starting playback of audio files encoded with image data.
- Some USB storage devices connected to this navigation system may generate noise on the radio.
- Do not connect anything other than the USB memory device.

The sequence of audio files on USB memory

For USB memory, the sequence is different from that of USB memory device.

Appendix

Notes about the SD memory card

- For details about SD memory card compatibility with this navigation system, refer to *Specifications* on page 146.
- This system is not compatible with Multi Media Card (MMC).

Appendix

Media compatibility chart

General

Media	CD-R/-RW	USB storage device
File system	ISO9660 level 1, ISO9660 level 2, Romeo and Joliet	FAT16/FAT32
Maximum number of folders	99	500
Maximum number of files	999	15 000
Playable file types	MP3, WMA, AAC, WAV	MP3, WMA, AAC, WAV

MP3 compatibility

Media	CD-R/-RW, USB storage device
File extension	.mp3
Bit rate	8 kbps to 320 kbps (CBR), VBR
Sampling frequency	16 kHz to 48 kHz
ID3 tag	ID3 tag Ver. 1.0, 1.1, 2.2, 2.3, 2.4
Notes: <ul style="list-style-type: none"> Ver. 2.x of ID3 tag is given priority when both Ver. 1.x and Ver. 2.x exist. The navigation system is not compatible with the following: MP3i (MP3 interactive), mp3 PRO, m3u playlist 	

WMA compatibility

Media	CD-R/-RW, USB storage device
File extension	.wma
Bit rate	48 kbps to 384 kbps (CBR), VBR
Sampling frequency	32 kHz to 48 kHz
Note: <ul style="list-style-type: none"> The navigation system is not compatible with the following: Windows Media™ Audio 9 Professional, Lossless, Voice 	

Appendix

WAV compatibility

Media	CD-R/-RW, USB storage device
File extension	.wav
Format	Linear PCM (LPCM), MS ADPCM
Sampling frequency	LPCM: 16 kHz to 48 kHz MS ADPCM: 22.05 kHz and 44.1 kHz

AAC compatibility

Media	CD-R/-RW, USB storage device
File extension	.m4a
Bit rate	16 kbps to 320 kbps (CBR)
Sampling frequency	11.025 kHz to 48 kHz
Notes:	
<ul style="list-style-type: none"> The navigation system plays back AAC files encoded by iTunes. The navigation system is not compatible with the following: Apple Lossless, files encoded with VBR 	

Common notes

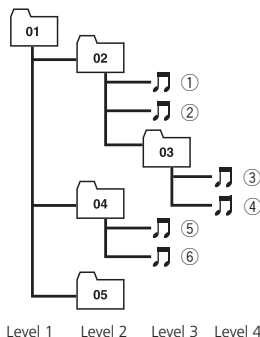
- The navigation system may not operate correctly, depending on the application used to encode WMA files.
- Depending on the version of Windows Media™ Player used to encode WMA files, album names and other text information may not be correctly displayed.
- There may be a slight delay when starting playback of audio files encoded with image data.
- The navigation system is not compatible with packet write data transfer.
- This navigation system can recognise up to 64 characters, beginning with the first character, including extension for the file and folder name. However, the maximum number of the characters that you can display varies according to the width of each character, and of the display area.
- Folder selection sequence or other operations may be altered, depending on the encoding or writing software.
- Regardless of the length of blank section between the songs of original recording,

compressed audio discs play with a short pause between songs.

Example of a hierarchy

The following figure is an example of the tier structure in the disc. The numbers in the figure indicate the order in which folder numbers are assigned and the order to be played back.


 Folder
 File



Level 1 Level 2 Level 3 Level 4

Appendix


Notes

- This product assigns folder numbers. The user cannot assign folder numbers.
- If there is a folder that does not contain any playable file, the folder itself will display in the folder list but you cannot check any files in the folder. Also, these folders will be skipped without displaying the folder number. 

Bluetooth



Bluetooth is a short-range wireless radio connectivity technology that is developed as a cable replacement for mobile phones, hand-held PCs and other devices. Bluetooth operates in 2.4 GHz frequency range and transmits voice and data at speeds up to 1 megabit per second. Bluetooth was launched by a special interest group (SIG) comprising Ericsson Inc., Intel Corp., Nokia Corp., Toshiba and IBM in 1998, and it is currently developed by nearly 2,000 companies worldwide.

- The *Bluetooth*[®] word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Pioneer Corporation is under licence. Other trademarks and trade names are those of their respective owners. 

SD and SDHC logo



SD Logo is a trademark of SD-3C, LLC.




