

Operation Manual

ADVANCED MULTIMEDIA NAVIGATION SYSTEM

AVIC-F500BT

Notice to all users:

Be sure to read “Important Information for the user” first! “Important Information for the user” includes the important information that you must understand before using this navigation system.

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



Thank you for buying this Pioneer product.

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



Important

The screens shown in the examples may differ from the actual screens.

The 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.

This manual provides important information you need to make full use of your new navigation system.

The beginning chapters outline this navigation system. The later chapters describe the details of the navigation functions.

Chapter 8 describes the operations related to hands free phoning by using a cellular phone featuring Bluetooth® technology.

Chapter 9 to Chapter 12 describe how to control the AV sources. Please read these chapters when you use the various functions in the built in audio and visual source or operate the audio equipment connected to the navigation system.

Chapter 13 describes how to change the settings so as to suit your tastes. The behavior of your navigation system depends the settings for navigation and audio visual functions.

How to read this manual

Finding the operation procedure from what you want to do

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

Finding the operation procedure from a menu name

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

Glossary

See the glossary to find the meaning of a term.

Terminology

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

- Buttons on your navigation system are described in **ALL CAPITAL, BOLD** lettering: e.g.) **MENU** button, **MAP** button.
- Items in different menus, screen titles, and functional components are described in **bold** with double quotation marks " ": e.g.) "Destination Menu" screen or "AV Source" screen
- Touch panel keys that are available on the screen are described in **bold** in brackets []: e.g.) **[Destination]**, **[Settings]**.
- Extra information, alternatives and other notes are presented in the following for mat: e.g.)
 - ☐ If the home location has not been stored yet, set the location first.
- References are indicated like this: e.g.)
 - ➔ For details, refer to *Setting your home position* on page 90.

About the definition of terminology

"Video image"

"Video image" in this manual indicates the moving images of iPod, and any equipment that is connected to this system with an RCA cable, such as general purpose AV equipment.

Introduction

“External storage device (USB, SD)”

The SD memory card, SDHC memory card, USB memory device and USB portable audio player are collectively referred to as the “external storage device (USB, SD)”. If it indicates the USB memory and USB portable audio player only, they are referred to as the “USB storage device”.

Features

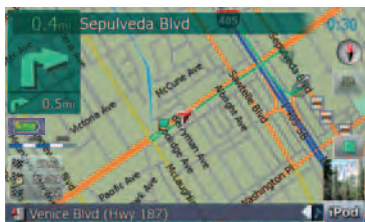
Touch panel key operation

It is possible to operate the navigation and audio functions by using the touch panel key.

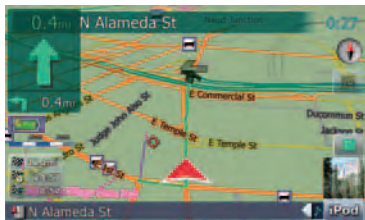
2D and 3D map view modes

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

2D map screen



3D map screen



A wide variety of Points of Interest (POI) information

More than 100 types of POI categories are included in the database. You can also create your own customized POIs and categories.

Auto reroute function

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

- This function may not work under certain conditions.

Assign your original image as a splash screen

You can store your own pictures on an external storage device (USB, SD) in JPEG or BMP for mat and import an original splash screen to this navigation system. These imported images can be set up as customized splash screens.

- Imported original images will be stored in the built in memory, but the ability to save these images cannot be guaranteed completely. If your original image data is deleted, set the external storage device (USB, SD) again and re import the original image.

A wide variety of playable file formats

- Following file types is playable on the external storage device (USB, SD). MP3, WMA, AAC, WAV, MPEG 4, AVI

Notice regarding video viewing

Remember that use of this system for commercial or public viewing purposes may constitute an infringement on the author's rights as protected by the Copyright Law.

Notice regarding MP3 file usage

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

Auto file name listing

The track name will be automatically listed when this function is available. This system provides easy to operate audio functions that allow playback simply by selecting an item from the list.

iPod® compatibility

This product supports only the following iPod models and iPod software versions. Others may not be 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
 - iPod fifth generation; Ver. 1.3
 - iPod classic; Ver. 1.1.1
 - iPod touch; Ver. 1.1.4
- ❑ When you use this navigation system with a Pioneer USB interface cable for iPod (CD IU200VM) (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.
 - ❑ Operations may vary depending on the iPod models and the software version of iPod.
 - ❑ For more details about iPod compatibility with this navigation system, refer to the information on our website.
 - ❑ iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

Hands-free phoning

A cellular phone featuring Bluetooth® technology can be connected wirelessly.

The cellular phone used must be compatible with the profile of this navigation system.

When using Bluetooth wireless technology, this navigation system may not be able to operate all of the functions on the cellular phone.

Rear view camera ready

You can display what is behind the vehicle if connected to a rear view camera (e.g. ND BC2) (sold separately). ❑

Map coverage

For more 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 cellular phone, keep the antenna of the cellular phone away from the LCD screen to prevent disruption of the video in the form of spots, colored stripes, etc.
- ❑ To protect the LCD screen from damage, be sure to touch the touch panel keys only with your fingers. (Keep the use of other instruments at a minimum, and only in cases in which the touch panel calibration is necessary.) ❑

Viewing the LCD comfortably

Due to its construction, the viewing angle of the LCD screen is limited. However, "Brightness" may be used to adjust the black density of the video. When using the screen for the first time, the adjustment of the black density for clear viewing is recommended. ❑

Introduction

Notes for internal memory

Before detaching the battery pack

If the internal battery is detached or discharged, the memory will be erased and must be reprogrammed.

- ❑ Some data remains. Read *Returning the navigation system to the default or factory settings* before you operate this function.
 - ➔ For more detailed information about the items to be deleted, refer to *Returning the navigation system to the default or factory settings* on page 104.

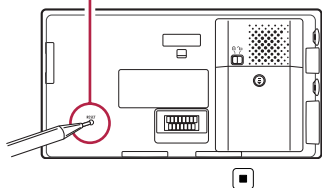
Resetting the navigation system

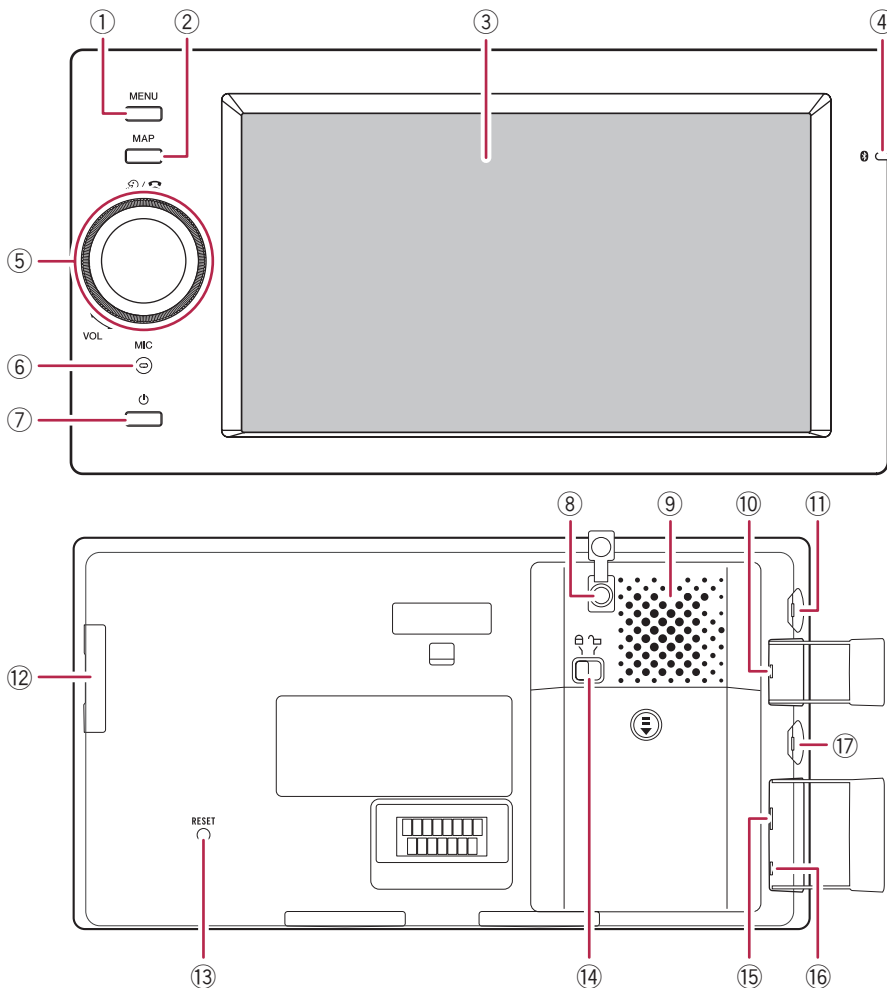
Press **RESET** button only under the following conditions:

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

- 1 Turn the ignition switch OFF.**
- 2 Detach the navigation unit from the cradle.**
- 3 Press RESET button with a pen tip or other pointed instrument.**

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 MENU button

Press **MENU** button to display the "Top Menu".

Press and hold to display the "Screen Calibration" screen.

➤ For details concerning operations, refer to *Adjusting the response positions of the touch panels (touch panel calibration)* on page 93.

Basic operation

② MAP button

Press to view the map screen.

Press and hold to display the "Picture Adjustment" screen.

- ➔ For details concerning operations, refer to *Adjusting the screen brightness* on page 94.

③ LCD screen

④ Bluetooth connection status indicator

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

During charging via the DC power jack, the indicator lights even if the system is powered off. The indicator will go off after full charge.

⑤ MULTI-CONTROL

Rotating;

Adjusts the AV (Audio and Video) source volume.

Moving upward or downward once;

Changes the map scale one step at a time.

Keep moving upward or downward;

Changes the map scale continuously.

- This operation is available only while the map screen is displayed.

Moving MULTI-CONTROL to the left or right;

Allows you to change the frequency one step at a time; operates track search controls.

Keep moving MULTI-CONTROL to the left or right;

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

Pressing the center of MULTI-CONTROL;

Enables you to start the voice operation when "English" is selected in "Program language:". (When a language other than "English" is selected, pressing the center allows you to hear the previous route guidance.)

- When your phone is paired to the navigation system, pressing its center allows

you to answer an incoming call or end the phone call.

⑥ Built-in microphone

Microphone for hands free operation.

Also this microphone can be used on the voice operation.

⑦ Power button

When the system is powered off, press and hold the key to turn the power on.

When the system is powered on, press the key to go into the power saving mode, and press and hold the key to turn the power off completely. When in power saving mode, pressing returns the system to the normal mode.

⑧ Optional GPS antenna jack

Use this jack only when optional GPS antenna connection is necessary.

⑨ Built-in speaker

When the sounds are not output in the following conditions;

The setting on "Audio Out Selection" is "Preout"

Headphone being connected

⑩ Optional microphone jack

Use this jack only when optional microphone connection is necessary.

⑪ Headphone jack

⑫ SD card slot

- ➔ For more detailed information, refer to *Inserting and ejecting an SD memory card* on the next page.

⑬ RESET button

- ➔ For details concerning operations, refer to *Resetting the navigation system* on page 9.

⑭ Battery lock knob

To remove the batteries, move this knob to unlock position.

Basic operation

- ➔ Be sure to keep this knob to lock position in regular use. Otherwise, the navigation system cannot boot up.

15 USB connector (Mini-USB)

Use this port to connect an USB storage device with using the supplied USB cable. Also you can connect an iPod (cable sold separately, CD IU200VM).


- ➔ For details, refer to *Plugging and unplugging a USB storage device* on the next page.
- ➔ For details, refer to *Connecting your iPod* on page 14.

16 AV input jack

To connect your iPod using a USB interface cable for iPod (CD IU200VM), connect it to both this input jack and USB connector.

- ➔ Use the CD RM10 (sold separately) to connect the external video component.

17 DC power jack

Use this jack only to connect with the AC adapter. 

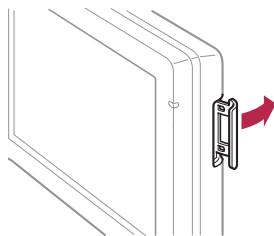
Inserting and ejecting an SD memory card

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.

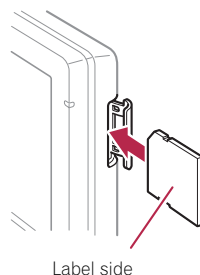
Inserting an SD memory card

1 Open the cover.



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

Insert it with the label facing in the same direction as the LCD screen and press the card until it clicks and completely locks.



3 Close the cover.

- There is no compatibility for Multi Media Card (MMC).
- Compatibility with all SD memory card is not guaranteed.
- Optimum performance of this unit may not be obtained depending on the SD memory card.
- Do not insert anything other than SD memory cards or dummy SD cards into the SD card slot.

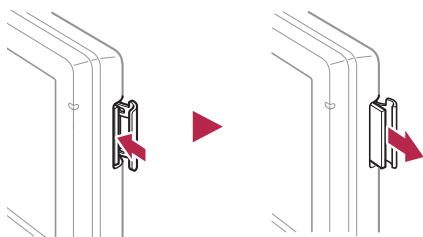
Ejecting an SD memory card

1 Open the cover.

2 Press the SD memory card until it clicks.

The SD memory card is ejected.

Basic operation



- 3 Pull out the SD memory card.
- 4 Close the cover.

Plugging and unplugging a USB storage device

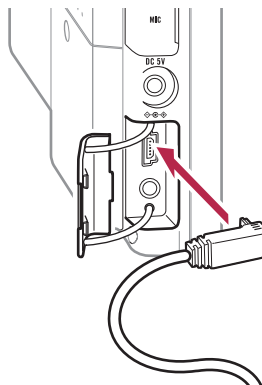
CAUTION

- 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.

When you run this navigation system on power from the built in battery alone, you cannot use an iPod and a USB memory device. To use them, supply power through this product by another method, such as connecting an AC adapter or vehicle power charger.

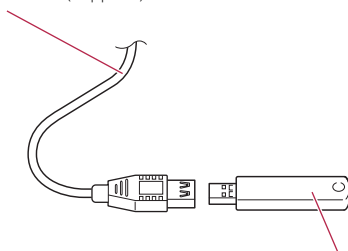
Plugging in a USB storage device

- 1 Connect the supplied USB cable to USB connector.



- 2 Plug a USB storage device into the USB connector.

USB cable (supplied)



USB storage device

- Compatibility with all USB storage device is not guaranteed.
Optimum performance of this navigation system may not be obtained depending on the USB storage device that is connected.
- Connection via USB hub is not available.

Unplugging a USB storage device

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

Connecting and disconnecting 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.

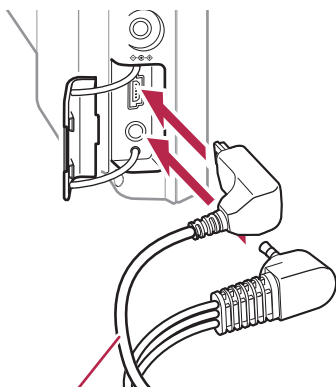
Connecting your iPod

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

- For connection, USB interface cable for iPod (CD IU200VM) (sold separately) is required.

1 Detach the supplied USB cable after checking that no data is being accessed.

2 Connect the USB interface cable for iPod to both USB connector and AV input.



USB interface cable for iPod

3 Connect your iPod.



USB interface cable for iPod

- For more details about iPod compatibility with this navigation system, refer to the information on our website.
- Connection via USB hub is not available.

Disconnecting your iPod

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

Flow from startup to termination

1 Start the engine to boot up the system.

After a short pause, the navigation splash screen comes on for a few seconds.

- To protect the LCD screen from damage, be sure to touch the touch panel keys only with your fingers. (Keep the use of other instruments at a minimum, and only in cases in which the touch panel calibration is necessary.)

2 Turn off the vehicle engine to terminate the system.

The navigation system is also turned off.

Basic operation

On first-time startup

CAUTION

The rear view camera function is not available for safety reasons until the navigation system boots up completely.

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

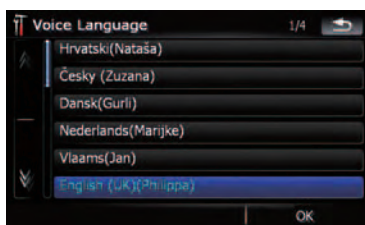
1 Start the engine to boot up the system.

After a short pause, the navigation splash screen comes on for a few seconds.

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

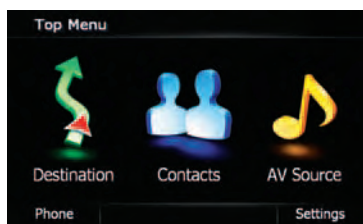


3 Touch the language that you want to use for the voice guidance.



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 "Top Menu" appears.

Regular startup

CAUTION

The rear view camera function is not available for safety reasons until the navigation system boots up completely.

● Start the engine to boot up the system.

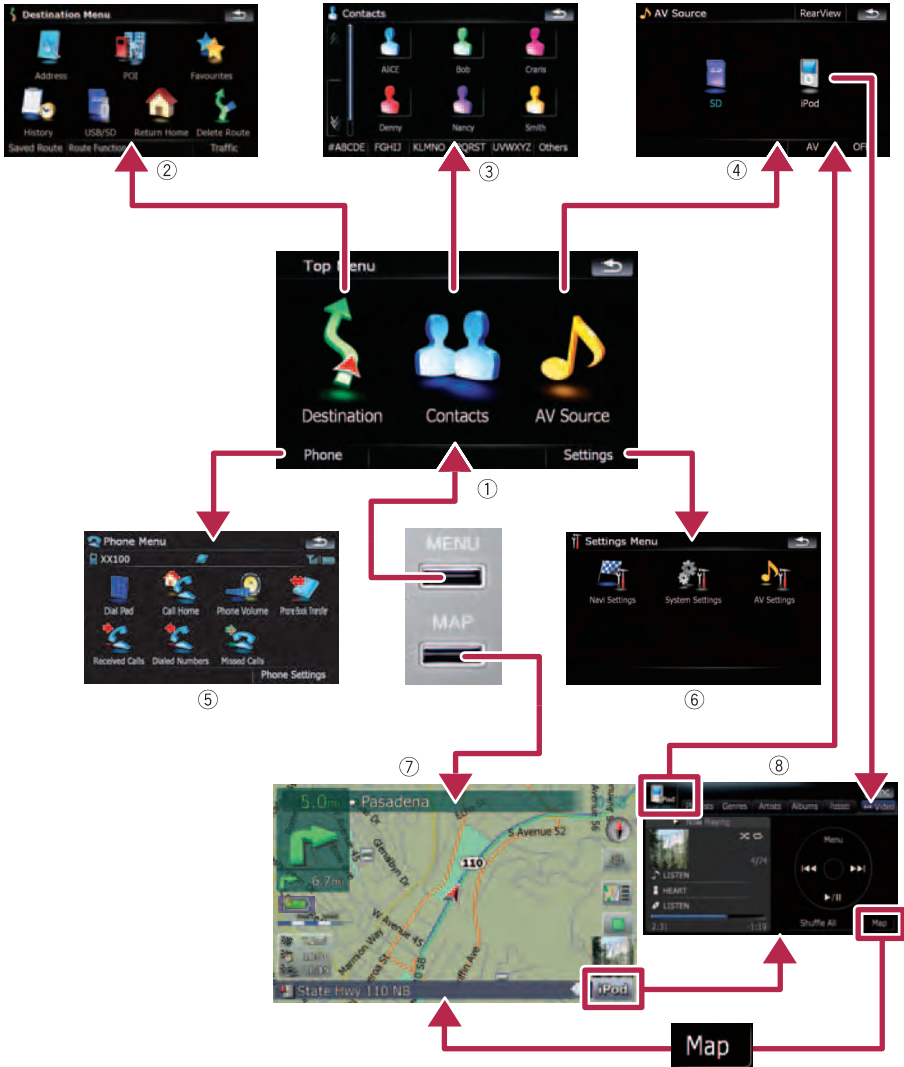
After a short pause, the navigation splash screen comes on for a few seconds.

- The screen shown will differ depending on the previous conditions.
- If the navigation screen was shown previously, the disclaimer appears. Read the disclaimer carefully, checking its details, and then touch [OK] if you agree to the conditions.
- If other screens were shown previously, the disclaimer screen will be skipped.

How to use the navigation menu screens


The "Top Menu" appears when you boot up the navigation system for the first time.

Screen switching overview



Basic operation

What you can do on each menu

- ① **Top Menu**
Press **MENU** button to display the “**Top Menu**”.
This is the starting menu to access the desired screens and operate the various functions.
 - ② **Destination Menu**
You can search for your destination on this menu. You can also check or cancel your set route from this menu.
 - ③ **Contacts** screen
You can access the list of contacts to call up an entry.
 - ④ **AV Source** menu
You can access the screen for selecting the audio and visual source to play.
 - ⑤ **Phone Menu**
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.
 - ⑥ **Settings Menu**
You can access the screen to customize settings.
 - ⑦ **Map screen**
Press **MAP** button to display the navigation map screen.
 - ⑧ **AV operation screen**
When you play the AV source, this screen appears regularly. Touching the icon on the top left corner displays the “**AV Source**” menu.
- ❑ To return to the previous screen, touch .

Displaying the rear camera image

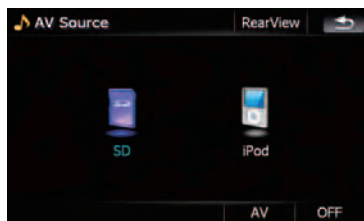
[**RearView**] can be displayed the full screen rear camera image. [**RearView**] is useful if you want to monitor an attached trailer, etc.

➔ For details, refer to *Setting the rear view camera* on page 92.

- 1 Press **MENU** button to display the “**Top Menu**”, and then touch [**Settings**].
- 2 Touch [**System Settings**] and then touch [**Back Camera**].
- 3 Touch [**On**] next to “**Camera**” to activate the camera setting.

4 Press **MENU** button to display the “**Top Menu**” and then touch [**AV Source**].

5 Touch [**RearView**] on the “**AV Source**” menu.



Listening to the combined car stereo sounds

When the navigation system is combined with ND G500 (sold separately), you can listen to the sound output from the connected car stereo.

1 Select “**Preout**” on [**Audio Out Selection**].

➔ For details, refer to *Setting the audio output* on page 96.

2 Press **MENU** button to display the “**Top Menu**” and then touch [**AV Source**].

3 Touch [**OFF**] on the “**AV Source**” menu.

4 Turn the car stereo on.

5 Adjust the volume level with the combined car stereo.

- ❑ When ND G500 is connected with this system, the following cases always mute the sound output from the connected car stereo:

While you use a mobile phone connected with Bluetooth technology (dialing, talking, incoming call).

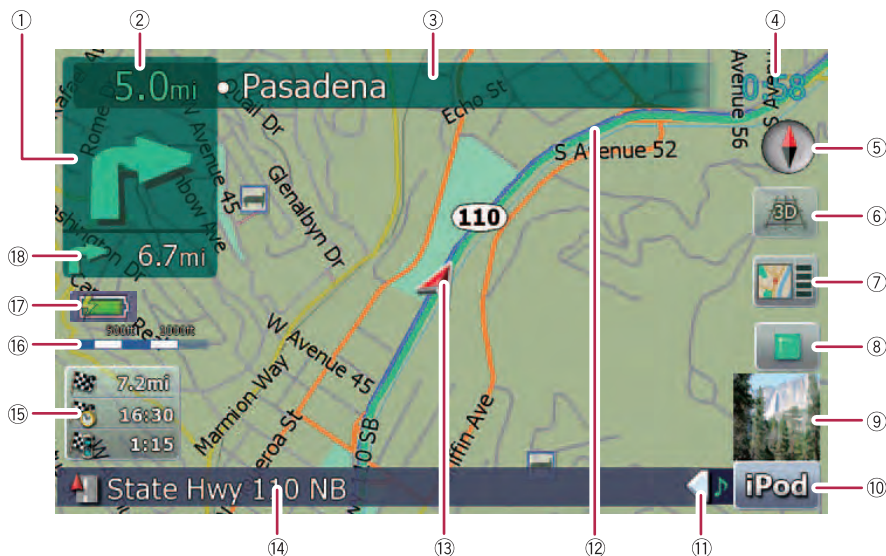
While you perform the voice operation. When the navigation guidance voice is output. ❑

How to use the map

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

How to read the map screen

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



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

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

① Next direction of travel*

When you approach a guidance point, this appears green. Touching this item enables you to hear the previous guidance again.

For more information about the direction symbol, refer to *Supplemental information about directions* on page 115.

② Distance to the guidance point*

Shows the distance to the next guidance point.

③ Name of the street to be used (or next guidance point)*

④ Current time

⑤ Compass

The red arrow indicates north.

⑥ Map mode selector

➔ For details, refer to *Switching the map between 2D and 3D* on page 20.

⑦ Shortcut to the "Map Confirmation Screen"

Touching this shortcut enables the screen to switch to the "Map Confirmation Screen" directly with the current position or the cursor position centered.

➔ For details, refer to *What you can do with the "Map Confirmation Screen"* on page 36.

⑧ Stop key for the dummy run

Basic operation

This key will be displayed while you activate the dummy run (“**Fly over**” or “**Demo Mode**”). Touching the key to cancel the dummy run.

- ➔ For details, refer to **Demo Mode** on page 86.
 - ➔ For details, refer to *Playing simulated travel at high speed* on page 42.
- ⑨ **Album artwork on iPod**
If you connect your iPod to this navigation system, the album artwork that is playing appears.
- ⑩ **Shortcut to the AV operation screen**
The **AV Source** currently selected is shown. Touching the indicator displays the AV operation screen of the current source directly.
- ⑪ **Extension tab for the AV information bar**
Touching this tab opens the AV information bar and enables you to briefly view the current status on the AV source. Touching it again retracts the bar.
- ⑫ **Current route***
The route currently set is highlighted in bright color on the map. If a waypoint is set on the route, the route after the next waypoint is highlighted in other color.
- ⑬ **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.
- ⑭ **Street name (or city name) that your vehicle is traveling along**
- ⑮ **Multi-Info window**
Shows the value on the items selected on “**Displayed Info**”. Touching this area allows you to display the “**Route Information**” screen.
➔ For details, refer to **Displayed Info** on page 82.
➔ For details, refer to *Checking the current route conditions* on page 41.
 This item is not shown when “**Full Screen Cockpit**” is set to “**On**”.

- ➔ For details, refer to **Map Settings** on page 81.
- The estimated time of arrival is an ideal value that the navigation system computes internally as the route is calculated. The estimated time of arrival should be read just as a reference value, and does not guarantee arrival at the time indicated.

- ⑯ **Map scale**
The scale of the map is indicated by distance.
- ⑰ **Battery status indicator**
Shows the battery power if “**Battery Power Indication**” is [On].
➔ For details, refer to *Displaying the battery power* on page 94.
- ⑱ **Second Maneuver Arrow***
Shows the turning direction after next and the distance to there.
 This item is not shown when “**Full Screen Cockpit**” is set to “**On**”.
➔ For details, refer to **Map Settings** on page 81.

Meaning of guidance flags



: Destination

The checkered flag indicates your destination.



: Waypoint

The yellow flags indicate your waypoints.



: Start point

The bright green flag indicates your start point.

When you drive on a multi-lane road

Appears where multi lane roads exist when you are driving on your route. The highlighted lane indicates the recommended lane.



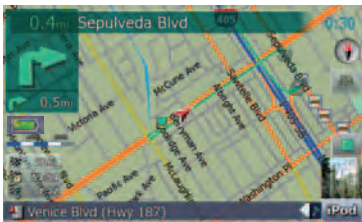
- This information is based on the map data base. Thus, the information may be different from what actual condition exists. Use it as just a directional reference for your driving.

Note regarding the route highlighted in purple

- A route highlighted in purple on the map indicates that your route includes a road not matching your preference on the following settings in "Route"; "Unpaved Roads", "Highways", "Ferries", "U-turns", "Permit Needed", "Toll Roads". For your safety, please review and obey all local traffic rules along the highlighted route.



Switching the map between 2D and 3D

2D map screen



3D map screen



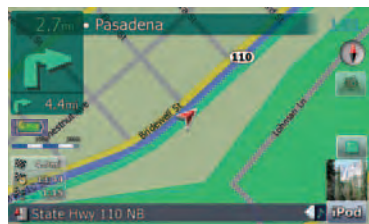
- 1 Press **MAP** button to display the navigation map screen.
- 2 Touch  or  to switch the map mode.

Changing the scale of the map

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

- 2 Move **MULTI-CONTROL** down or up to zoom in or out.

Moving **MULTI-CONTROL** upward or downward once allows you to change the map scale one step at a time. Holding **MULTI-CONTROL** while moving it up or down allows you to change the scale sequentially.



Basic operation



- ❑ Zooming out will reduce the size of the icon and further zooming out will hide it. However, the pin shaped icon is not resized and keeps displayed.
- ❑ Further zooming out hides the lines of traffic information.

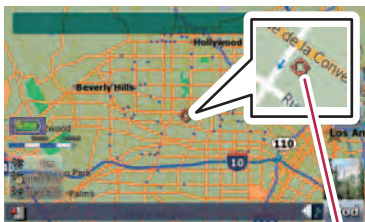
Scrolling the map to the position you want to see

1 Press **MAP** button to display the navigation map screen.

2 Touch  to switch the 2D map mode.

3 Touch the map briefly.

Briefly touching the position on the map that you want to see positions the cursor there.



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.)

4 Touch and drag the map in the desired direction to scroll.

Dragging the map scrolls it. The scrolling increment depends on your dragging length.

- ❑ Pressing **MAP** button returns the map to the current position.

Changing the tilt and rotation angle of the map

On the 3D map screen, briefly touching the map shows the tilt controls and rotation angle.

1 Press **MAP** button to display the navigation map screen.

2 Touch  to switch the 3D map mode.

3 Touch anywhere on the map briefly to show the tilt controls and rotation angle.








Controls for tilt and rotation angle

4 Touch the controls to adjust the tilt and rotation angle. ❑

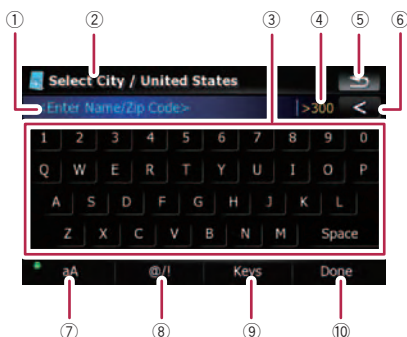
The basic flow of creating your route

- ① Park your vehicle in a safe place, and apply the parking brake.
- ↓
- ② Display the "Destination Menu".
- ↓
- ③ Select the method of searching for your destination.
- ↓
- ④ Enter the information for the destination and narrow down candidates to one.
- ↓
- ⑤ Touch [Go Here Now] on the "Map Confirmation Screen".
- ↓
- ⑥ The navigation system calculates the route to your destination, and then shows the route on the map.
- ↓
- ⑦ After releasing the parking brake, drive in accordance with navigation guidance.

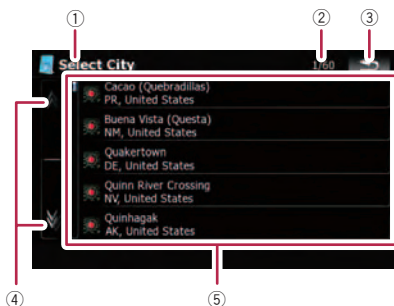
This description will provide you with a reference for the next operation.

- ② **Current page/total pages**
- ③  : Returns the previous screen.
- ④  : Touching  or  on the scroll bar scrolls through the list and allows you to view the remaining items.
- ⑤ **Listed items:** Touching an item on the list allows you to narrow down the options and proceed to the next operation. 



The operation of the on-screen keyboard



The operations of a list screen (e.g. city list)



- ① **Screen title**


- ① **Text box:** Displays the characters that are entered. If there is no text in the box, an informative guide with text appears.
- ② **Screen title** This description will provide you with a reference for the next operation.
- ③ **Keyboard:** Touching the keys enables you to enter the characters.
- ④ **Number of possible choices**
- ⑤  : Returns the previous screen.
- 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.



Basic operation


⑦ Caps lock control

Switches the keyboard between lowercase letters and uppercase letters.

Each touch of **[aA]** changes the settings as follows:

 enables you to capitalize the first letter of a word.

 enables you to enter letters in lower case. (When a space is entered, it switches  automatically.)

 enables you to enter letters with capitals (caps) lock.

⑧ [@/!]:


Displays the key to enter special characters, such as [!].

The appearance of this key and typeable characters change according to the current keyboard layout.

⑨ [Keys]:

Switches the on screen keyboard layout.

⑩ [Done]:

Confirms the entry and allows you to proceed to the next step. 

⚠ CAUTION

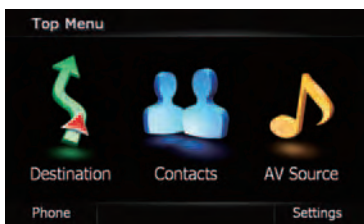
For safety reasons, these route setting functions are not available while your vehicle is in motion. To enable these functions, you must stop in a safe place and put on the parking brake before setting your route.

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

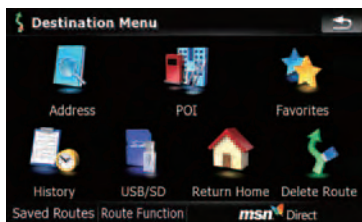
Searching for a location by address

The most frequently used function is [Address], in which the address is specified and the destination is searched.

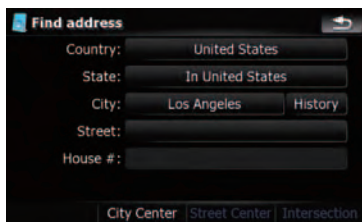
- 1 Touch [Destination] on the "Top Menu".



- 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.

Searching for and selecting a location

5 Touch the key next to “State:” and touch the desired state, province, or territory on the list.

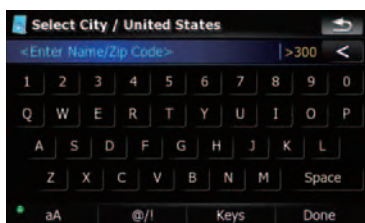


The screen returns to the previous screen.

6 Touch the key next to “City:” to enter the city name.



7 Enter the city name or Zip code.



- When the options are narrowed down to six or less, those are automatically listed.
- If you want to list the options matching to the current information entered, touch **[Done]**.
- Touching **[History]** displays the list of cities that you selected before.

8 Touch the desired city name.



- When a city is already set, touching **[City Center]** allows you to select the representative location of the city and proceed to the “Map Confirmation Screen”.

9 Enter the street name and touch the desired one from the list.

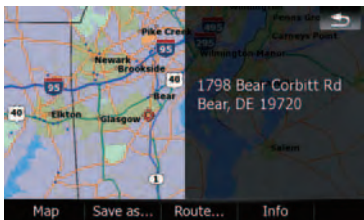
- When a street is already set, touching **[Street Center]** allows you to select the representative point of the street and proceed to the “Map Confirmation Screen”.
- When a street is already set, touching **[Intersection]** allows you to search for an intersection. After entering the second street name and selecting the desired intersection, the “Map Confirmation Screen” appears. This is useful when you don’t know the house number or cannot input the house number of the selected street.

10 Enter the house number and then touch **[Done]**.

- If the house number you have entered is not found, a message appears. In that case, touch **[OK]** and try entering the existing house number.



Searching for and selecting a location

11 Touch on of the options at the bottom of the “Map Confirmation Screen” to select the next operation.



Touching **[Route...]** and **[Go Here Now]** sequentially enables you to set your selected position as your destination and calculate the route up to that point.

- For details concerning other operations on the “Map Confirmation Screen”, refer to *What you can do with the “Map Confirmation Screen”* on page 36.

If only one option is appropriate for your entry, the screen will jump to the “Map Confirmation Screen” directly and the process of entering the street name or house number will be skipped. If this is an undesirable location, touch  to retry with another address. .

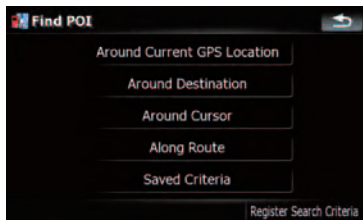
Searching for the vicinity Points of Interest (POI)

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

Searching for POIs around the cursor

1 Touch **[Destination]** on the “Top Menu”, and then touch **[POI]**.

2 Touch **[Around Cursor]**.

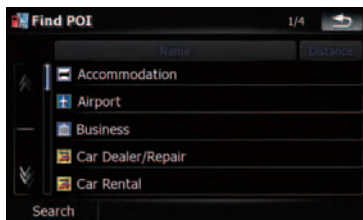


3 Drag the map to move the cursor to the desired position and touch **[OK]**.



The number of nearby POIs will appear at the bottom of the screen.

4 Touch your desired category.



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

Touch **[Search]** to search for a POI by entering the POI name in the selected category.

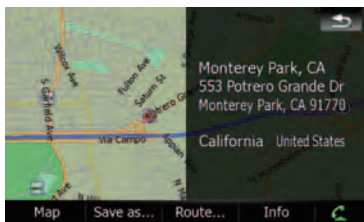
Searching for and selecting a location

5 Touch your desired POI.



- Touching **[Name]** tab sorts the options in the list in alphabetical order.
- Touching **[Distance]** tab sorts the options in the list in order by distance.
- ☐ Icons are helpful for quickly telling the category of facilities with the same name.

6 Touch on of the options at the bottom of the “Map Confirmation Screen” to select the next operation.



Touching **[Route...]** and **[Go Here Now]** sequentially enables you to set your selected position as your destination and calculate the route up that point.

- For details concerning other operations on the “Map Confirmation Screen”, refer to *What you can do with the “Map Confirmation Screen”* on page 36.
- ☐ Searching for a spot and touching **[Info]** on the “Map Confirmation Screen” also allows you to search for nearby POIs around the cursor.
- For details, refer to *Viewing the information of a specified location* on page 38.

Searching for a nearby POI

1 Touch **[Destination]** on the “Top Menu”, and then touch **[POI]**.

2 Touch **[Around Current GPS Location]**.

The list of POI categories appears.

- For the subsequent operations, refer to *Searching for POIs around the cursor* on the previous page.

Searching for POIs along the current route

- ☐ This function is available when the route is set.

1 Touch **[Destination]** on the “Top Menu”, and then touch **[POI]**.

2 Touch **[Along Route]**.

The list of POI categories appears.

- For the subsequent operations, refer to *Searching for POIs around the cursor* on the previous page.

Searching for POIs around the destination

- ☐ This function is available when the route is set.

1 Touch **[Destination]** on the “Top Menu”, and then touch **[POI]**.

2 Touch **[Around Destination]**.

The list of POI categories appears.

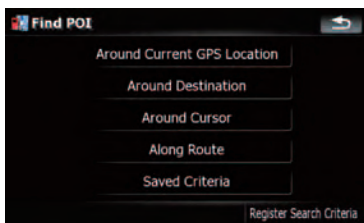
- For the subsequent operations, refer to *Searching for POIs around the cursor* on the previous page.

Using “Saved Criteria”

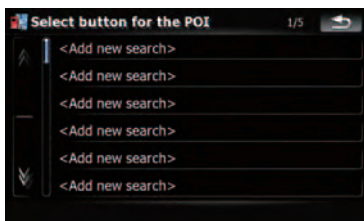
Memorizing your selection sequence

You can store the selected search method and one of the categories as the shortcut to recall it later. It allows you to search for a POI in the same way as you did before. You can also delete the shortcuts.

- 1 Touch [Destination] on the “Top Menu”, and then touch [POI].
- 2 Touch [Register Search Criteria].

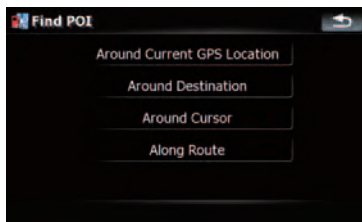


- 3 Touch one of the items on the list.



- Selecting an item that has already been stored allows you to overwrite it.

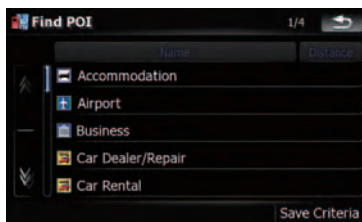
- 4 Touch the search method that you want to put it into memory.



The list of POI categories appears.

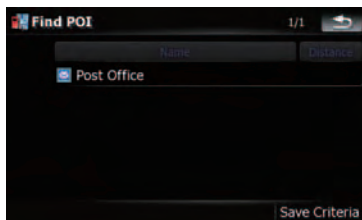
- 5 Touch the category that you want to put it into memory.

If there are more detailed categories within the selected category, select the desired category from the list repeatedly until your desired category appears.



Your selection sequence is shown on the top of the screen.

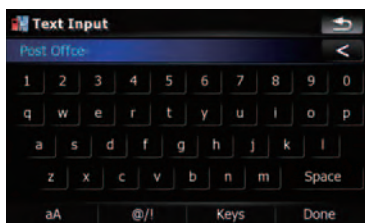
- 6 Recheck the sequence and touch [Save Criteria] to put it into memory.



Searching for and selecting a location

- Touching [**Save Criteria**] without selecting a category allows you to store only your selected search method including all categories.
- If there aren't anymore detailed categories, a blank list appears. In such case, touching [**Save Criteria**] allows you to store it as the currently selected category. To know the states of the current sequence, refer to the top of the screen.

7 Enter the desired name and then touch [Done] to complete the entry.



The storing process has completed and the shortcut is available on "**Saved Criteria**".

Searching for POIs by using the memorized sequence

You can search for POIs with using the pre stored shortcut.

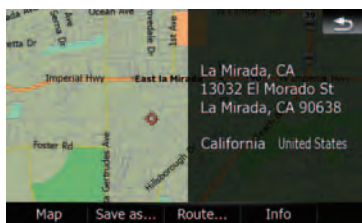
- 1 Touch [**Destination**] on the "Top Menu", and then touch [**POI**].
- 2 Touch [**Saved Criteria**].
- 3 Touch one of the items on the list.



4 Touch the desired POI.



5 Touch on of the options at the bottom of the "Map Confirmation Screen" to select the next operation.



Touching [**Route...**] and [**Go Here Now**] sequentially enables you to set your selected position as your destination and calculate the route up that point.

- For details concerning other operations on the "Map Confirmation Screen", refer to *What you can do with the "Map Confirmation Screen"* on page 36.

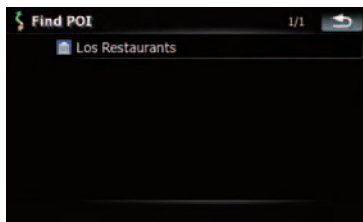
Deleting the memorized POI shortcuts

- 1 Touch [**Destination**] on the "Top Menu", and then touch [**POI**].
- 2 Touch [**Saved Criteria**].

3 Touch [Delete] on the right of the item that you want to delete.



4 Touch the folder that includes the desired item on the list.



5 Touch one of the items on the list.



Searching for POIs by using the data on external storage devices (USB, SD)

Creating a customized POI is possible by using the utility programme “AVIC FEEDS” which is available separately, on your PC. (“AVIC FEEDS” will be available on our web site.) Storing the customized POI properly and connecting the external storage device (USB, SD) enables the system to use the data for searches.

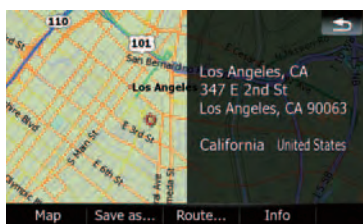
1 Connect the USB device or insert the SD card.

2 Touch [Destination] on the “Top Menu”, and then touch [USB/SD].

3 Touch the desired storage that you want to load.



6 Touch on of the options at the bottom of the “Map Confirmation Screen” to select the next operation.



Touching [Route...] and [Go Here Now] sequentially enables you to set your selected position as your destination and calculate the route up that point.

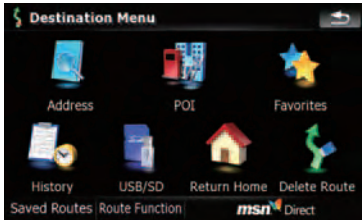
- For details concerning other operations on the “Map Confirmation Screen”, refer to *What you can do with the “Map Confirmation Screen”* on page 36. ■

Searching for and selecting a location

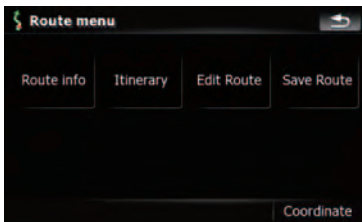
Searching for a location by coordinates

Entering a latitude and longitude pinpoints the location.

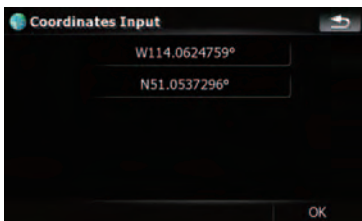
- 1 Touch [Destination] on the "Top Menu", and then touch [Route Function].