SDHC Logo is a trademark of SD-3C, LLC. 


WMA



Windows Media[™] and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

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AAC

AAC is short for Advanced Audio Coding and refers to an audio compression technology standard used with MPEG-2 and MPEG-4. Several applications can be used to encode AAC files, but file formats and extensions differ depending on the application which is used to encode. This unit plays back AAC files encoded by iTunes version 7.7. 

Detailed information regarding connectable iPods

CAUTION

- Pioneer accepts no responsibility for data lost from an iPod, even if that data is lost while using the navigation system.

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- Do not leave the iPod in direct sunlight for extended amounts of time. Extended exposure to direct sunlight can result in iPod malfunction due to the resulting high temperature.
- Do not leave the iPod in any location with high temperatures.
- Firmly secure the iPod when driving. Do not let the iPod fall onto the floor, where it may become jammed under the brake or accelerator pedal.

For details, refer to the iPod's manuals.

iPod



"Made for iPod" means that an electronic accessory has been designed to connect specifically to iPod and has been certified by the developer to meet Apple performance standards.

Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

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

iPhone




"Works with iPhone" means that an electronic accessory has been designed to connect specifically to iPhone and has been certified by

the developer to meet Apple performance standards.

Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

iPhone is a trademark of Apple Inc.

iTunes

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

Using the LCD screen correctly


Handling the LCD screen

- When the LCD screen is subjected to direct sunlight for a long period of time, it will become very hot, resulting in possible damage to the LCD screen. When not using this navigation system, avoid exposing it to direct sunlight as much as possible.
- The LCD screen should be used within the temperature ranges shown in *Specifications*.
- Do not use the LCD screen at temperatures higher or lower than the operating temperature range, because the LCD screen may not operate normally and could be damaged.
- The LCD screen is exposed in order to increase its visibility within the vehicle. Please do not press strongly on it as this may damage it.
- Do not push the LCD screen with excessive force as this may scratch it.
- Never touch the LCD screen with anything besides your finger when operating the Touch Panel functions. The LCD screen can scratch easily. (The stylus is supplied for special calibrations. Do not use the stylus for normal operation.)

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Liquid crystal display (LCD) screen

- If the LCD screen is near the vent of an air conditioner, make sure that air from the air conditioner is not blowing on it. Heat from the heater may break the LCD screen, and cool air from the cooler may cause moisture to form inside the navigation unit, resulting in possible damage.
- Small black dots or white dots (bright dots) may appear on the LCD screen. These are due to the characteristics of the LCD screen and do not indicate a malfunction.
- The LCD screen will be difficult to see if it is exposed to direct sunlight.
- When using a mobile phone, keep the aerial of the mobile phone away from the LCD screen to prevent disruption of the video in the form of disturbances such as spots or coloured stripes.

dealer or the nearest authorised Pioneer Service Station. 

Maintaining the LCD screen

- When removing dust from the LCD screen or cleaning it, first turn the system power off, then wipe with a soft dry cloth.
- When wiping the LCD screen, take care not to scratch the surface. Do not use harsh or abrasive chemical cleaners.

LED (light-emitting diode) backlight

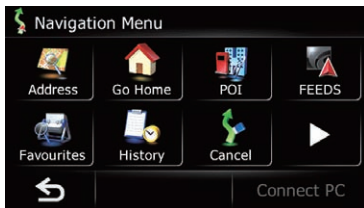
A light emitting diode is used inside the display to illuminate the LCD screen.

- At low temperatures, using the LED backlight may increase image lag and degrade the image quality because of the characteristics of the LCD screen. Image quality will improve with an increase in temperature.
- The product lifetime of the LED backlight is more than 10 000 hours. However, it may decrease if used in high temperatures.
- If the LED backlight reaches the end of its product lifetime, the screen will become dimmer and the image will no longer be visible. In that case, please consult your

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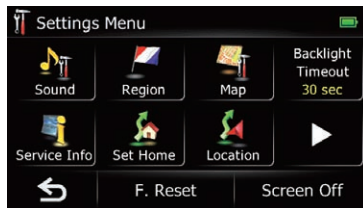
Display information

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“Settings Menu” screen

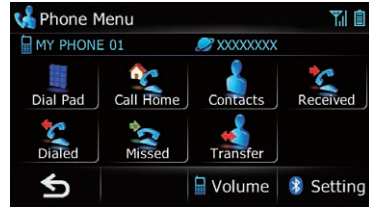


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Appendix

Glossary

AAC

AAC is short for Advanced Audio Coding and refers to an audio compression technology standard used with MPEG-2 and MPEG-4.