- 2 Touch [Coordinate].

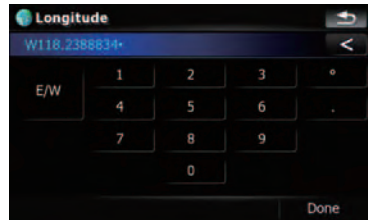


- 3 Touch either the latitude key or the longitude key, whichever you want to enter.



The values on the latitude key or longitude key shows the coordinates on the cursor just before entering this screen.

- 4 Touch **<** to delete the current value and enter the desired coordinate.



- Touching [N/S] or [E/W] changes the hemisphere.

- 5 Touch [Done].

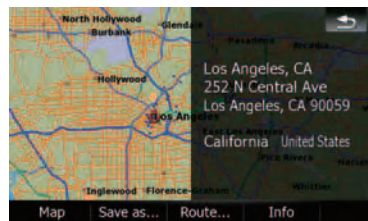
The screen returns to the previous screen. Touch the other key that you have not entered yet, enter the latitude or longitude and then touch [Done] to finish the entry.

- 6 Touch [OK].




The "Map Confirmation Screen" appears.

- 7 Touch on of the options at the bottom of the "Map Confirmation Screen" to select the next operation.



Touching **[Route...]** and **[Go Here Now]** sequentially enables you to set your selected position as your destination and calculate the route up that point.

- ➔ For details concerning other operations on the “Map Confirmation Screen”, refer to *What you can do with the “Map Confirmation Screen”* on page 36. 

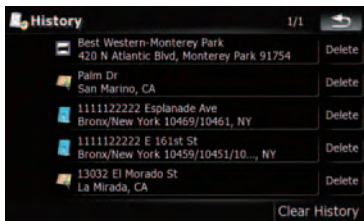
Selecting a location you searched for recently

The places that you have searched for in the past are automatically stored in “**History**”. Selecting the item on the list provides an easy way to specify the position.

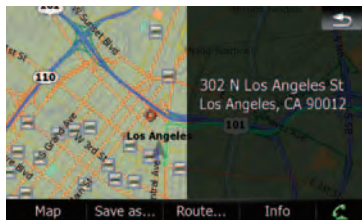
- “**History**” can store up to 32 locations. If the entries reach the maximum, the new entry overwrites the oldest one.

1 Touch [Destination] on the “Top Menu”, and then touch [History].

2 Touch the desired entry.



3 Touch on of the options at the bottom of the “Map Confirmation Screen” to select the next operation.



Touching **[Route...]** and **[Go Here Now]** sequentially enables you to set your selected position as your destination and calculate the route up that point.

- ➔ For details concerning other operations on the “Map Confirmation Screen”, refer to *What you can do with the “Map Confirmation Screen”* on page 36.

Deleting an entry in “History”


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

1 Touch [Destination] on the “Top Menu”, and then touch [History].

2 Touch [Delete] on the right of the item that you want to delete.

3 Touch [Yes].

A message will appear asking you to confirm the deletion.

- Touching **[Clear History]** allows you to delete all the entries.
- Because deleted data cannot be restored, take extra care not to mistakenly delete item. 

Selecting a location stored in “Favorites”

Storing locations you visit frequently saves time and effort.

Searching for and selecting a location

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

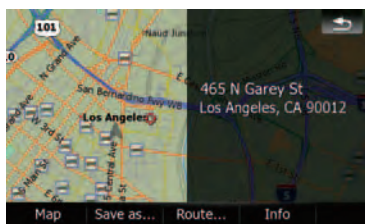
“Favorites” can store up to 30 locations.

1 Touch [Destination] on the “Top Menu”, and then touch [Favorites].

2 Touch the desired entry.



3 Touch on of the options at the bottom of the “Map Confirmation Screen” to select the next operation.



Touching **[Route...]** and **[Go Here Now]** sequentially enables you to set your selected position as your destination and calculate the route up that point.

- For details concerning other operations on the “Map Confirmation Screen”, refer to *What you can do with the “Map Confirmation Screen”* on page 36.

Deleting an entry in “Favorites”

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

1 Touch [Destination] on the “Top Menu”, and then touch [Favorites].

2 Touch [Clear All].

A message will appear asking you to confirm the deletion.

3 Touch [Yes].

- Because deleted data cannot be restored, take extra care not to mistakenly delete item.

Setting up a route to your home

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

● Touch [Destination] on the “Top Menu”, and then touch [Return Home].

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

When the route is already set, a message will appear asking you to cancel the current route. Touch **[Yes]** to start the route calculation.

- If the home location has not been stored yet, set the location first.
 - For details, refer to *Setting your home position* on page 90.

Setting a route by recalling a saved route

Saving a route enables you to recall the same route. Selecting the item on the list provides an easy way to set the saved route.


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

- If there are no entries on the list, save the route first.
 - For details concerning other operations, refer to *Storing the current route* on page 44.

1 Touch [Destination] on the “Top Menu”, and then touch [Saved Routes].

2 Touch the desired entry.



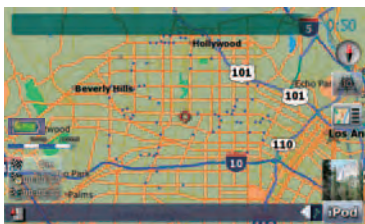
When the route is not set, the saved route is recalled and the guidance will start immediately. 

Searching for a location by scrolling the map

Specifying a location after scrolling the map enables you to set the position as an operable target in the "Map Confirmation Screen".

1 Press MAP button to display the navigation map screen.

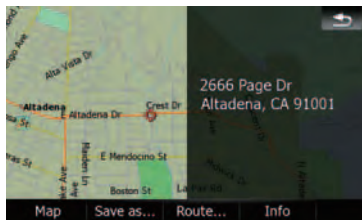
2 Touch and drag the screen to scroll the map to the desired position.




3 Touch to display the "Map Confirmation Screen".

The "Map Confirmation Screen" appears.

4 Touch on of the options at the bottom of the "Map Confirmation Screen" to select the next operation.



Touching **[Route...]** and **[Go Here Now]** sequentially enables you to set your selected position as your destination and calculate the route up that point.

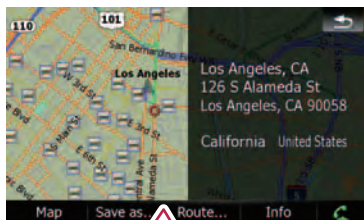
- For details concerning other operations on the "Map Confirmation Screen", refer to *What you can do with the "Map Confirmation Screen"* on page 36. 

Searching for and selecting a location

Searching for and selecting a location

What you can do with the “Map Confirmation Screen”

Under most conditions after searching for a location, the “Map Confirmation Screen” appears to let you select the next operation. The options shown below are available on this screen:



Map

Shows a full screen 2D map centered on the cursor position.

Save as...

Places a map pin, and saves the position.

- ➔ For more details concerning the operation, refer to **Save as...** on the next page.

Route...

Sets the destination, waypoints, and starting point positions.

- ➔ For more details concerning the operation, refer to **Route...** on this page.

Info

Shows detailed information about the location of the cursor position.

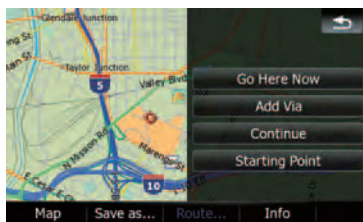
- ➔ For more details concerning the operation, refer to *Viewing the information of a specified location* on page 38.



Enables you to call the position if a telephone number is available. (Pairing with cellular phone featuring Bluetooth wireless technology is required.)

- ➔ For more details concerning the operation, refer to *Dialing a phone number on the “Map Confirmation Screen”* on page 58. ▣

Route...



Go Here Now

Calculates the new route by setting the cursor position as the new destination.

- ➔ For more details concerning the operation, refer to *Setting the location as a new destination* on the next page.

Add Via

Recalculates the route by adding the cursor position as a waypoint.

- ➔ For more details concerning the operation, refer to *Setting the location as a waypoint* on the next page.

Continue

Recalculates the route by setting the cursor position as the new destination. The previous destination becomes a waypoint.

After the location is decided (Map Confirmation Screen)

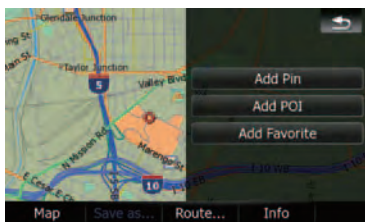
- For more details concerning the operation, refer to *Replacing the location as the new final destination* on this page.

Starting Point

Sets the location as a starting point.

- For more details concerning the operation, refer to *Setting the location as the start point* on this page.

Save as...



Add Pin

Puts a map pin at the cursor position as a mark up.

- For details, refer to *Placing a map pin on the location* on the next page.

Add POI

Stores the cursor position as a POI.

- For details, refer to *Registering the location as a customized POI* on page 39.

Add Favorite

Stores the cursor position as one of the "Favorites".

- For details, refer to *Storing the location in "Favorites"* on page 40.

Setting the location as a new destination

- 1 Touch [Route...] on the "Map Confirmation Screen".

2 Touch [Go Here Now].

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

When the route is already set, a message will appear asking you to cancel the current route. Touch [Yes] to start the route calculation.

- When the cursor overlaps with a destination that has already been set, touch [Remove Dest.] to cancel the current route or recalculate the route by setting one of the remaining waypoints as the destination.

Setting the location as a waypoint

- 1 Touch [Route...] on the "Map Confirmation Screen".

2 Touch [Add Via].

When no waypoint is set, route calculation starts immediately.

- When the cursor overlaps a waypoint already set, touch [Remove Via] to delete the waypoint and recalculate the route.

Replacing the location as the new final destination

- 1 Touch [Route...] on the "Map Confirmation Screen".

2 Touch [Continue].

- Recalculates the route by setting the cursor position as the new destination. The previous destination becomes a waypoint.

Setting the location as the start point

Only setting the starting point is performed when there is no route. Otherwise, the new route from the starting point to the current destination will be recalculated.

After the location is decided (Map Confirmation Screen)

1 Touch [Route...] on the “Map Confirmation Screen”.

2 Touch [Starting Point].

- When the cursor overlaps with a starting point already set, it changes to [Remove Start]. All waypoints already set are deleted. □



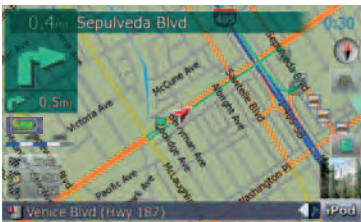
- ① The address and coordinates
- ② Information about a nearby POI

Viewing the information of a specified location

Locating the cursor to your desired position enables you to view detailed information about the location by using the “Map Confirmation Screen”.

1 Press MAP button to display the navigation map screen.

2 Touch and drag the screen to scroll the map to the desired position.





3 Touch  to display the “Map Confirmation Screen”.

The “Map Confirmation Screen” appears.

4 Touch [Info] at the bottom of the “Map Confirmation Screen”.

The “Point Info” screen appears.

5 Touch  or  to scroll the nearby POI list and then touch the desired POI.

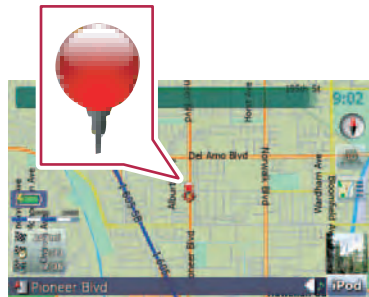
Touching one of the listed POIs enables you to view more detailed information about the POI.

6 Touch [OK].

If you touch [OK], the “Map Confirmation Screen” appears with a focus on the selected POI. □

Placing a map pin on the location

The pin shaped icons called “map pins” can be used just like markers. Placing the colored pins on the map makes the position stand out and helps you to find the position easily later.



After the location is decided (Map Confirmation Screen)

1 Search for a location or position the cursor on the desired area by scrolling the map and displaying the “Map Confirmation Screen”.

2 Touch [Save as...] on the “Map Confirmation Screen”.

3 Touch [Add Pin].

The pin shaped icon is placed on the map and the screen returns to the map screen.

- The color of pin shaped icon is assigned automatically within predefined colors when you set it up.

Removing a map pin

When the cursor overlaps a map pin that has already been set, you can remove the map pin.

1 Locate the cursor at the pin-shaped icon and display the “Map Confirmation Screen”.

2 Touch [Save as...] on the “Map Confirmation Screen”.

3 Touch [Remove Pins].

The pin shaped icon is removed and the screen returns to the map screen. □

Registering the location as a customized POI

If a new business has opened, it may not be found in the database. Registering the location as a new POI allows you to use the item just like a preinstalled POI.

1 Search for a location or position the cursor on the desired area by scrolling the map and displaying the “Map Confirmation Screen”.

2 Touch [Save as...] on the “Map Confirmation Screen”.

3 Touch [Add POI].

The list of POI categories appears.

4 Touch the desired category to which the location is to be assigned.



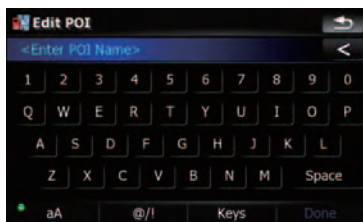
If there are more detailed categories within the selected category, repeat this step as many times as necessary.

5 Touch [Add here] when the desired category list appears to add the item to it.

If there aren't any more detailed categories, the blank list appears. In such case, touching [Add here] allows you to add the item and register it as an item belonging to the category that you selected on the previous screen.

- Touching [Add here] without selecting any category is invalid.

6 Enter the desired name and then touch [Done] to complete the entry.



The registration is now complete and the item is available as a customized POI.

- You can edit the stored POI later in “Manage POI”.
- ☞ For more details concerning the operation, refer to *Editing your customized POI* on page 88. □

Storing the location in “Favorites”

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

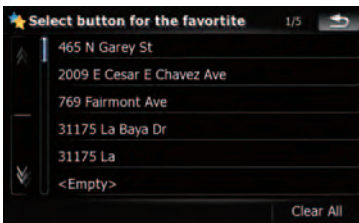
- ➔ For more details concerning the operation, refer to *Selecting a location stored in “Favorites”* on page 32.
- ☐ “**Favorites**” can store up to 30 locations.

1 Search for a location or position the cursor on the desired area by scrolling the map and displaying the “Map Confirmation Screen”.

2 Touch [Save as...] on the “Map Confirmation Screen”.

3 Touch [Add Favorite].

4 Touch the desired entry.



Selecting an item that has already been stored allows you to overwrite it.

5 Enter the desired name and then touch [Done] to complete the entry.

Storage has been completed and the item is available as a preset entry on “**Favorites**”. ☐

1 Touch [Destination] on the “Top Menu”, and then touch [Favorites].

2 Touch [Clear All].

A message will appear asking you to confirm the deletion.

3 Touch [Yes].

- ☐ Because deleted data cannot be restored, take extra care not to mistakenly delete item. ☐

Deleting an entry in “Favorites”

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

Checking the current route

Checking the current route conditions

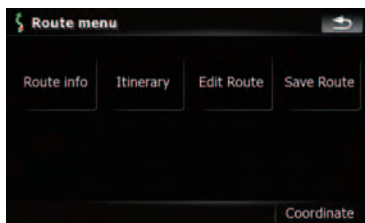
The **"Route Information"** screen provides you with various detailed information about the current route.

This is an example showing a route with two waypoints.

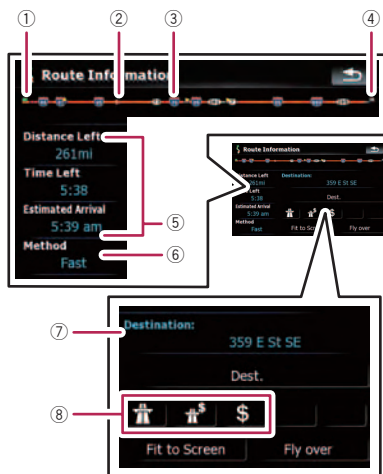
- ❑ This function is available only when the route is set and your vehicle position is on the route.
- ❑ You can also display the **"Route Information"** screen by touching **"Multi-Info window"** on the map screen.
 - ➔ For details, refer to **Multi-Info window** on page 19.

1 Touch [Destination] on the "Top Menu", and then touch [Route Function].

2 Touch [Route info].




The **"Route Information"** screen appears.



- ① Starting point
- ② Current position
- ③ Waypoint
- ④ Destination
- ⑤ Time and distance up to the point currently shown

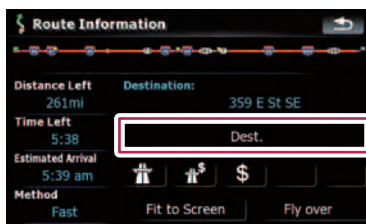
The remaining distance and time, as well as the estimated time of arrival are displayed.

- ⑥ The route calculation method that is currently set **"Method:"**
 - ➔ For details, refer to **Route** on page 83.
- ⑦ Point currently shown and information regarding the point
- ⑧ The route conditions up to the point currently shown

Touching the icon enables you to check the details. If there are five or more icons, touch  to show the next four icons.

Checking the current route

3 Touch [Dest.] to switch to the screen for first waypoint.



The “Route Information (to via)” screen appears.

4 Touch [Via] to switch to the second waypoint screen.

The “Route Information (to via)” screen for next waypoint appears.

5 Touch [Via] to return to the screen for whole route.

The “Route Information” screen appears.

- If three or more waypoints are set, each touch of [Via] shows the screen for the next waypoint.

Playing simulated travel at high speed

This function allows you to play the simulated navigation function at high speed without voice guidance. This function is useful if you want to browse how the current route will be navigated.


1 Touch [Destination] on the “Top Menu”, and then touch [Route Function].

2 Touch [Route info].

The “Route Information” screen appears.

3 Touch [Fly over].

The simulation will start.

- If you want to stop the simulation, touch  on the map.

Checking the entire route overview on the map


You can check the entire outline of the current route.

1 Touch [Destination] on the “Top Menu”, and then touch [Route Function].

2 Touch [Route info].

The “Route Information” screen appears.

3 Touch [Fit to Screen].

A 2D map screen will appear with the current overall route fitted onto the screen. 

Checking the current itinerary

You can check the route details.

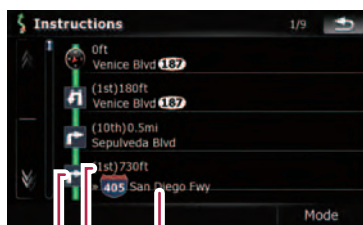
- This function is available only when the route is set and your vehicle position is on the route.

1 Touch [Destination] on the “Top Menu”, and then touch [Route Function].

2 Touch [Itinerary].

3 Touch  or  to scroll the list.

Scroll the list as necessary.



- ① Turning direction
- ② Driving distance
- ③ Names of the streets you are driving through

4 Touch [Mode].

Each touch of [Mode] changes the list mode.

Checking the current route

Alternative options:

- **Detailed Instructions**
All turning points, passed streets and other information is shown.
 - **Instructions**
All turning points (where voice guidance is given) are shown.
 - **Road List**
Displays the turning points with the most simplified condition (the duplicate route names are merged into one.).
- When a long distance route is calculated, your navigation system may not be able to list all roads. (In this case, the remaining roads will be shown in the list as you drive on.)

Editing waypoints

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

Adding a waypoint

1 Search for a location.

- ➔ For more details, refer to the descriptions from page 24 to page 34.

2 Touch [Route...] on the “Map Confirmation Screen”.

3 Touch [Add Via].

When no waypoint is set, route calculation starts immediately.

- ➔ For more details concerning the operation, refer to *Sorting waypoints* on this page.
- ☐ When you set waypoints in the route to your destination, the route up to the next waypoint will appear in light green. The rest of the route will appear in light blue.

Sorting waypoints

You can sort waypoints and recalculate the route.

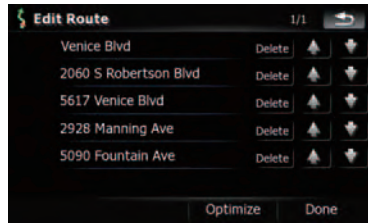
1 Touch [Destination] on the “Top Menu”, and then touch [Route Function].

2 Touch [Edit Route].

The “Edit Route” screen appears.

3 Touch [↑] or [↓] to move the waypoint or destination.

Put them in the desired order.



Touching [Optimize] sorts the waypoints automatically so that the route will comprise the least time and distance.

4 Touch [Done].

The route is recalculated and the map of the current position appears.

Deleting a waypoint

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

1 Touch [Destination] on the “Top Menu”, and then touch [Route Function].

2 Touch [Edit Route].

The “Edit Route” screen appears.

3 Touch [Delete] on the right of the waypoint that you want to delete.

The waypoint will be deleted from the list.

4 Touch [Done].

The route is recalculated and the map of the current position appears. ☐

Storing the current route

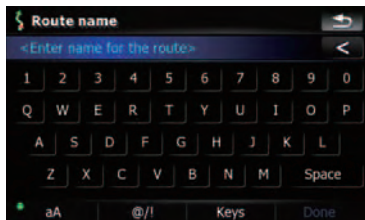
Storing the current route allows you to recall and set the stored route.

- ☐ This function is available only when the route is set and your vehicle position is on the route.

1 Touch [Destination] on the “Top Menu”, and then touch [Route Function].

Editing waypoints and the destination

- 2 Touch [Save Route].
- 3 Enter the desired name and then touch [Done] to complete the entry.



The previous screen appears.

Deleting the entry in “Saved Routes”

- 1 Touch [Destination] on the “Top Menu”, and then touch [Saved Routes].
- 2 Touch [Delete] on the right of the item that you want to delete.
 - Because deleted data cannot be restored, take extra care not to mistakenly delete item.

Deleting the current route

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

- 1 Touch [Destination] on the “Top Menu”, and then touch [Delete Route].
A message confirming the cancellation of the current route appears.
- 2 Touch [Yes].

MSN Direct tuner is embedded in the cradle. Therefore, this function is available only when the navigation system is attached on the cradle.

If the MSN Direct information has not been updated for a length of time, unplug the system cable from the cradle and plug it again.

If you have an active subscription to MSN Direct service, you can check and browse various information on your navigation system, such as gas prices, movie times, weather conditions and traffic information. The information will be updated periodically.

Notice about MSN Direct™

Pioneer is not responsible for the accuracy of the MSN Direct content. The MSN Direct content may not be current or available at times, and is subject to change without notice. To receive MSN Direct content, you must subscribe to the MSN Direct service, and you must be within the MSN Direct coverage area. Coverage may also be affected by the availability and relative strength of FM transmissions, as well as reception limitations of Microsoft's Direct Band network.

Please visit

<http://www.msndirect.com/pioneer>

or current coverage area maps, subscription details, and other important information about MSN Direct.

Activating the service

You have to activate MSN Direct first.

- A web connected computer is required for the online subscription.
- If you have difficulty for the online subscription, please call toll free 1 866 658 7032.

General flow chart:

- 1 Check your product key.
You have to know your product key for the subscription.
(Refer to *Checking your product key* on this page.)
↓
- 2 Make an online subscription to MSN Direct service using your PC.
(Refer to *Subscribing to the MSN Direct service* on the next page.)
↓
- 3 Activate the MSN Direct service on this product.
(Refer to *Activating the MSN Direct function* on the next page.)
↓
- 4 Activation is complete.

Checking your product key

The product key that you can find here is used in the online subscription.

1 Touch [Destination] on the "Top Menu", and then touch [MSN Direct].

The "MSN Direct" screen appears.

2 Touch [Status].

3 Write your product key down in the following box;



Browsing information on MSN Direct

Subscribing to the MSN Direct service

Within two days of completing the subscription, execute *Activating the MSN Direct function*.

1 Access the following URL and read the description.

http://www.msndirect.com/pioneer

2 Be sure to check the coverage area and other availabilities of MSN Direct on the web page.

3 Move to the page for activation and enter your product key.


4 Follow the directions on the web page to complete the subscription.

Activating the MSN Direct function

After the online subscription, complete the activation so that the navigation system can receive the information.

This operation must be performed under the following conditions

You are currently in the coverage area of MSN Direct.

The signal strength () on "MSN Direct" screen is not weak.

1 Boot-up your navigation system.

2 Touch [Destination] on the "Top Menu", and then touch [MSN Direct].


The "MSN Direct" screen appears.

Check the signal strength. If the signal is weak, move to another location where a stronger signal can be received.

3 Touch [Status].

4 Wait until the activation status changes to "Active".

It may take approximately 20 or 30 minutes to complete the activation.

After activation is complete, the information will be available on each menu. 

Browsing gas prices

Recent gas prices of nearby gas stations are displayed in a list.

This information does not necessarily correspond to actual information. Utilize the information for your reference.

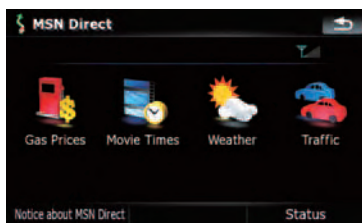
It may take up to 24 hours for all the data to become available under the following conditions:

- When you use MSN Direct for the first time.
- When you have not performed this function previously around the current area.
- After the navigation system has been turned off for a few days.

1 Touch [Destination] on the "Top Menu", and then touch [MSN Direct].

The "MSN Direct" screen appears.

2 Touch [Gas Prices].



3 Touch the desired tab to change the sort order.

Name	Price	Distance
Mobil	n/a	9.2mi
Circle K	\$3.89 (today)	9.2mi
Valero	\$4.11 (yesterday)	9.3mi
Chevron	\$3.95 (today)	9.3mi
76	\$3.93 (today)	9.4mi

Available options;

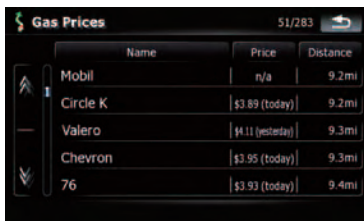
- **[Distance]** (default):

Browsing information on MSN Direct

Sorts the items in the list in order by distance from the vehicle position.

- **[Name]:**
Sorts the items in the list alphabetically.
- **[Price]:**
Sorts the items in the list by price.


4 Touch on the item that you want to view in detail.



Name	Price	Distance
Mobil	n/a	9.2mi
Circle K	\$3.89 (today)	9.2mi
Valero	\$4.11 (yesterday)	9.3mi
Chevron	\$3.95 (today)	9.3mi
76	\$3.93 (today)	9.4mi

- ① The names of gas stations and their locations
- ② Gas prices
The information in () shows how current the information is.
- ③ Distance from the current position

5 Touch on of the options at the bottom of the "Map Confirmation Screen" to select the next operation.

- ➔ For details concerning other operations on the "Map Confirmation Screen", refer to *What you can do with the "Map Confirmation Screen"* on page 36. 

Browsing movie times

Nearby theaters can be displayed on a list. Switching the screen allows you to see the movie title now showing.

This information does not necessarily correspond to actual information. Utilize the information for your reference.

It may take up to 6 hours for all the data to be come available under the following conditions:

- When you use MSN Direct for the first time.
- When you have not performed this function previously around the current area.
- After the navigation system has been turned off for a few days.

Searching for a theater by selecting a movie title

1 Touch [Destination] on the "Top Menu", and then touch [MSN Direct].

2 Touch [Movie Times].

3 Touch [All Movie Titles].

The movie titles now showing are displayed.

4 Touch the desired movie title.

The theaters that are currently showing the selected movie are displayed.

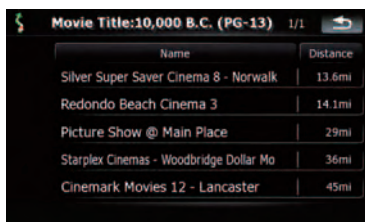


Movie Title	Rating
10,000 B.C.	(PG-13)
21	(PG-13)
88 Minutes	(R)
Alvin and the Chipmunks	(PG)
Baby Mama	(PG-13)
Before the Rains	(PG-13)

All Movie Theaters

Browsing information on MSN Direct

5 Touch the desired tab to change the sort order.



Available options;

- **[Distance]** (default):
Sorts the items in the list in order by distance from the vehicle position.
- **[Name]**:
Sorts the items in the list alphabetically.

6 Touch on the item that you want to view in detail.



- ① The names of theaters and their locations
- ② Distance from the current position

7 Touch on of the options at the bottom of the "Map Confirmation Screen" to select the next operation.

- ☞ For details concerning other operations on the "Map Confirmation Screen", refer to *What you can do with the "Map Confirmation Screen"* on page 36.

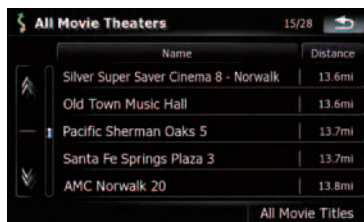
Searching for a movie title by selecting a theater

1 Touch [Destination] on the "Top Menu", and then touch [MSN Direct].

2 Touch [Movie Times].

The nearby theaters are displayed.

3 Touch the desired tab to change the sort order.



Available options;

- **[Distance]** (default):
Sorts the items in the list in order by distance from the vehicle position.
- **[Name]**:
Sorts the items in the list alphabetically.

4 Touch the desired theater.

The movie titles currently shown on the selected theater are displayed.

5 Touch on the item that you want to view in detail.

6 Touch on of the options at the bottom of the "Map Confirmation Screen" to select the next operation.

- ☞ For details concerning other operations on the "Map Confirmation Screen", refer to *What you can do with the "Map Confirmation Screen"* on page 36. ■

Browsing weather information

Local weather information can be displayed on a list. Switching the screen allows you to see worldwide weather conditions.

This information does not necessarily correspond to actual information. Utilize the information for your reference.

Checking the local weather information

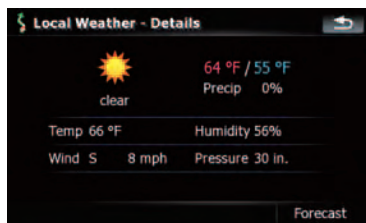
1 Touch [Destination] on the “Top Menu”, and then touch [MSN Direct].

2 Touch [Weather].

The local weather information is displayed. The area name, distance and direction from current position are displayed on the list. The items on the list are sorted by distance.

3 Touch the desired area.

Detailed information is displayed.



Touching [**Forecast**] displays the weather forecasts for these three days.

Checking worldwide weather conditions

1 Touch [Destination] on the “Top Menu”, and then touch [MSN Direct].

2 Touch [Weather].

The local weather information is displayed.

3 Touch [Worldwide].

Worldwide weather conditions are displayed. The area name, distance and direction from current position are displayed on the list. The list is sorted alphabetically by the area name.

4 Touch the desired area.

Detailed information is displayed. 

Using traffic information

You can view current traffic conditions and information. When the navigation system receives updated traffic information, it will overlay the traffic information on your map and also display detailed text information when available.

In the default setting, the navigation system takes into account traffic information and tries to avoid traffic jam and suggests better routes. Also, when you are traveling along a route and the system finds another better route for avoiding the traffic jam, the current route will be recalculated automatically.

The term “traffic jam” in this section indicates the following types of traffic conditions:

- Stop and go traffic
- Stopped traffic
- Closed/blocked roads

Viewing the traffic list

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

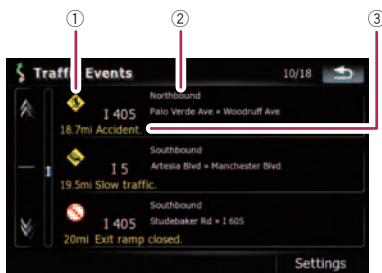
1 Touch [Destination] on the “Top Menu”, and then touch [MSN Direct].

2 Touch [Traffic].

A list with traffic information that has been received is shown. The list is sorted by distance from your current position.

Places (street names) where incidents have occurred are displayed on the list.

Browsing information on MSN Direct



- ① Event related icon
- ② Street or location and direction
- ③ Distance to the location and event

Touching the desired item allows you to check its position on the map.




How to read traffic information on the map

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

- ☐ Further zooming out hides the lines and icons of traffic information.

Traffic event icon



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

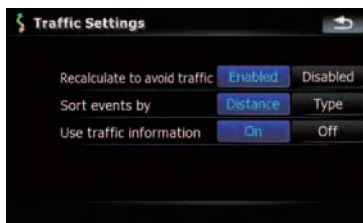
Setting the traffic information

Preferred functions related to traffic information can be set.

1 Touch [Destination] on the "Top Menu", and then touch [MSN Direct].

2 Touch [Traffic] and then touch [Settings].

The "Traffic Settings" screen appears.



Available options;

- "Recalculate to avoid traffic"
 - [Enabled]: Calculates the new route with the traffic congestion taken into account when rerouting.
 - [Disabled]: Calculates the new route without the traffic congestion taken into account when rerouting.
- "Sort events by"
 - [Distance]: Sorts the traffic event items in the list by distance.
 - [Type]: Sorts the traffic event items in the list by event type.
- "Use traffic information"
 - [On]: Calculates the route with the traffic congestion taken into account in the initial calculation.
 - [Off]: Calculates the route without the traffic congestion taken into account in the initial calculation. ☐

Hands-free phoning overview

! CAUTION

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

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

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



Preparing communication devices

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

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

- ➔ For details, refer to *Notes for hands free phoning* on page 63.
- ☐ When the power of the navigation system turns off, the Bluetooth connection is also disconnected. When the system restarts, the system automatically attempts to reconnect the previously connected cellular phone. Even when the connection is severed for some reason, the system automatically reconnects the specified cellular phone (except when the connection is severed due to cellular phone operations). ☐

Displaying the Phone Menu

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

- 1 Press MENU button to display the “Top Menu”.
- 2 Touch [Phone].



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

Registering your cellular phone

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

- Searching for nearby phones
- Searching for a specified phone
- Pairing from your mobile phone
- ☐ If you try to register more than three cellular phones, the system will ask you to select one of the registered cellular phones to overwrite.
 - ➔ For details, refer to *Connecting a registered cellular phone* on page 55.
- ☐ The default device name displayed on the cellular phone is “Pioneer Navi”. The PIN code is “1111”.

Using hands-free phoning

Searching for nearby phones

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

1 Activate the Bluetooth wireless technology on your cellular phone.

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

2 Touch [Phone Settings] on the “Phone Menu”.

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

3 Touch [Connection].

4 Touch [Add Device], and then [Search devices].

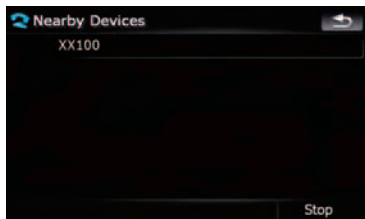
The system searches for cellular phones with Bluetooth technology that are waiting for the connection and displays them in the list if the device has found.

- ☐ Up to 10 cellular phones will be listed in the order that the cellular phone is found.

5 Wait until your cellular phone appears in the list.

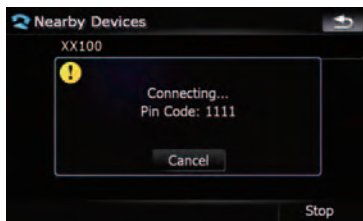
- ☐ If you cannot find the cellular phone you want to connect, check that the cellular phone is waiting for the Bluetooth wireless technology connection.

6 Touch the cellular phone name you want to register.



A message prompts you to enter a PIN code appears.

7 Enter the PIN code “1111” using the cellular phone.



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

Searching for a specified phone

If you cannot connect your phone in the regular two methods previously described, try this method if your phone is found in the list.

1 Activate the Bluetooth wireless technology on your cellular phone.

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

2 Touch [Phone Settings] on the “Phone Menu”.

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

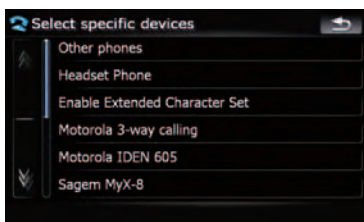
3 Touch [Connection].

4 Touch [Add Device], and then [Select specific devices].

Using hands-free phoning

5 Touch the model name of the cellular phone to be connected.

The system searches for cellular phones with Bluetooth technology that are waiting for the connection and displays them in the list if the device has found.

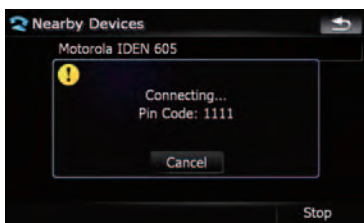


- If you cannot find the desired model name on the list, touch **[Other phones]** to search the cellular phones available nearby.

6 Select the cellular phone you want to register from the list.

A message prompts you to enter a PIN code appears.

7 Enter the PIN code "1111" using the cellular phone.



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

Pairing from your mobile phone

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

1 Activate the Bluetooth wireless technology on your cellular phone.

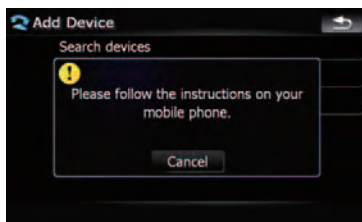
For some cellular phones, no specific action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your cellular phone.

2 Touch **[Phone Settings]** on the "Phone Menu".

- ➔ For details, refer to *Displaying the Phone Menu* on page 52.

3 Touch **[Add Device]**, and then **[Pair from the mobile phone]**.

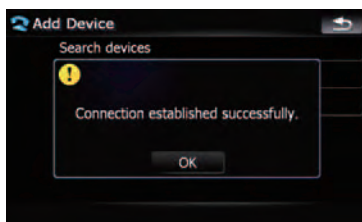
The navigation system waits for a Bluetooth wireless technology connection.



4 Register the navigation system on your cellular phone.

If your cellular 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.



- If registration fails repeat the procedure from the beginning. □

Using hands-free phoning

Connecting a registered cellular phone

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

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

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

➔ For details, refer to *Setting the automatic connection* on page 62.

1 Activate the Bluetooth wireless technology on your cellular phone.

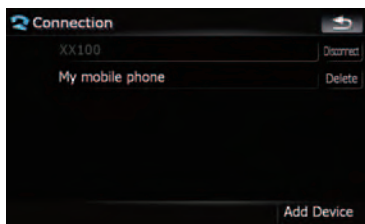
For some cellular phones, no specific action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your cellular phone.

2 Touch [Phone Settings] on the "Phone Menu".

➔ For details, refer to *Displaying the Phone Menu* on page 52.

3 Touch [Connection].

4 Touch the name of the cellular phone that you want to connect.



Connection starts.

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

- ❑ If another cellular phone is already connected, touch [Disconnect] next to the cellular phone name to disconnect it, and start connection.
- ❑ To cancel the connection to your cellular phone, touch [Cancel].
- ❑ If connection fails, check to see whether your cellular phone is waiting for a connection and then retry.

Disconnecting a cellular phone

1 Touch [Phone Settings] on the "Phone Menu".

➔ For details, refer to *Displaying the Phone Menu* on page 52.

2 Touch [Connection].

3 Touch [Disconnect] next to the cellular phone name.

Deleting a registered phone

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

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

1 Touch [Phone Settings] on the "Phone Menu".

➔ For details, refer to *Displaying the Phone Menu* on page 52.

2 Touch [Connection].

3 Touch [Delete] next to the cellular phone name.

The registration is canceled. ❑

Receiving a phone call

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

Answering an incoming call

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

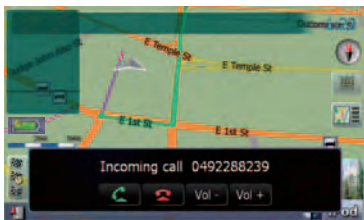
If **[Auto Answer Preference]** is set to **[Off]**, answer the call manually. Answering is available if any screen is displayed, such as the map screen or the setting screen.


- You can set this navigation system to automatically answer incoming calls.
 - For details, refer to *Answering a call automatically* on page 61.

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

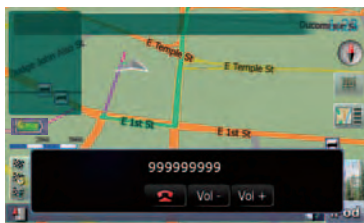
- You cannot carry out operations other than answering calls.

2 To answer an incoming call, touch .



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

- When there is an incoming call, pressing **MULTI-CONTROL** answers the call. During the call, pressing **MULTI-CONTROL** gets you off the phone.
- If the voice on the other end of the call is too quiet to hear, you can adjust the volume of the received voice.
 - For more details about **"Phone Volume"**, refer to *Setting the phone volume* on page 61.
- 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 *Answering a call automatically* on page 61.

● 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 *Dialing from the history* on the next page.

Making a phone call

You can make a phone call in many different ways.

Using hands-free phoning

Direct dialing

1 Touch [Dial Pad] on the “Phone Menu”.

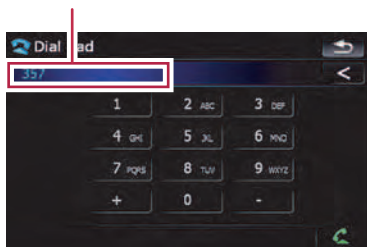
- For details, refer to *Displaying the Phone Menu* on page 52.

The direct dial screen appears.

2 Touch the number keys to enter the phone number.

The phone number that was input is displayed.

Input number



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



Return to the previous screen.

3 Touch [Call] to make a call.

- ☐ To cancel the call after the system starts dialing, touch [Cancel].

4 Touch [End Call] to end the call.

1 Touch [Dialed Numbers] on the “Phone Menu”.

- For details, refer to *Displaying the Phone Menu* on page 52.

2 If you touch an entry on the list, dialing starts.

- ☐ If you touch [Detail], you can check the details of the party before making a phone call.
- ☐ To cancel the call after the system starts dialing, touch [Cancel].

3 Touch [End Call] to end the call.

Making a phone call using the received call history

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

1 Touch [Received Calls] on the “Phone Menu”.

- For details, refer to *Displaying the Phone Menu* on page 52.

2 If you touch an entry on the list, dialing starts.

- ☐ If you touch [Detail], you can check the details of the party before making a phone call.
- ☐ To cancel the call after the system starts dialing, touch [Cancel].

3 Touch [End Call] to end the call.

Making a phone call using missed call history

The missed call history saves 20 calls per registered cellular phone. If the number of calls exceeds 20, the oldest entry will be deleted.

1 Touch [Missed Calls] on the “Phone Menu”.

- For details, refer to *Displaying the Phone Menu* on page 52.


Dialing from the history

The most recent calls made (dialed), received and missed are stored in the call history list. You can browse the call history list and call numbers from it.

Making a phone call using the dialed number history

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

2 If you touch an entry on the list, dialing starts.

- If you touch **[Detail]**, you can check the details of the party before making a phone call.
- To cancel the call after the system starts dialing, touch .

3 Touch to end the call.

Calling a number in the “Contacts” screen

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

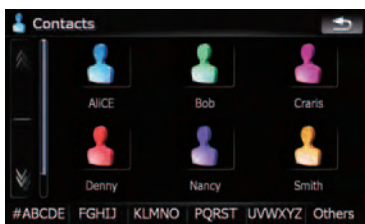
1 Press MENU button to display the “Top Menu”.

2 Touch **[Contacts]**.

The “**Contacts**” screen appears.

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

If you touch an alphabet tab, you can jump to the first page of the contacts whose names start with that letter.



 or .

Shows the next or previous page.

Alphabet tabs

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

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

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

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

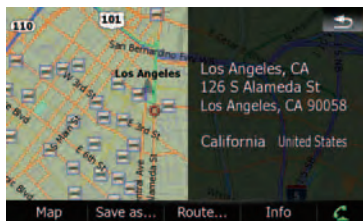
5 Touch to end the call.


Dialing a phone number on the “Map Confirmation Screen”

You can make a call to the searched location or the location that you are selecting on the map screen if the telephone number exists.

1 To display the “Map Confirmation Screen”, search for a locations or moves the cursor and touch .

2 Touch to make a call.



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

3 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.

● Touch **[Call Home]** on the “Phone Menu”.

Dialing home starts.

- ➔ For details, refer to *Displaying the Phone Menu* on page 52.

Using hands-free phoning

- ❑ If you have not registered your home number, a message appears. Touch **[Yes]** to start registration.
 - ➔ For more details about **"Set Home"**, refer to *Setting your home position* on page 90.

Dialing GOOG-411

CAUTION

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


You can dial GOOG 411 to dial the free business listing service available from Google by one touch.

1 Touch **[GOOG-411]** on the **"Phone Menu"**.

- ➔ For details, refer to *Displaying the Phone Menu* on page 52.

Dialing GOOG 411 starts.


2 You can now use the **GOOG-411 phone service**.

- ❑ For details about GOOG 411 service and availability, contact Google. 

Announcing incoming short mails

While the cellular phone and the navigation system are connected, the following notice is displayed when you get a new SMS message. **"New mail from: (sender's name)"** is displayed and the notice disappears after eight seconds.