Bit rate

This expresses data volume per second, or bps units (bits per second). The higher the rate, the more information is available to reproduce the sound. Using the same encoding method (such as MP3), the higher the rate, the better the sound.

CD-DA

This stands for a general music CD (commercial-release audio CD). In this manual, this word is sometime used for a distinction between data CDs (which include compressed audio files) and general music CDs.

Current location

The present location of your vehicle; your current location is shown on the map by a red triangle mark.

Destination

A location you choose as the end point of your journey.

Favourites

A frequently visited location (such as your workplace or a relative's home) that you can register to allow easy routing.

GPS

Global Positioning System. A network of satellites that provides navigation signals for a variety of purposes.

Guidance mode

The mode in which guidance is given as you drive to your destination; the system automatically switches to this mode as soon as a route has been set.

Guidance point

These are important landmarks along your route, generally intersections. The next guidance point along your route is indicated on the map by the yellow flag icon.

Home location

Your registered home location.

ID3 tag

This is a method of embedding track-related information in an MP3 file. This embedded information can include the track title, the artist's name, the album title, the music genre, the year of production, comments and other data. The contents can be freely edited using software with ID3 tag editing functions. Although the tags are restricted by the number of characters, the information can be viewed when the track is played back.

ISO 9660 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 eight 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 eight hierarchies.

Extended formats

Joliet:

File names can have up to 64 characters.

Romeo:

File names can have up to 128 characters.

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MP3

MP3 is short for MPEG Audio Layer 3. It is an audio compression standard established by a working group (MPEG) of the ISO (International Organization for Standardization). MP3 is able to compress audio data to about 1/10th the size of a conventional disc.

MPEG

This stands for Moving Pictures Experts Group, and is an international video image compression standard.

Multi-session

Multi-session is a recording method that allows additional data to be recorded later. When recording data on a CD-ROM, CD-R or CD-RW, etc., all data from beginning to end is treated as a single unit or session. Multi-session is a method of recording more than two sessions in one disc.

Packet write

This is a general term for a method of writing individual files to a CD-R, etc. whenever required, just as is done with files on floppy or hard disks.

Phone book

An address book on user's phone is collectively referred to as "Phone book". Depending on the mobile phone, the phone book may be called a name such as "Contacts", "Business card" or something else.

Point Of Interest (POI)

Any of a range of locations stored in the data, such as railway stations, shops, restaurants, and amusement parks.

RDS-TMC

A communication system for informing drivers of the latest traffic information using FM multiplex broadcast. Information such as traffic jams or accidents can be checked on the display.

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 colour on the map.

Track log

Your navigation system logs routes that you already passed through if the track logger is activated. This recorded route is called a "track log". It is handy when you want to check a route travelled or if returning along a complex route.

VBR

VBR is short for variable bit rate. Generally speaking, CBR (constant bit rate) is more widely used. But by flexibly adjusting the bit rate according to the needs of audio compression, it is possible to achieve compression-priority sound quality.

Voice guidance

The giving of directions by navigation voice while in guidance.

Waypoint

A location that you choose to visit before your destination; a journey can be built up from multiple waypoints and the destination.

WMA

WMA is short for Windows Media™ Audio and refers to an audio compression technology that is developed by Microsoft Corporation. WMA data can be encoded by using Windows Media Player version 7 or later.

Appendix

Specifications

General

Rated power source	14.4 V DC (allowable voltage range: 10.8 V to 15.1 V DC)
Earthing system	Negative type
Maximum current consumption	10.0 A
Dimensions (W × H × D):	
AVIC-F320BT	
DIN	
Chassis	180 mm × 100 mm × 158 mm
Nose	188 mm × 118 mm × 16 mm
D	
Chassis	178 mm × 100 mm × 165 mm
Nose	171 mm × 97 mm × 8 mm
Detachable device	130 mm × 79 mm × 19 mm
AVIC-F3210BT	
Chassis	188 mm × 122 mm × 155 mm
Nose	225 mm × 133 mm × 25 mm
Detachable device	130 mm × 79 mm × 19 mm
Weight:	
AVIC-F320BT	2.24 kg
AVIC-F3210BT	2.2 kg
NAND flash memory	4 GB

Navigation

GPS receiver:	
System	L1, C/Acode GPS SPS (Standard Positioning Service)
Reception system	20-channel multi-channel reception system
Reception frequency ...	1 575.42 MHz
Sensitivity	-140 dBm (typ)
Position update frequency	Approx. once per second
GPS aerial:	
Aerial	Micro strip flat aerial/right-handed helical polarisation
Aerial cable	3.55 m
Dimensions (W × H × D)	33 mm × 14.7 mm × 36 mm
Weight	96 g