- ❑ If you want to delete the message, touch anywhere on the screen.
- ❑ If the voice language with TTS is currently used, the audible message can be output.
 - ➔ For details, refer to *Selecting the language* on page 91. 

Transferring the phone book

You can transfer the numbers in a registered user phone's address book into the phone book.

- ❑ With some cellular phones, it may not be possible to transfer the entire phone book at once. In this case, transfer addresses one at a time from your phone book using your cellular phone.
- ❑ The maximum 400 entries can be transferred per cellular phone. If the entries exceed 400, the extra entries will not be transferred. If more than one number is registered for one person, such as work place and home, each number is counted separately.
- ❑ Each entry can hold up to 3 phone numbers.

Using hands-free phoning

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

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

- ➔ For details, refer to *Connecting a registered cellular phone* on page 55.

2 Touch [Phone Book Transfer] on the "Phone Menu".

The confirmation messages appear.

3 Check the messages and touch [OK].

- ❑ If there is a phone book already transferred, a message asking whether you can accept the data replacement appears.

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



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

- ❑ You can send the phone book entries repeatedly before touching [OK]. If your cellular phone supports one by one transfer only, send all the entries that you want to transfer before touching [OK].
- ❑ If your phone has a capability for automatic transfer of phone book, this screen is skipped and transfer will start.

- ❑ The transferred data can not be edited on the navigation system.

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

Transfer ends. ❑

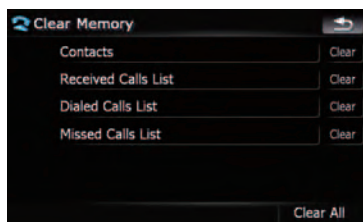
Clearing memory

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

1 Touch [Phone Settings] on the "Phone Menu".

- ➔ For details, refer to *Displaying the Phone Menu* on page 52.

2 Touch [Clear Memory].



On this screen, you can select the following items:

Contacts:

You can clear the registered phone book.

Received Calls List:

You can clear the received call history list.

Dialed Calls List:

You can clear the dialed call history list.

Missed Calls List:

You can clear the missed call history list.

- ❑ Touching [Clear] displays the confirmation message for clearing the memory.
- ❑ Touching [Clear All] clears all the data that correspond to the connected cellular phone.

Using hands-free phoning

3 Touch [OK].

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

- If you do not want to clear memory that you have selected, touch [Cancel]. □

Setting the phone

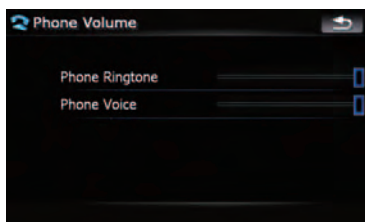
Setting the phone volume

The volume level related with the hands free phoning can be adjusted.

1 Touch [Phone Volume] on the "Phone Menu".

- ➔ For details, refer to *Displaying the Phone Menu* on page 52.

2 Adjust volume to touch the sliders of [Phone Ringtone] and [Phone Voice].



[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 56.

Stopping Bluetooth wave transmission

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

1 Touch [Phone Settings] on the "Phone Menu".

- ➔ For details, refer to *Displaying the Phone Menu* on page 52.

2 Touch [Off] on [Bluetooth On/Off].

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

Answering a call automatically

The navigation system automatically answers an incoming call to the cellular phone. You can answer a call while holding the steering wheel while you are driving.

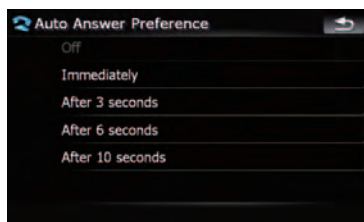
1 Touch [Phone Settings] on the "Phone Menu".

- ➔ For details, refer to *Displaying the Phone Menu* on page 52.

2 Touch any key next to [Auto Answer Preference] (such as [Off], [After 3 seconds] keys).

Auto Answer Preference selection appears.

3 Touch the item to configure.



[Off]: No automatic response. Respond manually

[Immediately]: Answers immediately

[After 3 seconds]: Answers after three seconds

[After 6 seconds]: Answers after six seconds

[After 10 seconds]: Answers after ten seconds

Setting the automatic rejection function

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

1 Touch [Phone Settings] on the “Phone Menu”.

- ➔ For details, refer to *Displaying the Phone Menu* on page 52.

2 Touch [Refuse All Calls].

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

- If both the automatic reject and automatic answer functions are set to [On], automatic reject is prioritized and all incoming calls are automatically rejected.
- If the [Refuse All Calls] is set to [On], rejected incoming calls will not be stored in the missed call list.

Echo canceling and noise reduction

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

1 Touch [Phone Settings] on the “Phone Menu”.

- ➔ For details, refer to *Displaying the Phone Menu* on page 52.

2 Touch [Echo Cancel].

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

Setting the automatic connection

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

- With some cellular phones, it may not be possible to perform automatic connection.
- This unit does not initiate an automatic connection to your registered phone while you are operating in the “Function” menu for hands free phoning.

1 Touch [Phone Settings] on the “Phone Menu”.

- ➔ For details, refer to *Displaying the Phone Menu* on page 52.

2 Touch [Auto Connect].

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

- Automatic connection is performed in the registration number order.
- Some cellular phones do not support automatic connection.

Editing the device name

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

1 Touch [Phone Settings] on the “Phone Menu”.

- ➔ For details, refer to *Displaying the Phone Menu* on page 52.

2 Touch [Edit Name].

The keyboard to enter the name appears.

Using hands-free phoning

- 3 Touch **<** to delete the current name, and enter the new name by using the keyboard.



- 4 Touch **[Done]**.

The name is changed.

- Up to 30 characters can be entered for a device name.

Notes for hands-free phoning

General notes

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

Registration and connection

- Cellular phone operations vary depending on the type of cellular phone. Refer to the instruction manual that came with your cellular phone for detailed instructions.
- Depending on the mobile phone, transferring phone book may not work even though your phone can be pairing with the navigation system.

In such 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 effects of the echo.
- With some cellular phones, even if you press the accept button on the cellular phone when a call comes in, hands free phoning may not be performed.
- The registered name appears if the phone number of the received call is already registered in the phone book. When one phone number is registered under different names, the name that comes first alphabetically is displayed.
- If the phone number of the received call is not registered in the phone book, the phone number of the received call appears.

The received call history and the dialed number history

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

About 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 cellular phones, it may not be possible to transfer all items in the phone book at one time. In this case, transfer items one by one from your cellular phone.
- Depending on the cellular phone, this navigation system may not display the phone book correctly. (Some characters may be garbled or first name and last name are in reverse order.)
- If the phone book in the cellular phone contains image data, the phone book may not be transferred correctly. (Image data can not be transferred from the cellular phone.)
- Depending on the cellular phone, phone book transfer may not be available.



3 Touch [Software Update].

Update starts.

Updating the Bluetooth wireless technology software

Downloading the files of updating will be available in the future. You will be able to download the latest update from appropriate website by using your PC.

- Before you download the files and install the update, read through the instructions on the website. For the procedure before you display the screen used for updating, follow the instructions on the website.

1 Touch [Phone Settings] on the “Phone Menu”.

- ➔ For details, refer to *Displaying the Phone Menu* on page 52.

2 Touch [Bluetooth Software Update].

The current version is displayed.

Playing the music file (USB, SD)

You can play the compressed audio files stored in the external storage device (USB, SD).

- In the following description, the SD memory card, USB memory device and USB portable audio player are collectively referred to as the “external storage device (USB, SD)”. If it indicates the USB memory device and USB portable audio player only, they are referred to as the “USB storage device”.
- When “SD” or “USB” selected as the AV source, the AV sounds, the navigation guidance and beep sounds are mixed and the volume can be adjusted simultaneously.

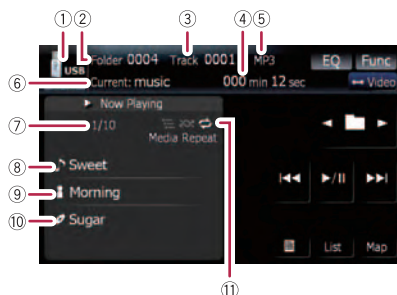
Starting procedures

- **Insert the SD memory card into the SD card slot or plug the USB storage device to the USB connector.**

The source changes and then playback will start if there is a playable file on the external storage device.

- ➡ For details, refer to *Plugging and unplugging a USB storage device* on page 13.
- ➡ For details, refer to *Inserting and ejecting an SD memory card* on page 12.
- If the external storage device is already set, touch [USB] or [SD] on the “AV Source” menu.
- ➡ For details concerning operations, refer to *Screen switching overview* on page 16.
- Playback is performed in order of folder number. Folders are skipped if they contains no playable files. (If there are no playable files on folder 001 (root folder), playback starts from folder 002.) □

Reading the screen



- Optimum performance of this unit may not be obtained depending on the connected external storage device.
- You can playback the files on a USB storage device compliant with Mass Storage Class. For details about the USB Class, refer to the manual supplied with USB storage device.

- ① **Source icon**
Shows which source has been selected.
- ② **Folder number indicator**
- ③ **Track number indicator**
- ④ **Play time indicator**
Shows the elapsed playing time of the current track.
- ⑤ **File type indicator**
Shows the type of audio file currently playing.
- ⑥ **Current folder name indicator**
Shows the folder name currently playing.
- ⑦ **Current file number and total number of files**
Shows the file number currently played and the total number of playable audio files.
- ⑧ **Track title indicator***
Shows the title of the track currently playing (when available).
- ⑨ **Artist name indicator***
Shows the artist name currently playing (when available).
- ⑩ **Album title indicator***
Shows the title of the album for the current track (when available).
- ⑪ **Playback condition indicator**

The marks shown below appears and indicates the current playback condition.


: Repeat play

: Random play

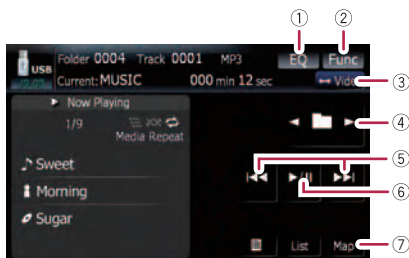
: Scan play

Indicator	Implication
Media Repeat	All audio files in the current external storage device (USB, SD) are played repeatedly. This is default condition.
Folder Repeat	Current folder is played repeatedly.
Track Repeat	Current file is played repeatedly.
Media Random	All audio files in the current external storage device (USB, SD) are played in random order.
Folder Random	All audio files in the current folder are played in random order.
Media Scan	The beginning of each audio file is played for about 10 seconds.
Folder Scan	The beginning of each track in the current folder is played for about 10 seconds.

☞ For more information, refer to *Using the “Function” menu* on the next page.

- ☐ The information marked with an asterisk (*) is displayed only when the information has been encoded on the compressed audio files. If specific information has not been encoded on the files, “ ” is displayed instead. 

Using the touch panel keys (Music)



- Recalls equalizer curves**
Select one from the 11 equalizer curves.
☐ This function is also effective for beep sounds.
- Displaying the “Function” menu**
☞ For details, refer to *Using the “Function” menu* on the next page.
- Switch the operation screen**
Touching the key switches between the screen to operate music files and the screen to operate movie files. This touch panel key is available only when there are both audio and video file in the external storage device (USB, SD).
- Select the previous or next folder**
Touching [◀] or [▶] play the first playable file on the previous or next folder. The folders that there is no playable files are skipped.
- Skip forward or backward**
Touching [▶▶] skips to the start of the next file. Touching [◀◀] once skips to the start of the current file. Touching again will skip to the previous file.
Fast rewind or forward
Keep touching [◀◀] or [▶▶] to perform fast rewind or forward.
☐ There is no sound on fast rewind or forward.
☐ Moving **MULTI-CONTROL** left or right enables you to perform the equivalent operations.
- Playback and Pause**

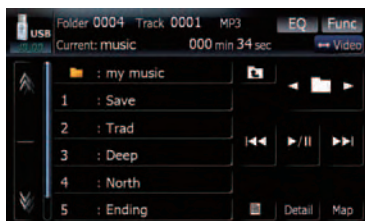
Playing the music file (USB, SD)

Touching **[▶/II]** switches between playback and pause.

⑦ Displaying the map screen

Selecting a track from the list

The list lets you see the list of track titles or folder names on an external storage device (USB, SD). If you touch a folder on the list, you can view its contents. If you touch a track on the list, you can play the selected track.



1 Touch [List].

2 Touch the folder that you want to view.

Touching **[↶]** or **[↷]** switches the selection to the next or previous page in the list.

Touching **[⏪]** shows a content of the parent folder.

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

3 Touch the track you want to play.

- ❑ To cancel the list screen, touch **[Detail]**.

Browsing embedded text information

Text information recorded on a compressed audio file can be displayed.

● Touch **[📄]**.

The next piece of information is displayed.

- **Album Title** : (album title)
- **Track Title** : (track title)
- **Folder Title** : (folder title)
- **File Name** : (file name)

- **Artist Name** : (artist name)

- ❑ If the information has not been recorded on files, nothing may be displayed.
- ❑ For WAV files, only the information marked with (*) can be displayed.
- ❑ If the characters recorded on the compressed audio file are not compatible with this navigation system, those characters may turn into garbled characters. **[☐]**

Using the “Function” menu

1 Touch [USB] or [SD] on the “AV Source” menu to display the “USB” or “SD” screen.

- For details concerning operations, refer to *Screen switching overview* on page 16.

2 Touch [Func].



① Repeating play

Each touch of **[Repeat]** changes the settings as follows:

- **Media** Repeat all compressed audio files in the selected external storage device (USB, SD)
- **Track** Repeat just the current track
- **Folder** Repeat the current folder
- ❑ If you skip the file forward or backward when the repeat play range in **“Track”**, the repeat play range changes to **“Folder”**.

② Play tracks in a random order

Random play lets you playback tracks in random order within the current repeat range.

Touching **[Random]** switches between **“On”** and **“Off”**.

- ❑ If you turn [**Random**] to "**On**" while the repeat play range is set to "**Track**", the repeat play range changes to "**Folder**" automatically.

③ **Scan folders and tracks**

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

Touching [**Scan**] switches between "**On**" and "**Off**". When you find the desired track touch [**Scan**] to turn scan play off.

- ❑ After all tracks or folders scanning are finished, normal playback will begin again.
- ❑ If you turn [**Scan**] to "**On**" while the repeat play range is set to "**Track**", the repeat play range changes to "**Folder**" automatically.

Playing the movie file (USB, SD)

You can play the video files stored in the external storage device (USB, SD).

- ❑ In the following description, the SD memory card, USB memory device and USB portable audio player are collectively referred to as the “external storage device (USB, SD)”. If it indicates the USB memory device and USB portable audio player only, they are referred to as the “USB storage device”.
- ❑ When “SD” or “USB” selected as the AV source, the AV sounds, the navigation guidance and beep sounds are mixed and the volume can be adjusted simultaneously.

Starting procedures

- **Insert the SD memory card into the SD card slot or plug the USB storage device to the USB connector.**

The source changes and then playback will start if there is a playable file on the external storage device.

- ➡ For details, refer to *Plugging and unplugging a USB storage device* on page 13.
- ➡ For details, refer to *Inserting and ejecting an SD memory card* on page 12.
- ❑ If the external storage device is already set, touch [USB] or [SD] on the “AV Source” menu.
- ❑ Playback is performed in order of folder number. Folders are skipped if they contain no playable files. (If there are no playable files on folder 001 (root folder), playback starts from folder 002.) ❑

Reading the screen



- ❑ Optimum performance of this unit may not be obtained depending on the connected external storage device.
- ❑ You can playback the files on a USB storage device compliant with Mass Storage Class. For details about the USB Class, refer to the manual supplied with USB storage device.

- ① **Source icon**
Shows which source has been selected.
- ② **Folder number indicator**
- ③ **File number indicator**
- ④ **Play time indicator**
Shows the elapsed playing time of the current track.
- ⑤ **File type indicator**
Shows the type of audio file currently playing.
- ⑥ **Current folder name indicator**
Shows the folder name currently playing. ❑

Using the touch panel keys (Video)



① Recalls equalizer curves

Select one from the 11 equalizer curves.

- This function is also effective for beep sounds.

② Displaying the “Function” menu

➔ For details, refer to *Using the “Function” menu* on the next page.

③ Switch the operation screen

Touching the key switches between the screen to operate music files and the screen to operate movie files. This touch panel key is available only when there are both audio and video file in the external storage device (USB, SD).

④ Select the previous or next folder

Touching [◀] or [▶] play the first playable file on the previous or next folder. The folders that there is no playable files are skipped.

⑤ Skip forward or backward

Touching [▶▶] skips to the start of the next file. Touching [◀◀] once skips to the start of the current file. Touching again will skip to the previous file.

Fast rewind or forward

Keep touching [◀◀] or [▶▶] to perform fast rewind or forward.

- There is no sound on fast rewind or forward.
- Moving **MULTI-CONTROL** left or right enables you to perform the equivalent operations.

⑥ Playback and Pause

Touching [▶/⏸] switches between playback and pause.

⑦ Displaying the map screen

⑧ Specify the chapter you want to play back or the time to start playback by entering a number

➔ For details, refer to *Searching for a desired scene and starting playback from a specified time* on this page.

⑨ Stop playback

⑩ Hides the touch panel keys

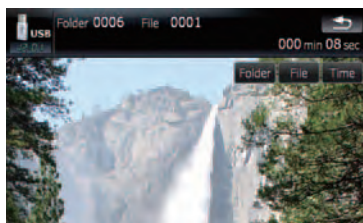
Touching [Hide] hides the touch panel keys.

Touch anywhere on the LCD screen to display the touch panel keys again.

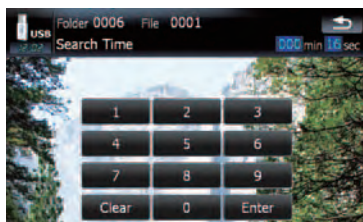
Searching for a desired scene and starting playback from a specified time

You can search for a desired scene by specifying a folder number, file number or the time.

1 Touch [Search] and then touch [Folder], [File] or [Time].



2 Touch the keys to input the desired number or time and then touch [Enter].




Playing the movie file (USB, SD)

For folders, files

- To select 3, touch **[3]** and **[Enter]** in order.
- To select 10, touch **[1]** and **[0]** and **[Enter]** in order.

For time (time search)

- To select 5 minutes 03 seconds, touch **[5]**, **[0]**, **[3]** and **[Enter]** in order.
 - To select 71 minutes 00 seconds, touch **[7]**, **[1]**, **[0]**, **[0]** and **[Enter]** in order.
- To clear the input numbers, touch **[Clear]**. 

Using the “Function” menu

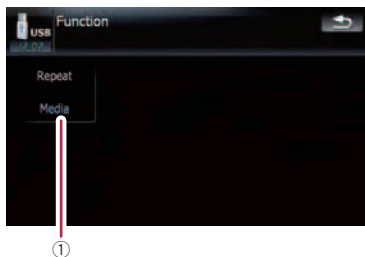
1 Touch **[USB]** or **[SD]** on the “AV Source” menu to display the “USB” or “SD” screen.

- ➔ For details concerning operations, refer to *Screen switching overview* on page 16.

2 Touch the screen to display the touch panel keys.


3 Touch **[Func]**.

- If the touch panel keys are not shown, touching anywhere to display them.



① Repeating play

Each touch of **[Repeat]** changes the settings as follows:

- **Media** Repeat all video files in the selected external storage device (USB, SD)
 - **File** Repeat just the current file
 - **Folder** Repeat the current folder
- If you skip the file forward or backward when the repeat play range in “Track”, the repeat play range changes to “Folder”. 

Using the iPod® (iPod)

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

- ❑ For connection, USB interface cable for iPod (CD IU200VM) (sold separately) is required.
- ❑ iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

Starting procedures

1 Touch [AV Input] on the "AV Settings" menu to select the "iPod".

- ➔ For details, refer to *Setting video input (AV)* on page 95.

2 Connect your iPod.

The source changes and then playback will start.

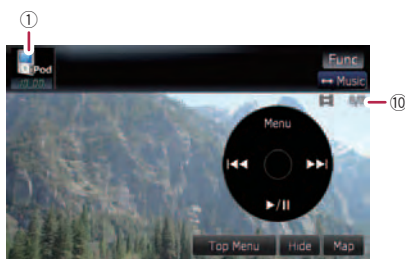
- ➔ For details, refer to *Connecting your iPod* on page 14.
- ❑ If the iPod is already connected, touch [iPod] on the "AV Source" menu.
- ➔ For details concerning operations, refer to *Screen switching overview* on page 16. ❑

Reading the screen

Music



Video



- ① **Source icon**
Shows which source has been selected.
- ② **Shuffle play indicator**
Appears when the shuffle play is activated.
- ③ **Repeat play indicator**
Appears when the repeat play is activated.
 🔄: All tracks repeat
 🔄: One track repeat
- ④ **Album artwork**
Album art of the current song is displayed if it is available.
- ⑤ **Song title (episode) indicator**
Shows the title of the current song. When the podcast is played, the episode is displayed.
- ⑥ **Artist name (podcast title) indicator**
Shows the artist name currently playing. When the podcast is played, the podcast title is displayed.
- ⑦ **Album title (release date) indicator**
Shows the title of the album for the song. When the podcast is played, the release date is displayed.
- ⑧ **Play time indicator**
Shows the elapsed playing time of the current song.
- ⑨ **Song number indicator**
Shows the number of the song currently playing and total number of songs in the selected list.
- ⑩ **Chapter number indicator**
Shows the current chapter number and total number of chapters when the video with chapters played.

Using the iPod® (iPod)

- ❑ If the characters recorded on the iPod are not compatible with this navigation system, those characters may turn into garbled characters. ❑

Using the touch panel keys (Music)



- ① **Album artwork**
Touch the key to enlarge the album artwork. If you touch again, the artwork returns to a normal size.
- ② **Category tabs**
Shows the list to narrow down the songs. If you want to use the list of "Audiobooks" or "Composers", touch [Menu] to display the lists.
- ③ **Displaying the "Function" menu**
➔ For details, refer to *Using the "Function" menu* on page 76.
- ④ **Switch the operation screen**
Touching the key switches between the screen to operate music files and the screen to operate movie files. After touching the key, the top category menu appears to let you select the item for playback.
❑ This touch panel key is available only when there are both audio and video file in your iPod.
- ⑤ **Display the top category menu**
Touching the key displays the top category before you use the category tabs. If you select the song using the category tabs to play, touching the key displays the previous list.
- ⑥ **Skip back or forward to another song**
Touching [▶▶] skips to the start of the next song. Touching [◀◀] once skips to the start of the current song. Touching again will skip to the previous song. When the track with chapters played, chapter can be skipped back and forward.
Fast rewind or forward
Keep touching [◀◀] or [▶▶] to perform fast rewind or forward.
❑ Moving **MULTI-CONTROL** left or right enables you to perform the equivalent operations.
- ⑦ **Playback and Pause**
Touching [▶/||] switches between playback and pause.
- ⑧ **Displaying the map screen**
- ⑨ **Shuffle All**
All songs (except for the track in "Audiobooks" and "Podcasts") in your iPod can be played randomly.
❑ To cancel the random play, switch [Shuffle] on the "Function" menu to the "Off".

Browsing for a song

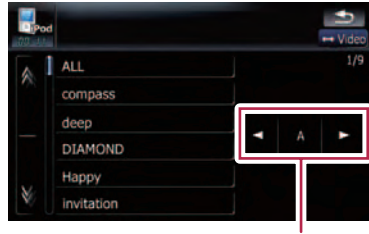
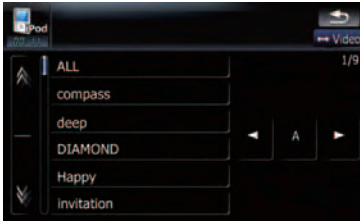
Touching the item on list allows you to search for a song and play it in your iPod.

Narrowing down a song with the list

1 Touch your desired category tab to display the song or track list.

- **Playlists** (playlists)
- **Genres** (genres)
- **Artists** (artists)
- **Albums** (albums)
- **Podcasts** (podcasts)

The search screen is displayed.



Search control

2 Touching  or  switches the selection to the next or previous page in the list.

3 Touch the item that you want to refine. Refine the item until the track title is displayed on the list.

- Touching **[All]** on the list includes all options in the current list. For example, if you touch **[All]** after touching **[Artists]**, you can proceed to next screen with selecting all artists in the list.
- After you select **Artists, Albums,** or **Genres,** continued touching one of the list allows you to start playing the first songs in the selected list and display the next options.

4 On the song (or episode) list, touch the track you want to play.

- After you select the track using this function, touching **[Menu]** displays the list previously selected.



Searching for applicable items by alphabet

Using the search control displays the page includes the first applicable option.

- This function is available for the alphabetical list only.

1 Touch your desired category tab to display the list.

2 Touch the item that you want to refine.

3 Touch  or  to select the character.

- "THE" or "The" and space at the beginning of the artist name will be ignored and the next character will be taken into account for searching.

4 Touch the character key to display the page includes applicable options.

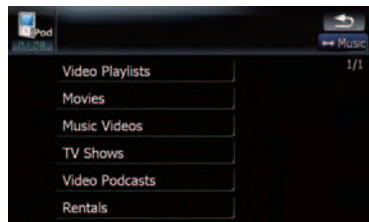
5 On the song (or episode) list, touch the track you want to play. .

Starting the video playback

This navigation system can play video if an iPod with video capabilities is connected.

1 Touch **[Video]**.

2 Touch one of the categories in that contains the video you want to play.



Video playback will start.


Using the iPod® (iPod)

3 Touch your desired item on the list to narrow down them until the video list appears.

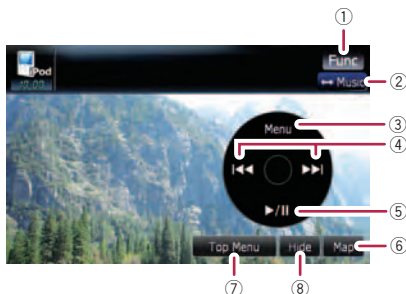
- ➔ For details concerning operations, refer to *Browsing for a video* on the next page.

4 On the video list, touch the video you want to play.

5 Touch the screen to display to touch panel keys.

- ➔ For details concerning operations, refer to *Using the touch panel keys (Video)* on this page. 

Using the touch panel keys (Video)



① Displaying the “Function” menu

- ➔ For details, refer to *Using the “Function” menu* on the next page.

② Switch the operation screen

Touching the key switches between the screen to operate music files and the screen to operate movie files. After touching the key, the top category menu appears to let you select the item for playback.

- This touch panel key is available only when there are both audio and video file in your iPod.

③ Display the previous selected list

If you select the video from the list to play after touching **Top Menu**, touching the key displays the previous list. (If you touch **Top Menu** again but do not select a video, this key

is disabled until you select a video with the list next time.)

④ Skip back or forward to another song

Touching [▶▶] skips to the start of the next video. Touching [◀◀] once skips to the start of the current video. Touching again will skip to the previous video. When the video with chapters played, chapter can be skipped back and forward.

Fast rewind or forward

Keep touching [◀◀] or [▶▶] to perform fast rewind or forward.

- Moving **MULTI-CONTROL** left or right enables you to perform the equivalent operations.

⑤ Playback and Pause

Touching [▶/||] switches between playback and pause.

⑥ Displaying the map screen

⑦ Display the top category menu for video

Touching the key displays the top category for video playback.

⑧ Hides the touch panel keys

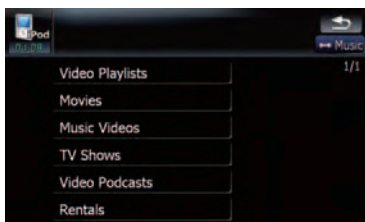
Touching [Hide] hides the touch panel keys. Touch anywhere on the LCD screen to display the touch panel keys again.

Browsing for a video

Touching the item on list allows you to search for a video and play it in your iPod.

Narrowing down a video with the list

1 Touch your desired category.



2 Touching or switches the selection to the next or previous page in the list.

3 Touch the item that you want to refine.

Refine the item until the track title is displayed on the list.

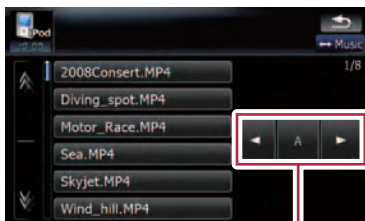
4 On the video list, touch the video you want to play.

- ❑ After you select the video using this function, touching **[Menu]** displays the list previously selected.


Searching for applicable items by alphabet

Using the search control displays the page in cludes the first applicable option.

- ❑ This function is available for the alphabetical list only.



Search control

- 1 Touch your desired category.
- 2 Touch the item that you want to refine.
- 3 Touch **[<]** or **[>]** to select the character.
 - ❑ "THE" or "The" and space at the beginning of the artist name will be ignored and the next character will be taken into account for searching.
- 4 Touch the character key to display the page includes applicable options.
- 5 On the video list, touch the video you want to play. 

Using the "Function" menu

1 Touch [iPod] on the "AV Source" menu to display the control screen for "iPod".

- For details concerning operations, refer to *Screen switching overview* on page 16.

2 Touch [Func].



① Setting the repeat play

There are two repeat play types for the play back.

Each touch of **[Repeat]** changes the settings as follows:

- **One** Repeats just the current track
- **All** Repeats all tracks in the selected list

② Setting the shuffle play for music

This function shuffles songs or albums and plays them in random order.

Each touch of **[Shuffle]** changes the settings as follows:

Using the iPod® (iPod)

- **Off** Does not shuffle.
- **Songs** Play back songs in random order within the selected list
- **Albums** Select an album randomly, and then play back all songs in that album in order

③ Setting the audiobook play speed

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

Each touch of [**Audio Book**] changes the settings as follows:

- **Normal** Playback in normal speed
- **Slower** Playback slower than normal speed
- **Faster** Playback faster than normal speed

④ Playback the video on the wide screen mode

If the video is compatible with wide screen format, set [**Widescreen**] to [**On**] in order to view the video image in the wide screen.

Each touch of [**Widescreen**] changes the settings as follows:

- **On** Outputs the wide screen video from iPod
 - **Off** Outputs the normal sized video from iPod
- Display size is changed after you change "**Widescreen**" setting and select the video to play.
- This setting is available only during the video operation.

You can display “video image” output by the equipment connected to “**AV Input**”.

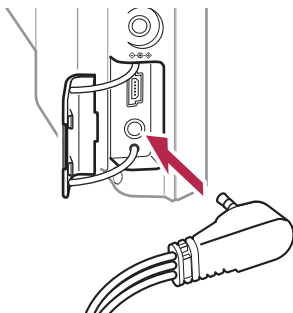
- Use the CD RM10 (sold separately) to connect the external video component.

! CAUTION

For safety reasons, video images cannot be viewed while your vehicle is in motion. To view video images, you must stop in a safe place and apply the parking brake.

Starting procedures (AV)

- 1 **Connect the dedicated AV cable (sold separately) to AV input jack.**



- 2 **Touch [AV Input] on the “AV Settings” menu.**

- ➔ For details, refer to *Setting video input (AV)* on page 95.

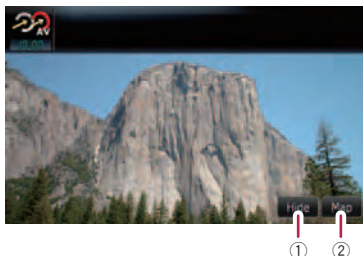
- 3 **Touch [AV] on the “AV Source” menu.**

The image is displayed on the screen.

- ➔ For details concerning operations, refer to *Screen switching overview* on page 16. □

Using the touch panel keys

- **Touch the screen to display the touch panel keys.**



- ① **Hides the touch panel keys**
Touching [**Hide**] hides the touch panel keys. Touch anywhere on the LCD screen to display the touch panel keys again.
- ② **Displaying the map screen** □

Customizing preferences

The options in the “Navi Settings” menu

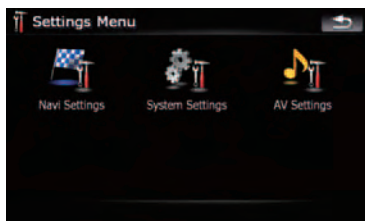
Basic operations in the “Navi Settings” menu

Preferences related to the navigation functions can be set.

A method for changing the volume setting for the navigation guidance and beep is described here, along with an operational example.

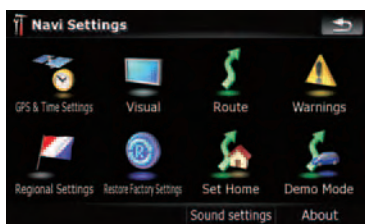
1 Press MENU button to display the “Top Menu”, and then touch [Settings].

2 Touch [Navi Settings].



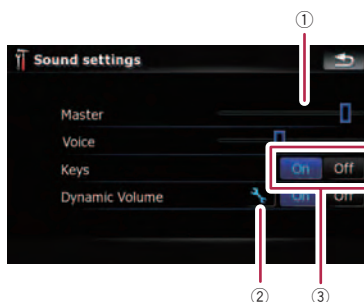
The “Navi Settings” menu appears.

3 Touch [Sound settings].



The “Sound settings” menu appears.

4 Use the tool assigned to the desired option to change the settings.



① Slider

Touching the desired point on the bar or dragging the slider to the desired point allows you to change the value.

② Detailed setup key

Displays the screen for setting the preferences in detail.

③ On-off control

Touching [On] or [Off] enables activation or deactivation of this function.

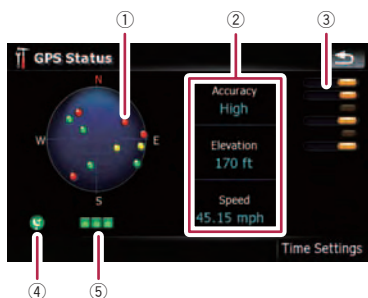
5 Touch [Back] to return to the “Navi Settings” menu.

GPS & Time Settings

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

● Touch [GPS & Time Settings] on the “Navi Settings” menu.

The “GPS Status” screen appears.



- ① Positions of the GPS constellation being received by the navigation system

Color	Signal communication	Used in positioning
Green	Yes	Yes
Gray	Yes	No
Red	No	No

- ② Shows the current comprehensive accuracy, altitude and speed.
 ③ Shows each satellite's signal strength.
 ④ Shows the connection status or reception condition of GPS antenna.

Color	Condition
Green	3D reception (Normal positional accuracy)
Yellow	2D reception (lower positional accuracy)
Red	Connected and no reception
Black with x	No connection

- ⑤ Shows the GPS reception status. A blinking green lamp indicates whether positioning is works normally. If the lamp lights up in an other color, there is a problem related with GPS reception. In such case, check whether the connection and installation are correct.

Time Settings

The "Time Settings" screen provides you to set the time manually.

1 Touch [GPS & Time Settings] on the "Navi Settings" menu.

The "GPS Status" screen appears.

2 Touch [Time Settings].

The "Time Settings" screen appears.



Available options;

- "Auto Correction"

Synchronizes the internal clock of this navigation system with the accurate time transmitted from GPS (GMT). Changing this preference allows you to set the time manually.

⚠ CAUTION

Turning "Auto Correction" to "Off" disables the automatic change to the appropriate time zone. Note that the proper route may not be calculated if the time you set does not match the time zone of the area that your route passes through.

[On]:

Corrects the current time by changing the time zone automatically according to this system's whereabouts.

[Off]:

Corrects the current time according to the settings on "Time Zone" and "Time".

- "Time Zone"

Enables you to set the time zone manually. Touch the key to show the list and then touch the current time zone.

Customizing preferences

- **"Time"**
Enables you to adjust the time difference by one hour. Touch ▲ or ▼ to adjust it.
 "Time Zone" and **"Time"** are activated only when **[Off]** is selected.

3D Settings

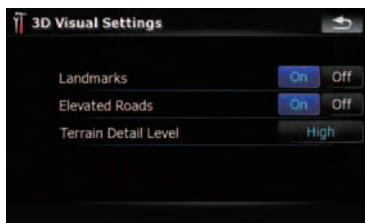
The 3D map screen settings can be customized.

1 Touch [Visual] on the "Navi Settings" menu.

The **"Visual Settings"** screen appears.

2 Touch [3D Settings].

The **"3D Visual Settings"** screen appears.



Available options;

- **"Landmarks"**
You can select whether to draw or refrain from drawing graphical 3D landmarks on the map.
- **"Elevated Roads"**
You can select whether to draw or refrain from drawing elevated roads, interchanges, and bridges on the map.
- **"Terrain Detail Level"**
[High], **[Medium]**, **[Low]**:
Draws the terrain (e.g. mountain chains) on the map with the selected fineness.
[Off]:
Does not draw the terrain on the map.

Map Settings

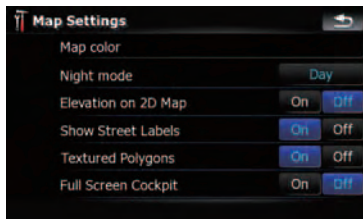
The general settings related with a map screen can be customized.

1 Touch [Visual] on the "Navi Settings" menu.

The **"Visual Settings"** screen appears.

2 Touch [Map Settings].

The **"Map Settings"** screen appears.



Available options;

- **[Map color]**
Enables you to define the map color for day time and nighttime use. Touch this key to show the next screen.
"Daylight color profile:"
The daytime map color can be set. Touch the key and select the desired profile from the list.
"Night color profile:"
The nighttime map color can be set. Touch the key and select the desired profile from the list.
- **"Night mode"**
Changes the settings for the nighttime map.
[Automatic]:
Switches the map color defined on **"Map color"** automatically between daytime and nighttime.
[Night]:
Always displays the map in the color defined on **"Night color profile:"**.
[Day]:
Always displays the map in the color defined on **"Daylight color profile:"**.
- **"Elevation on 2D Map"**
You can select whether to draw or refrain from drawing the terrain with a realistic landscape on the map, such as a green space, water place, undulating surface.

- **"Show Street Labels"**
Shows or hides the street names and city names.
- **"Textured Polygons"**
You can select whether to draw or refrain from drawing the map more graphically.
- **"Full Screen Cockpit"**
Shows or hides the **"Multi-Info window"** and **"Second manoeuvre arrow"**.

Displayed Info

Allows you to select what options you want to display on each part of the **"Multi-Info window"**.

- The estimated time of arrival is an ideal value that the navigation system computes internally as the route is calculated. The estimated time of arrival should be read just as a reference value, and does not guarantee arrival at the time indicated.

A method for changing the value of **Top field:** is described here along with an operational example.



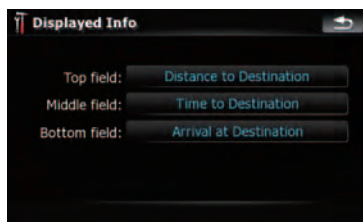
1 Touch [Visual] on the "Navi Settings" menu.

The **"Visual Settings"** screen appears.

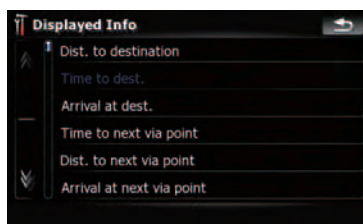
2 Touch [Displayed Info].

The **"Displayed Info"** screen appears.

3 Touch the key on the right of "Top field:" to display the options.



4 Touch your desired option.



Smart Zoom


Enables the navigation system to zoom in automatically when you approach a guidance point and zoom out after you pass through it. You can setup the behavior while **"Smart Zoom"** is activated.

- When the route is not set, the navigation system will simply zoom in or out depending on your speed.

1 Touch [Visual] on the "Navi Settings" menu.

The **"Visual Settings"** screen appears.

2 Touch [On] or [Off] to activate or deactivate "Smart Zoom".

Touching  allows you to enter the detailed setting screen only when [On] has been selected.

Customizing preferences



Available options;

- **"Zoom-in limit:"**
Allows you to set the limit for zoom in behavior.
- **"Zoom-out limit:"**
Allows you to set the limit for zoom out behavior.
- **"Restore Smart Zoom"**
Allows you to set whether **"Smart Zoom"** is to be reactivated after changing the map scale, tilt, or rotation.
Also, enables you to set how soon **"Smart Zoom"** interval will be reactivated after completion of the operations described previously.
- **"Zoom In After Find"**
Shows the "Map Confirmation Screen" with the preset map scale after you have searched for a position using one of the methods on the **"Destination Menu"**.


Overview Mode

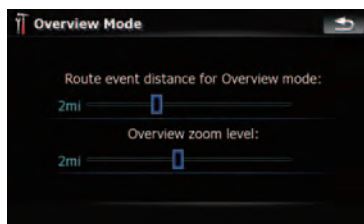
Enables the navigation system to zoom out automatically up to the selected map scale when the next guidance point is distant.

1 Touch [Visual] on the "Navi Settings" menu.

The **"Visual Settings"** screen appears.

2 Touch [On] or [Off] to activate or deactivate "Overview Mode".

Touching  allows you to enter the detailed setting screen only when [On] has been selected.



Available options;

- **"Route event distance for Overview mode:"**
Allows you to set a distance to activate **"Overview Mode"**. The map starts zooming out when the distance to the next guidance point is further than the distance set here.
- **"Overview zoom level:"**
Allows you to set the map scale for zoom out behavior in **"Overview Mode"**.

Manage POI

- For more details concerning the operation, refer to *Setting the POI appearance* on page 87.

Manage Track Logs

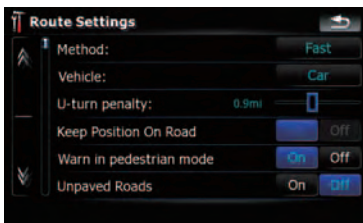
- For more details concerning the operation, refer to *Recording your travel history* on page 89.

Route


The settings related to route calculation can be customized.

● Touch [Route] on the "Navi Settings" menu.

The **"Route Settings"** screen appears.



Available options;

- **"Method:"**
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.
[Easy]:
Calculates a route to your destination with the fewest turning points possible as a priority.
[Economical]:
Calculates a route on the basis of least fuel consumption.
- **"Vehicle:"**
 **CAUTION**
Be sure to choose the proper setting. Other wise, an inappropriate route for your current situation may be calculated.
[Car]:
Calculates a route according to traffic restrictions which should be applied to the normal vehicle and other customized settings.
[Pedestrian]:
Calculates a route that excludes freeways, ignores one way road restrictions and provides passage through pedestrian areas.
- **"U-turn penalty:"**
Allows you to limit the distance increase for U turns.
- **"Keep Position On Road"**
Activates or deactivates map matching.

- This selection is available only when **"Pedestrian"** is selected on **"Vehicle:"**.
- **"Warn in pedestrian mode"**
Activates or deactivates an over speed warning for the pedestrian.
- **"Unpaved Roads"**
[On]:
Calculates a route without avoidance of unpaved roads.
[Off]:
Calculates a route with avoidance of unpaved roads to the extent possible.
- **"Highways"**
[On]:
Calculates a route without avoidance of freeways.
[Off]:
Calculates a route with avoidance of free ways to the extent possible.
- **"Ferries"**
[On]:
Calculates a route without avoidance of ferries.
[Off]:
Calculates a route with avoidance of ferries to the extent possible.
- **"U-turns"**
[On]:
Calculates a route without avoidance of U turns.
[Off]:
Calculates a route with avoidance of U turns to the extent possible.
□ Turning back on divided highway is not considered a U turn.
- **"Toll Roads"**
[On]:
Calculates a route without avoidance of toll roads areas.
[Off]:
Calculates a route with avoidance of toll roads areas to the extent possible.
- **"Permit Needed"**
[On]:
Calculates the route without taking into account roads and areas where permission is needed for entry.

Customizing preferences

[Off]:

Calculates the route taking into account the roads and areas where permission is needed for entry.

Warnings

The settings related to warning operations can be customized.

- **Touch [Warnings] on the “Navi Settings” menu.**

The “Warning settings” screen appears.



Available options;

- **“Warn When Speeding”**
Establishes whether or not to enable the excessive speed warnings for when you exceed the speed limit.



CAUTION

The speed limit is based on the map data base. The speed limit in the database may not match the actual speed limit of the current road. This is not a definite value. Be sure to drive according to the actual speed limit.

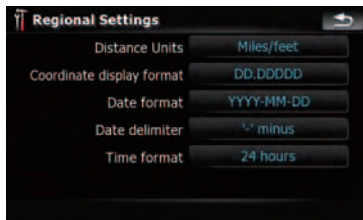
- **“Speeding Tolerance”**
Sets the tolerance for the speed limit with a percentage.

Regional Settings

The display format for the distance unit, latitude and longitude, and other settings related to time and date can be customized.

- **Touch [Regional Settings] on the “Navi Settings” menu.**

The “Regional Settings” screen appears.



Available options;

- **“Distance Units”**
Controls the unit of distance and speed shown.
- **“Coordinate display format”**
Controls the format of latitude and longitude shown.
- **“Date format”**
Controls the format of date shown.
- **“Date delimiter”**
Controls the delimiter format for the date shown.
- **“Time format”**
Controls the time format shown.