Display

Screen size/aspect ratio	4.3 inch wide/16:9 (effective display area: 95 mm × 53 mm)
Pixels	130 560 (480 × 272)
Display method	TFT Active matrix driving
Backlight	LED
Tolerable temperature range:	
Power on	-10 °C to +60 °C
Power off	-20 °C to +80 °C

Audio

Maximum power output	50 W × 4
Continuous power output ...	22 W × 4 (50 Hz to 15 kHz, 5%THD, 4 Ω LOAD, Both Channels Driven)
Load impedance	4 Ω (4 Ω to 8 Ω [2 Ω for 1 ch] allowable)
Preout output level (max) ...	2.2 V
Preout impedance	1 kΩ
Equaliser (3-Band Parametric Equaliser):	
Low	
Frequency	40 Hz/80 Hz/100 Hz/160 Hz
Q Factor	0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain	±12 dB
Mid	
Frequency	200 Hz/500 Hz/1 kHz/2 kHz
Q Factor	0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain	±12 dB
High	
Frequency	3.15 kHz/8 kHz/10 kHz/ 12.5 kHz
Q Factor	0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain	±12 dB
Loudness contour:	
Low	+3.5 dB (100 Hz), +3 dB (10 kHz)
Mid	+10 dB (100 Hz), +6.5 dB (10 kHz)
High	+11 dB (100 Hz), +11 dB (10 kHz) (volume: -30 dB)
HPF:	
Frequency	50 Hz/63 Hz/80 Hz/100 Hz/ 125 Hz
Slope	-12 dB/oct
Subwoofer:	
Frequency	50 Hz/63 Hz/80 Hz/100 Hz/ 125 Hz
Slope	-18 dB/oct
Gain	-24/+6 dB

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Phase	Normal/Reverse
Bass boost:	
Gain	0 dB to +12 dB

CD drive

System	CD, MP3, WMA, AAC system
Usable discs	CD, MP3, WMA, AAC, WAV
Signal-to-noise ratio	94 dB (1 kHz) (IEC-A network)
MP3 decoding format	MPEG-1 & 2 Audio Layer 3 (Windows Media Player)
WMA decoding format	Ver.7,7.1,8,9,10 (2 ch audio)
MP3 decoding format	MPEG-4 AAC (iTunes encoded only)
WAVE SIGNAL FORMAT	Linear-PCM, MS ADPCM (Non Compressed)

USB

Head unit	
USB standard spec.	USB 1.1 Full Speed
Max current supply	500 mA
Minimum memory capacity	256 MB
File system	FAT16, FAT32
USB class	Mass storage class
Decoding format	MP3/WMA/AAC/WAVE
Detachable device	
USB standard spec.	USB 2.0 High Speed
Max current supply	500 mA
File system	FAT16, FAT32
USB class	Mass storage class

SD

Compatible physical format	Version 2.00
Max memory capacity	16 GB
File system	FAT16, FAT32

Bluetooth

Version	Bluetooth 1.2 certified
Output power	+4 dBm Max. (Power class 2)

FM tuner

Frequency range	87.5 MHz to 108.0 MHz
Usable sensitivity	8 dBf (0.7 μ V/75 Ω mono, S/N: 30 dB)
Signal-to-noise ratio	75 dB (IEC-A network)
Distortion	0.3% (at 65 dBf, 1 kHz, stereo) 0.1% (at 65 dBf, 1 kHz, mono)
Frequency response	30 Hz to 15 000 Hz (\pm 3 dB)

Stereo separation	45 dB (at 65 dBf, 1 kHz)
-------------------------	--------------------------

MW tuner

Frequency range	531 kHz to 1 602 kHz (9 kHz)
Usable sensitivity	18 μ V (S/N: 20 dB)
Signal-to-noise ratio	65 dB (IEC-A network)

LW tuner


Frequency range	153 kHz to 281 kHz
Usable sensitivity	30 μ V (S/N: 20 dB)
Signal-to-noise ratio	65 dB (IEC-A network)

RDS-TMC tuner

Rated power source	13.8 V DC (allowable voltage range: 10.0 V to 14.5 V DC)
Earthing system	Negative type
Maximum current consumption	60 mA
Dimensions (W \times H \times D) ...	68 mm \times 49 mm \times 19 mm
Weight	180 g



Note

Specifications and design are subject to possible modifications without notice due to improvements. 

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