Restore Factory Settings

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

- ☐ Some data remains. Read *Returning the navigation system to the default or factory settings* before you operate this function.
 - ➡ For more detailed information about the items to be deleted, refer to *Returning the navigation system to the default or factory settings* on page 104.

- 1 **Touch [Restore Factory Settings] on the “Navi Settings” menu.**

- 2 **Touch [Yes].**

The navigation system will now restart.

Set Home

- For more details concerning the operation, refer to *Setting your home position* on page 90.

Demo Mode

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

1 Touch [Demo Mode] on the "Navi Settings" menu.

2 The demonstration guidance will begin.

- If you want to perform the simulation at faster speed, touch [Fly over] on the "Route Information" screen.
- For more details concerning the operation, refer to *Playing simulated travel at high speed* on page 42.

Sound settings

All settings here are effective only for the navigation guidance and beep.

● Touch [Sound settings] on the "Navi Settings" menu.

The "Sound settings" menu appears.




Available options;

- "Master"
Controls the master volume of both the navigation guidance and beep.
- "Voice"

Controls the volume of the navigation guidance.

- "Keys"
Controls the beep tone volume.
- "Dynamic Volume"
Increases and decreases the master volume of the navigation guidance and beep automatically according to the current speed. This function is very helpful when you are driving at high speed and there is too much noisy to hear the guidance instructions and beep.

Touching  allows you to enter the detailed setting screen only when [On] has been selected.

"Minimum speed:"

Enables the navigation system to automatically start turning the volume up as the current speed reaches the value set here.

"Maximum speed:"

Enables the navigation system to automatically maximize the volume when the current speed reaches the value set here.

About

Enables you to check the copyright and other information about the map database.

1 Touch [About].

Copyright information of the database is displayed.

2 Touch [Maps].

Touching [Maps] allows you to view the information regarding the map database in detail. After that, touching the desired item on the list allows you to view more detailed information about the selected map database.

Customizing preferences

Setting the POI appearance

You can display or hide the POI (points of interest) icons on the map. To avoid the screen becoming crowded with POI icons, all the icons have been made invisible as a default setting. You can set the conditions for each category here and also create new categories.

❑ If the custom POI is found on an external storage device (USB, SD), the navigation system will show a POI list which includes them.

1 Touch [Visual] on the “Navi Settings” menu.

The “Visual Settings” screen appears.

2 Touch [Manage POI].

3 Touch the desired category that you want to display.

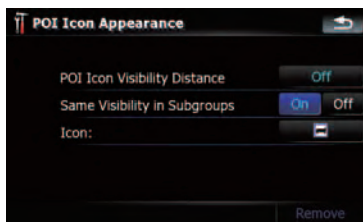


If there are more detailed categories within the selected category, repeat this step as many times as necessary.

If there aren't anymore detailed categories, a blank list appears. In this case, you can only create the new category by touching [New Group].

4 Touch [Edit] on the right of the desired sub-category to set the appearance.

5 Touch the desired key to customize it.



Available options;

- **“POI Icon Visibility Distance”**
Touching the key shows the option. Touch one of them to set the desired visibility. When **“Satellite”** is selected, the POI icons will appear even though they are far away from your current position. When **“Close”** is selected, only the nearest POI icons will appear. Selecting **“Off”** hides the POI icons of this category.
- **“Same Visibility in Subgroups”**
[On]:
Also applies this visibility to all sub categories belonging to this category.
[Off]:
Does not apply this visibility to all sub categories belonging to this category.
- **“Icon:”**
Touching the key shows the options available. Touch one of them to set the desired icon.
- **[Remove]:**
Touching the key allows you to delete the selected category.
 - ❑ **[Remove]** is available only for POI categories that are created on this navigation system.

Creating new categories

If your customized POI does not match any pre installed categories, creating a new category allows you to edit your customized POI so that it can belong to this newly created category.

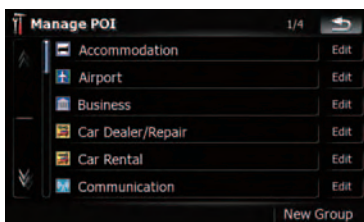
- ❑ If the custom POI is found on an external storage device (USB, SD), the navigation system will show a POI list which includes them.

1 Touch [Visual] on the “Navi Settings” menu.

The “Visual Settings” screen appears.

2 Touch [Manage POI].

3 Touch the desired category.



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

If there aren't anymore detailed categories, a blank list appears. In this case, touching [New Group] allows you to create a new category.

4 Touch [New Group] at the screen where you want to create a new category.

5 Enter the category name and touch [Done] to complete the entry.



Editing your customized POI

If you have already stored the customized POI, you can edit the POI property.

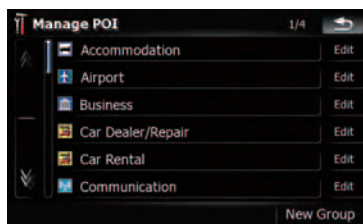
- ❑ If the custom POI is found on an external storage device (USB, SD), the navigation system will show a POI list which includes them.

1 Touch [Visual] on the “Navi Settings” menu.

The “Visual Settings” screen appears.

2 Touch [Manage POI].

3 Touch the desired category for editing.



If there are more detailed categories within the selected category, repeat this step until the desired POI appears.

4 Touch the desired POI.

The “Edit POI” screen appears.

5 Touch the desired key to customize it.



Available options;

- “Group:”

Customizing preferences

The category that the item currently selected belongs to can be changed. Touching the key shows the options available. Touch one of them to set the desired category.

- **"POI Name:"**
Touching the key displays the screen for entering a new POI name. Enter the name and then touch **[Done]** to complete the entry.
- **"Icon:"**
Touching the key shows the options available. Touch one of them to set the desired icon.
- **[Remove]:**
Touching the key allows you to delete the selected POI.
 - [Remove]** is available only for POIs that are created on this navigation system.
 - The POI address is not editable.

Recording your travel history

Activating the track logger enables you to record your driving history (hereinafter called "track log"). You can review the travel history later and replay the travel for your reference.

Activating track logger temporarily

One time activation is useful if you want to create a log only for that trip.

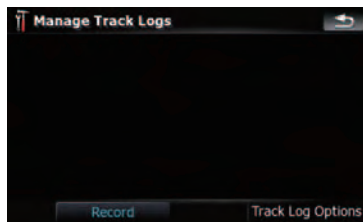
1 Touch **[Visual]** on the "Navi Settings" menu.

The **"Visual Settings"** screen appears.

2 Touch **[Manage Track Logs]**.

A list of track logs already recorded appears. A blank list appears if you have not recorded it yet.

3 Touch **[Record]** to activate the track logger.



The key then changes to **[Stop Recording]**. Touching **[Stop Recording]** allows you to deactivate the track logger.

- If there is not enough space in the built-in memory, the oldest track log will be overwritten by the new one.
- If you want to permanently activate the track logger whenever the GPS signal is available, switch **"Enable Auto-saving"** to **"On"**.
 - ➔ For details, refer to *Setting the track logger options* on the next page.

Browsing and replaying the track log

1 Touch **[Visual]** on the "Navi Settings" menu.

The **"Visual Settings"** screen appears.

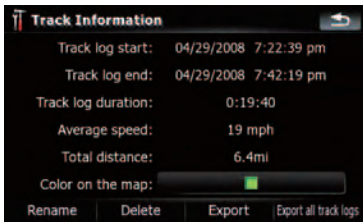
2 Touch **[Manage Track Logs]**.

A list of track logs already recorded appears. Touching **[▶]** enables you to replay the track log with **"Fly over"**.

3 Touch the desired track log on the list.

More details about the track log appears.

4 Touch the desired key to operate it.



Available options;

- **[Rename]:**
Touching this key displays the screen for entering a new name for the track log. Enter the name and then touch **[Done]** to complete the entry.
- **[Delete]:**
Touching this key deletes the track log.
- **[Export]:**
Touching this key exports the track log currently selected to the external storage device (USB or SD).
- **[Export all track logs]:**
Touching this key exports all track logs currently stored to the external storage device (USB or SD) at once.
- **The key next to "Color on the map":**
Touching this key displays the screen for changing the color used for the route high lighting of the track log. Touch the desired color on the color list. The color of track logs is assigned automatically within predefined colors when this setting is established.

Setting the track logger options

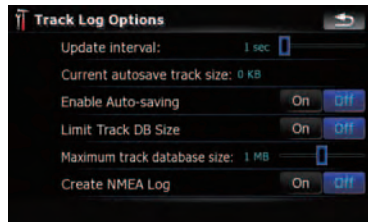
1 Touch [Visual] on the "Navi Settings" menu.

The "Visual Settings" screen appears.

2 Touch [Manage Track Logs].

3 Touch [Track Log Options].

4 Touch the desired key to operate it.



Available options;

- **"Update interval:"**
Sets how often the system updates the log.
- **"Current autosave track size:"**
Sets a size limit on automatic logging. This setting will be effective only when "Enable Auto-saving" is "On".
- **"Enable Auto-saving"**
Sets whether the automatic logging is activated or not.
- **"Limit Track DB Size"**
Limits the total data size for logging.
- **"Maximum track database size:"**
Sets a size limit on logging. This parameter can be adjustable only when "Limit Track DB Size" is "On".
- **"Create NMEA Log"**
Creates the log files in the SD memory card. When this setting is "On", the system outputs the log files with NMEA 0183 format onto the SD memory card.

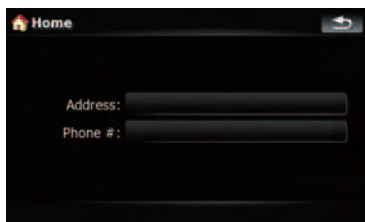
Setting your home position

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 "Destination Menu". The registered home position can also be modified later.

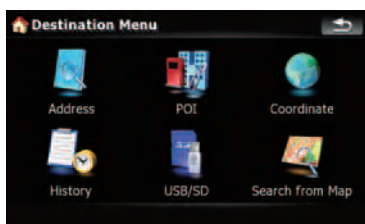
1 Touch [Set Home] on the "Navi Settings" menu.

Customizing preferences

- 2 Touch the key next to “Address:”.



- 3 Perform one of the search methods and locate the cursor on your desired position.

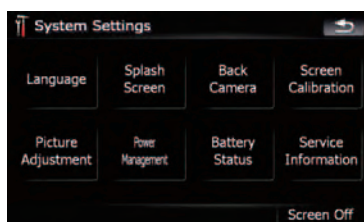
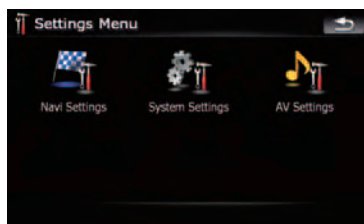


- 4 Touch [OK].
- 5 Touch the key next to “Phone #”.
- 6 Enter your home phone number, then touch [Done].

The options on the “System Settings” menu

Displaying the “System Settings” menu

- 1 Press MENU button to display the “Top Menu”, and then touch [Settings].
- 2 Touch [System Settings].
The “System Settings” menu appears.



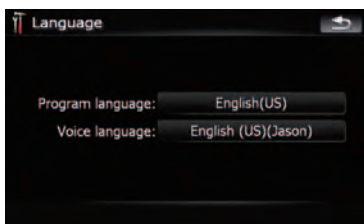
Selecting the language

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

- If you use voice operation, select [English] in [Program language:] of “Language”. If you select other languages, voice operation will not be available.
 - For details, refer to *Basics of Voice Operation* on page 98.

- 1 Touch [Language] on the “System Settings” menu.
- For details, refer to *Displaying the “System Settings” menu* on this page.

- 2 Touch the key next to “Voice language:”.



The language list is displayed.

- 3 Touch the desired language.

After the language is selected, the screen returns to the previous screen.

- 4 Touch the key next to “Program language:”.

- 5 Touch the desired language.

If you change [Program language:], a message prompting you to reboot appears. Touch [OK] reboots the system.

Changing the splash screen

You can change the splash screen that appears when the navigation system starts. Copy your favorite image to the external storage device (USB, SD), and select the image to import.

- Splash screen images should be used with in the following formats;
 - BMP or JPEG files
 - Allowable horizontal and vertical size are 2,592 x 1,944 or smaller
 - Allowable data size is 15 MB or smaller
- Proper compatibility with allowable files is not guaranteed.
- Imported original images will be stored in the built in memory, but the ability to save these images cannot be guaranteed completely. If your original image data is deleted, set the external storage device (USB, SD) again and re import the original image.

- 1 Create a folder named “Pictures” on the top-most directory of the external storage device (USB, SD) and store the picture files in this folder.

- 2 Insert the SD memory card into the SD card slot or plug the USB storage device to the USB connector.

- 3 Touch [Splash Screen] on the “System Settings” menu.

- ☞ For details, refer to *Displaying the “System Settings” menu* on the previous page.

The navigation system checks the external storage device (USB, SD). If an appropriate file is found, the file list will be displayed.

- If there is no “Pictures” folder or loadable file, a message appears.
- You can switch the list by touching [Import from SD] and [Import from USB].

- 4 Touch the image to use as the splash screen from the list.

The image is displayed on the screen.

- 5 Touch [OK].

The image is set as the splash screen, and the system returns to the “System Settings” menu.

Setting the rear view camera

The following two functions are available. The rear view camera feature requires a separately sold rear view camera (e.g. ND BC2). (For details, consult your dealer.)

Back up camera

The navigation system features a function that automatically switches to the full screen rear camera image installed on your vehicle. When the shift lever is in the REVERSE (R) position, the screen automatically switches to full screen rear view camera.

Customizing preferences

Camera for "RearView"

[RearView] can be displayed the full screen rear camera image any time without relation to the shift lever position after touching [RearView] on the "AV Source" menu. [RearView] is useful if you want to monitor an attached trailer, etc.

CAUTION

Pioneer recommends the use of a camera which outputs mirror reversed images, otherwise the screen image may appear reversed.

- Immediately verify whether the display changes to a rear view camera image when the shift lever is moved to REVERSE (R) from another position.
- When the whole screen changes to a rear view camera image during normal driving, switch to another setting.
- Initially, this function is set to "Off".

1 Touch [Back Camera] on the "System Settings" menu.

- ➔ For details, refer to *Displaying the "System Settings" menu* on page 91.

The "Camera Input" screen appears.

2 Touch [On] next to "Camera" to activate the camera setting.

- Unless this setting is [On], you cannot switch to "RearView".

3 Touch [Battery] or [GND] next to "Polarity" to select the appropriate polarity setting.

- **Battery** When the polarity of the connected lead is positive while the shift lever is in the REVERSE (R) position
- **GND** When the polarity of the connected lead is negative while the shift lever is in the REVERSE (R) position

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

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

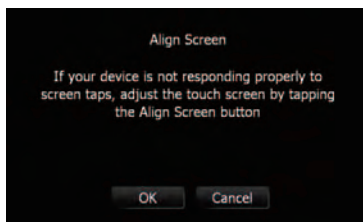
- For adjustment, make sure to use a relatively soft and tapered instrument so that the screen is not scratched or damaged, and gently touch the screen. If you press the touch panel forcefully, the touch panel may be damaged. Also, do not use a sharp pointed metallic or hard tool such as a ball point pen or a mechanical pencil. Otherwise the screen may become damaged.

1 Touch [Screen Calibration] on the "System Settings" menu.

A message confirming whether to start the calibration appears.

- You can also start the calibration by keeping pressing **MENU** button on the "Top Menu".

2 Touch [OK].



3 Touch and hold the arrows that point to the center and corners of the LCD screen.

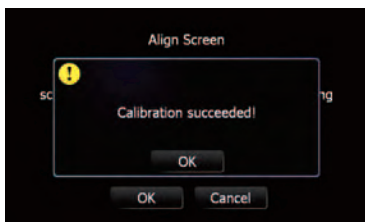
The arrow indicates the order.

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.

5 Touch [OK].



Adjusting the screen brightness

“**Brightness**” modifies the black level of the screen.

1 Touch [Picture Adjustment] on the “System Settings” menu.

- ➔ For details, refer to *Displaying the “System Settings” menu* on page 91.

2 Touch [+] or [-] to adjust the brightness.

Each time you touch [+] or [-] increases or decreases the level. **10** to **01** is displayed as the level is increased or decreased.

3 Touch to return to the previous screen.

- ☐ You can also start the adjustment by keep pressing **MAP** button.

Setting the power-saving function

You can select the setting of automatic suspend and the power saving feature of the screen backlight to save the battery power.

1 Touch [Power Management] on the “System Settings” menu.

- ➔ For details, refer to *Displaying the “System Settings” menu* on page 91.

2 Touch the desired key to change the setting.




Available options:




- **“Auto Power Off”**
Enables you to set the automatic suspend of the system.
[Never]:
Deactivates the automatic suspend function.
[10 min]:
Suspends the system automatically if you do nothing for 10 minutes.
- **“Backlight Timeout”**
Enables you to set the power saving feature of the screen backlight.
[Never]:
Deactivates the power saving feature of the screen backlight.
[30 sec]:
Dims the backlight automatically if you do nothing for 30 seconds.

Monitoring the battery status

Displaying the battery power

You can select whether to display or hide the battery status indicator (e.g. ) on the map screen.

Battery status indicator

	Fully charged
	Sufficient power
	Charging

Customizing preferences

1 Touch [Battery Status] on the “System Settings” menu.

- For details, refer to *Displaying the “System Settings” menu* on page 91.

2 Touch [On] or [Off] to activate or deactivate “Battery Power Indication”.

Setting the low battery caution

You can select whether to display or refrain from displaying a warning message when battery power decreases.

1 Touch [Battery Status] on the “System Settings” menu.

- For details, refer to *Displaying the “System Settings” menu* on page 91.

2 Touch [On] or [Off] to activate or deactivate “Low Battery Caution”.

Checking the version information

1 Touch [Service Information] on the “System Settings” menu.

- For details, refer to *Displaying the “System Settings” menu* on page 91.

2 Check the version information.

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.

● Touch [Screen Off] on the “System Settings” menu.

- For details, refer to *Displaying the “System Settings” menu* on page 91.

The screen is turned off.

- To turn on the screen, touch anywhere on the screen.

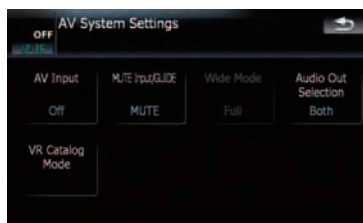
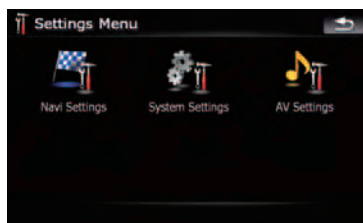
The options on the “AV Settings” menu

Displaying the “AV Settings” menu

1 Press MENU button to display the “Top Menu”, and then touch [Settings].

2 Touch [AV Settings].

The “AV Settings” menu appears.



- Only when selecting the AV source with video, you can adjust [Wide Mode].
- Only when the AV source is “OFF”, [MUTE Input/GUIDE] can be adjusted.

Setting video input (AV)

You can switch this setting according to the connected component.

- This setting is effective for mini jack input on front panel.

● Touch [AV Input] on the “AV Settings” menu.

- For details, refer to *Displaying the “AV Settings” menu* on this page.

Each touch of **[AV Input]** changes the settings as follows:

- **Off** No video component is connected
- **iPod** iPod connected with the USB Interface cable for iPod (CD IU200VM)
- **Video** External video component
- Use the CD RM10 (sold separately) to connect the external video component.

Switching the sound muting/attenuation

You can select the muting method when the navigation guidance is output.

- When you use a cellular phone connected with Bluetooth technology (dialing, talking, incoming call), the AV source volume is always muted independently of this setting.
- When the voice recognition mode is activated, the AV source volume is always muted independently of this setting.
- When ND G500 is connected with this system, the sound output from the connected car stereo is always muted when the navigation guidance outputs.

● Touch **[MUTE Input/GUIDE]** on the “AV Settings” menu.

- For details, refer to *Displaying the “AV Settings” menu* on the previous page.

Each touch of **[MUTE Input/GUIDE]** changes the settings as follows:

- **MUTE** Muting
- **ATT** Attenuation
- **Normal** Volume does not change
- Operation returns to normal when the correspond action is ended.
- When “**SD**” or “**USB**” selected as the AV source, the AV sounds, the navigation guidance and beep sounds are mixed and the volume can be adjusted simultaneously.

Changing the wide screen mode

● Touch **[Wide Mode]** on the “AV Settings” menu.

- For details, refer to *Displaying the “AV Settings” menu* on the previous page.

Each touch of **[Wide Mode]** changes the settings as follows:

Full Normal

Full (full)

A 4:3 picture is enlarged in the horizontal direction only, enabling you to enjoy a 4:3 TV picture (normal picture) without any omissions.

Normal (normal)

A 4:3 picture is displayed normally, giving you no sense of disparity since its proportions are the same as that of the normal picture.

- Different settings can be memorized for each video source.
- The setting is automatically applied with the following grouping.
 - **SD, USB, iPod**
 - **AV**
- When video is viewed in a wide screen mode that does not match its original aspect ratio, it may appear differently.
- Remember that use of this system for commercial or public viewing purposes may constitute an infringement on the author's rights protected by the Copyright Law.
- The navigation map and the rear view camera picture is always viewed at **Full**.

Setting the audio output

You can change the audio output setting depending on your usage.

1 Touch **[Audio Out Selection]** on the “AV Settings” menu.

- For details, refer to *Displaying the “AV Settings” menu* on the previous page.

2 Touch **[Audio Out Selection]**.

Each touch of **[Audio Out Selection]** changes the settings as follows:

- **Both** Outputs the sound from both the built in speaker and audio output terminal.

Customizing preferences

- **Built-in** Outputs the sound from the built in speaker only.
- **Preout** Outputs the sound from the audio output terminal only.
- ❑ This product's audio output terminal is the mini plug at the cradle's cable end.
- ❑ When the navigation system is combined with ND G500 (sold separately), select "**Pre-out**".
- ❑ When the headphone is connected, no sounds are output from both the built in speaker and audio output terminal.

Acquiring/Cataloging iPod music information

If you always set the language other than "**English**" on "**Program language:**", this setting is unnecessary.

Unless [**VR Catalog Mode**] is turned off, this navigation system tries to acquire the information needed to operate iPod with voice commands. It may take a short period of time to transfer the information. Change the setting according to your usage.

The navigation system starts acquiring/cataloging music information (1) when the iPod is connected or when the system boots up while the iPod is connected and (2) when iPod is the selected and displayed AV Source, unless [**VR Catalog Mode**] is turned off.

- ❑ If you do not use iPod, this setting is unnecessary.
- ❑ During transfer, iPod operations (such as [**Shuffle**], [**Menu**], or [**Video**]) are not available.
- ❑ Once the cataloging is completed, you can deactivate [**VR Catalog Mode**] until you update the content/data on iPod. If you update the iPod data, activate [**VR Catalog Mode**] again to transfer the music information and synchronize the music information for voice commands with the data on iPod.

- ❑ After you select "**Off**" in [**VR Catalog Mode**], the system doesn't catalog the data on the iPod. In such case, the previously cataloged data are available as voice commands.
- ❑ Once you start the cataloging process, only a few basic voice commands can be used for iPod until the process has completely finished.
- ❑ If unreadable characters are included in the data on your iPod, names or types may not be available as voice commands.

Important Notice regarding Voice Control for iPods

Voice Control for iPods may be limited if cataloging of iPod content is not completed. Cataloging of iPod content only occurs when the system is in "AV Source" mode and the "iPod" is the selected and displayed AV source. Cataloging of iPod content will not occur if the system is off, if any other "AV Source" is selected (aside from iPod), or if the system is in any other mode (aside from "AV Source" mode) such as "Destination" mode, "Contacts" mode, "Settings" mode, "Phone" mode or "Map" mode. If you wish to use Voice Control for all iPod content, it is recommended that you first connect your iPod, select "iPod" as the AV source, and keep the iPod screen displayed until cataloging is completed. Cataloging of iPod content should only take a few minutes, and will depend on the size of the content stored on your iPod. A message will be displayed when cataloging is completed.

1 Touch [**VR Catalog Mode**] on the "AV Settings" menu.

- For details, refer to *Displaying the "AV Settings" menu* on page 95.

2 Touch [**On**] or [**Off**] to activate or deactivate "VR Catalog Mode".

To Ensure Safe Driving

Some functions of the navigation system support voice operation.

- ❑ The navigation function is not available using voice operation.

CAUTION

For your safety, avoid viewing the screen in the voice operation as much as possible while driving.

If you use voice operation, select **[English]** in **[Program language:]** of **"Language"**. If you select other languages, voice operation will not be available.



Basics of Voice Operation

Your Pioneer navigation system uses the latest in voice recognition technology. You can use voice commands to operate many of its functions. This chapter describes where you can use voice commands, and also what commands the system accepts.

Flow of voice operation

You can start voice operation any time even when the map screen is displayed or audio is operating. (Some operations are not available.) The basic steps of voice operations are as follows.

1 Switch the screen to map screen or AV operation screen.

- For details concerning operations, refer to *Screen switching overview* on page 16.



2 Press MULTI-CONTROL to activate voice operations.



3 Speak a command into the microphone after the beep.



4 When the command is recognized, the navigation system displays next options on the screen, and pronounces it in some cases.



5 Repeat previous step as necessary.



6 The requested operation will be carried out.

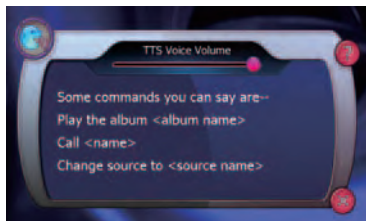
- ❑ The voice operation may not be operable for a minute after the navigation system has booted up.

Operating Your Navigation System with Voice


Starting voice operation

- Press **MULTI-CONTROL** on map screen or the **AV operation screen**.

The voice operation screen appears.





If you lose your way...

You can listen to the brief operating instruction by touching .

To cancel voice operation

You can cancel the voice operation feature at any time by saying “**Cancel**”. After you cancel voice operations, the display returns to the screen displayed before the voice operation screen appeared.

- You can also cancel voice operation if you touch  on the voice operation screen, or press **MENU** button or **MAP** button. .

Operating iPod by voice

You can play music using voice operation from the iPod connected to the navigation system.

- Playback of iPod movies is not available using voice commands.
- To use the content/data on the iPod for voice operation, transfer the data to this system first.
 - ➔ For details, refer to *Acquiring/Cataloging iPod music information* on page 97.

Examples of voice operation of the iPod are shown below. (A method for playing the album title named “Pioneer” is described here, along with an operational example.)

1 Press MULTI-CONTROL to start voice operation.


2 Say “Change Source” to display the AV source selection screen.

3 Say “iPod” on the selection screen to switch the AV source to iPod.

- Touching the item on the screen also enables you to select the desired AV source.

4 Press MULTI-CONTROL to start voice operation.

5 Say “Play the album Pioneer” to playback the album name “Pioneer”.


If the command is recognized properly, playback starts from the first song of “**Pioneer**”. .

Calling the entry on “Contacts”

A method for dialing the entry named “Nancy” is described here along with an operational example.

1 Press MULTI-CONTROL to start voice operation.

2 Say “Call Nancy” to make a call.

Dialing starts. .

Available Basic Voice Commands

The navigation system can also recognize the words in the following list.

Basic commands

Voice commands and operations

Back → Returns the previous screen.

Cancel → Cancels the voice operation.

Help → Outputs the brief operating instruction by voice.

Voice operation for the iPod

For <Artist name>, <Album name>, <Play list name>, <Genre name> shown on the following chart, say the name their name in the iPod.

- ❑ Playback of iPod movies is not available using voice commands.

Voice commands and operations

Shuffle play → Plays all songs randomly.

Pause the music, Stop the music → Pauses the song currently playing .

Resume the music → Resumes the song currently playing .

Next song → Plays the next song.

Previous song → Plays the previous song or return to the beginning of the song currently playing.

Play songs → Start playback from the top of "**Songs**".

Play artists → Start playback from the top of "**Artists**".

Play the artist <Artist name> → Start playback from the top of the selected artist.

Play albums → Start playback from the top of "**Albums**".

Play the album <Album name> → Start playback from the top of the selected album.

Play playlists → Start playback from the top of "**Playlists**".

Play the playlist <Playlist name> → Start playback from the top of the selected playlist.

Play genres → Start playback from the top of "**Genres**".

Play the genre <Genre name> → Start playback from the top of the selected genre.

Show artists → Displays the artist list together with sub screen to continue the voice operation. → Touch the desired item on the list or say the desired voice commands.

Show the artist <Artist name> → Displays the album list of the selected artist together with sub screen to continue the voice operation. → Touch the desired item on the list or say the desired voice commands.

Show albums → Displays the album list together with sub screen to continue the voice operation. → Touch the desired item on the list or say the desired voice commands.

Show the album <Album name> → Displays the song list of the selected album together with sub screen to continue the voice operation. → Touch the desired item on the list or say the desired voice commands.

Operating Your Navigation System with Voice

Show playlists → Displays the playlist together with sub screen to continue the voice operation. → Touch the desired item on the list or say the desired voice commands.

Show the playlist <Playlist name> → Displays the song list of the selected playlist together with sub screen to continue the voice operation. → Touch the desired item on the list or say the desired voice commands.

Show genre → Displays the genre list together with sub screen to continue the voice operation. → Touch the desired item on the list or say the desired voice commands.

Show the genre <Genre name> → Displays the song list of the selected genre list together with sub screen to continue the voice operation. → Touch the desired item on the list or say the desired voice commands.

Show songs → Displays the song list together with sub screen to continue the voice operation. → Touch the desired item on the list or say the desired voice commands.

Page down, Page up → Displays the previous or next page of the selection list. (Note 1)

(Note 1) The voice commands is available only when the selection list is displayed.

Voice operation for AV source (other than iPod)

AV source selection

Voice commands and operations

Change Source to SD Media → Switch the AV source to **SD**.

Change Source to USB → Switch the AV source to **USB**.

Change Source to iPod → Switch the AV source to **iPod**.

Change Source → Switch to the AV source selection screen. → Touch the desired AV source or say the desired AV source name.

External storage device (USB, SD)

Voice commands and operations

Shuffle play → Plays all songs randomly.

Pause the music, Stop the music → Pauses the song currently playing .

Resume the music → Resumes the song currently playing .

Next song → Plays the next song.

Previous song → Plays the previous song or return to the beginning of the song currently playing.

Voice commands related to hands-free phoning

- ❑ You can make a phone call by voice dialing if the cellular phone featuring Bluetooth wireless technology is being paired with the navigation system.
- ❑ For <entry's name> shown on the following chart, say the name of the entry stored in "**Contacts**".
- ❑ For <phone number> shown on the following chart, say the desired phone number.

Voice commands and operations

Call <entry's name> → Make a call to the entry (Note2).

Call <entry's name> mobile → Dial the mobile phone number of the entry (Note3).

Call <entry's name> home → Dial the home phone number of the entry (Note3).

Call <entry's name> office → Dial the office phone number of the entry (Note3).

Call <phone number> → Dial the phone number.

Make a call → Say the phone number you want to call → The system starts dialing to the number.

Make a call → Say the name of entry stored on "**Contacts**" you want to call → The system starts dialing to the number (Note2).

List outgoing calls → Display the list of recent outgoing calls ("**Dialed Numbers**") to select the number and call.

List recent calls → *Incoming calls* (Note4) → Display the list of recently received calls ("**Received Calls**") to select the number and call.

List recent calls → *Outgoing calls* (Note4) → Display the list of recent outgoing calls ("**Dialed Numbers**") to select the number and call.

List recent incoming calls → Display the list of recently received calls ("**Received Calls**") to select the number and call.

(Note2) If the entry has multiple phone number data, selection list may appear. In such case, say the type of phone number or touch the one of listed item that you want to dial.

(Note3) If there is no corresponding type on the entry, the system may suggest you other phone numbers of the entry. In such case, say the type of phone number or touch the one of listed item that you want to dial.

(Note4) Touching the item on the screen also enables you to select the desired list.



Tips for Voice Operation

For your voice commands to be correctly recognized and interpreted, ensure that conditions are suitable for recognition.

Close the vehicle windows

Please note that wind through the vehicle window or miscellaneous noise from outside the vehicle can interfere with voice operation.

Keep a proper distance from the microphone

For optimum pick up, don't speak commands extremely close to the microphone.

Pause before giving a command

Speaking too soon may cause the recognition to fail.

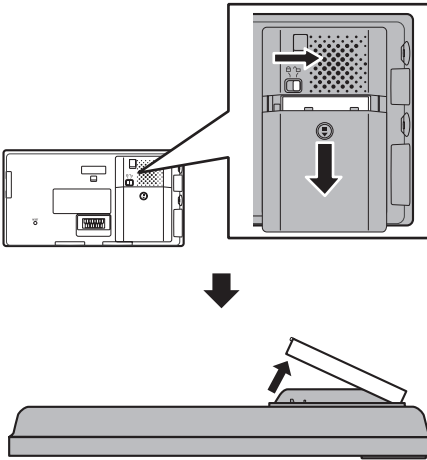
Pronounce your commands carefully

Speak slowly, deliberately, and clearly. 

Returning the navigation system to the default or factory settings

You can return settings or recorded content to the default or factory settings. There are three methods to clear user data, and the situations and the cleared content are different for each method. For information regarding the content that is cleared by each method, see the list presented later.

Method 1: Remove the battery pack



- 1 Move the battery lock knob to unlock position and slide the cover.
- 2 Detach the battery pack.
- 3 Attach the battery pack and close the cover.
- 4 Move the battery lock knob to lock position.

This transforms the system into the same state as when the battery is completely run out.

Method 2: Restore Factory Settings

Clears some items in the "Navi Settings" menu.

- For details, refer to **Restore Factory Settings** on page 85.

Other functions

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.

- Almost all items not listed below will be retained. However, some items to be returned to the default value are not listed if the setting value can be easily recovered by user, such as the last map scale, the last status of AV operation screen, etc.
- : The setting will be retained.
- ✓ : The setting will be cleared and returned to the default or factory settings.

Navigation functions		Method 1	Method 2
Destination Menu	All settings on "MSN Direct"		✓
	[Sound settings] "Master"		
Navi Settings	[Sound settings] "Voice", "Keys", "Dynamic Volume"		✓
	Other settings		✓
System Settings	[Language]		✓
	Other settings		
Audio functions		Method 1	Method 2
SD, USB	All settings (*1)	✓	
	Volume setting for AV sources	✓	

(*1) All settings including the setting on the "Function" menu are to be deleted.



Appendix

Troubleshooting

If you have problems operating your navigation system, refer to this section. The most common problems are listed below, along with likely causes and solutions. While this list is not comprehensive, it should answer your most common problems. If a solution to your problem cannot be found here, contact your dealer or the nearest authorized Pioneer service facility.

Problems with the navigation screen

Symptom	Cause	Action (See)
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 (in the vehicle power charge) is blown.	Rectify the reason for the fuse blowing, then replace the fuse. Be very sure to install a correct fuse with the same rate.
	Noise and other factors are causing the built in microprocessor to operate incorrectly.	Press RESET button. (Page 9)
You cannot position your vehicle on the map without a significant positioning error.	Signal quality from the GPS satellites is poor causing reduced positioning accuracy. Such a loss of signal quality may occur for the following reasons: <ul style="list-style-type: none"> • This product is in an unsuitable location. • Obstacles are blocking signals from the satellites. • The position of satellites relative to your vehicle is inadequate. • Signals from the GPS satellites have been modified to reduce accuracy. (GPS satellites are operated by the US Department of Defense, and the US government reserves the right to distort positioning data for military reasons. This may lead to greater positioning errors.) • If a cellular phone is used near the GPS module, GPS reception may be lost temporarily. 	Check the GPS signal reception, the position of this product and the topside clearance if necessary, or continue driving until reception improves.
	Something covers this product's topside.	Do not cover this product with spray paint or vehicle wax, because this may block the reception of GPS signals.
	You cannot position your vehicle on the map without a significant positioning error.	The navigation system may not be mounted securely in your vehicle.
Indication of the position of your vehicle is misaligned after a U turn or reversing.		Check whether or not the reverse gear signal input lead (violet) is connected properly. (The navigation system works properly without the lead connected, but positioning accuracy will be adversely affected.)

Appendix

The map color does not switch automatically between daytime and nighttime.	[Night mode] is set to [Day].	Check [Night mode] setting and make sure [Automatic] is selected. (Page 81)
The screen is too bright.	An improper value has been set on " Brightness ".	Check the settings.
The display is very dim.	[Night] is selected in " Night mode ".	Check the setting of [Night mode] and select [Automatic] or [Day]. (Page 81)
	An improper value has been set on " Brightness ".	Check the settings.
No sounds of AV source are produced.	The volume level is low.	Adjust the volume level.
The volume level will not rise.	A speaker lead is disconnected.	Check the connection.
Adjusting the volume of navigation guidance and beeps is not possible.	You cannot adjust these with MULTI-CONTROL .	Turn the volume up or down according to [Sound settings] on the " Navi Settings " menu. (Page 86)
The person on the other end of the phone call cannot hear the conversation due to an echo.	The voice from the person on the other end of the phone call is output from the speakers and then picked up by the microphone again, creating an echo.	Use the following methods to reduce the echo: Lower the volume on the receiver Have both speakers pause slightly before speaking
There's no picture while this product is attached on the cradle.	The parking brake cord is not connected.	Connect the parking brake cord, and apply the parking brake.
	The parking brake is not applied.	Connect the parking brake cord, and apply the parking brake.
	The backlight of the LCD panel is turned off.	Turn on the backlight. (Page 95)
Nothing is displayed and the touch panel keys cannot be used.	The setting for the rear view camera is incorrect.	Select the appropriate setting for the rear view camera.
	The shift lever was placed in [R] when the rear view camera was not connected.	Press MAP button, and then press MENU button to return to the " Top Menu " and then select the correct polarity setting for [Back Camera]. (Page 92)
There is no response when the touch panel key are touched or a different key responds.	The touch panel keys deviate from the actual positions that respond to your touch for some reason.	Perform the touch panel calibration. (Page 93)

Problems in the AV screen

Symptom	Cause	Action (See)
The screen is covered with the caution message and the video cannot be shown.	The parking brake lead is not connected or applied.	Connect the parking brake lead correctly, and apply the parking brake.
	The parking brake interlock is activated.	Park your vehicle in a safe place and apply the parking brake.
No video output from connected equipments.	[AV Input] setting is incorrect.	Establish the setting correctly. (Page 78)
No video output from connected iPod.	The connection of the USB interface cable for iPod is incorrect.	Connect both USB plug and mini jack cable side. (If only one connection has made, an iPod will not work properly.) (Page 14)

Appendix

No sounds are produced. The volume level will not rise.	Cables are not connected correctly.	Connect the cables correctly.
	The system is performing still, slow motion, or frame by frame playback with video.	There is no sound during still, slow motion, or frame by frame playback with video.
The picture stops (pauses) and the navigation system cannot be operated.	The system is paused or performing, fast reverse or forward during the audio playback.	There is no sound on fast reverse or forward.
	The reading of data is impossible during video playback.	After touching ■ once, start playback once more.
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 software version of iPod.
	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 parking brake. Turn the power off and then turn the power on. If this does not solve the problem, press RESET button on the navigation system. • Update the software version of iPod.
Songs on iPod connected with this system cannot be available as voice commands or different song or title from the one that you said is recognized.	iPod content/data has been updated, but the data on this system's memory has not been updated yet. (i.e., system has not cataloged new iPod content), or cataloging was not completed)	If you update the iPod data, activate [VR Catalog Mode] to catalog/transfer the music information to this system and synchronize the music information for voice commands with the data on iPod. (Page 97)

Problems with the phone screen

Symptom	Cause	Action (See)
Dialing is not possible because the touch panel keys for dialing are inactive.	Your phone is out of range for service.	Retry after re entering the range for service.
	The connection between the cellular 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 parking brake. Turn the power off and then turn the power on. If this does not solve the problem, press **RESET** button on the navigation system.



Appendix

Messages and how to react to them

The following messages may be displayed by your navigation system.

There are occasions when you may see error messages other than those shown here. In such a case, follow the instructions given on the display.

Messages for navigation functions

Message	When	What to do (See)
There is no "Pictures" folder. Please create /Pictures/ folder and store the appropriate files images to be uploaded in that Folder.	Cannot load the image because "Pictures" folder is not found in the inserted external storage device.	Use the appropriate data and store the data properly. (Page 92)
	"Pictures" folder exists on the external storage device (USB, SD) but there is no loadable data in the folder.	Use the appropriate data and store the data properly. (Page 92)
Data Read error.	Failed to read the data for some reason.	Use the appropriate data and store the data properly. (Page 92)
The file is corrupt	The data is damaged or an attempt was made to set an image file that was not made to specifications as the splash screen.	Use the appropriate data and store the data properly. (Page 92)
Connection failed.	The cellular phone's Bluetooth wireless technology is turned off.	Activate the target phone's Bluetooth wireless technology.
	The cellular phone is paired (connected) with another device.	Cancel the pairing (connection) and retry.
	Rejection has been received from the cellular phone.	Operate the target phone and accept the connection request from the navigation system. (Furthermore, check the connection settings on your cellular phone.)
	The target cellular phone can not be found.	Check whether your cellular phone is activated and, whether the distance to your cellular phone is not too far.
Could not find any available phone.	No available phone exists in the surroundings when the system searches for connectable cellular phones featuring Bluetooth wireless technology.	<ul style="list-style-type: none"> • Activate the target phone's Bluetooth wireless technology. • Check whether your cellular phone is activated and, whether the distance to your cellular phone is not too far.
Dataloading failed.	If you transferred the data from your cellular phone in a format can not be received with navigation system.	<ul style="list-style-type: none"> • Select just a suitable item, format, and then retry. (Page 64) • Connect your cellular phone with another method again and retry. (Page 52)
Your mobile phone can not support this feature.	Connected cellular phone has no compatibility with the phone book transfer function of this navigation system.	Depending on the cellular phone, phone book transfer may not be available.



Appendix

Messages for Audio Functions

When problems occur with AV source playback, an error message appears on the display. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists, contact your dealer or your nearest Pioneer Service Center.

SD/USB/iPod

Message	Cause	Action (See)
Non-playable tracks are skipped.	Files that are protected by digital rights management.	The protected files are skipped.
Impossible to play all tracks.	All the files on the inserted external storage device are secured by DRM.	Store playable files.
An error occurred on USB connection. USB devices are not available to use and iPod power supply is also unavailable.	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 power off, then turn the power on and connect the compliant USB storage device.
	The USB interface cable for iPod is short circuited.	Confirm that USB interface cable for iPod or USB cable is not caught in something or damaged.
Connected iPod is not supported. Please check instruction manual.	The iPod is not compatible with this navigation system.	Use an iPod with a compatible version.
iPod connection failed. Please reconnect.	Communication failure	<ul style="list-style-type: none"> • Disconnect the cable from iPod. Once iPod main menu is displayed, connect the cable again. • If the message appears frequently, consult your dealer.
Updating VR dictionary. Please wait.	iPod function is restricted because the navigation system is trying to acquire the information needed to operate iPod with voice commands from the iPod currently connected.	<ul style="list-style-type: none"> • Wait on the iPod basic screen (Music) until "iPod VR activation process complete." appears. • Switch the screen to another screen to cancel the acquiring process. (In such case, the acquiring process will resume when the iPod basic screen (Music) is displayed.) (Page 97)
Voice Synching...My voice system will be busy until I'm finished, but you can use the touch interface	Voice operation is restricted because the navigation system is trying to acquire the information needed to operate iPod with voice commands from the iPod currently connected.	<ul style="list-style-type: none"> • Wait on the iPod basic screen (Music) until "iPod VR activation process complete." appears. • Switch the screen to another screen to cancel the acquiring process. (In such case, the acquiring process will resume when the iPod basic screen (Music) is displayed.) (Page 97)



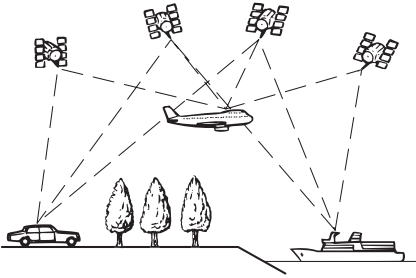
Appendix

Positioning technology

Positioning by GPS

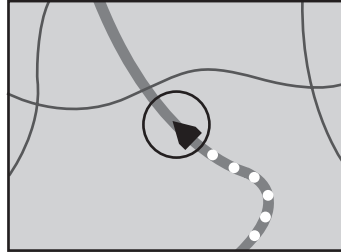
The Global Positioning System (GPS) uses a network of satellites orbiting the Earth. Each of the satellites, which orbit at a height of 21 000 km, continually broadcasts radio signals giving time and position information. This ensures that signals from at least three can be picked up from any open area 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.

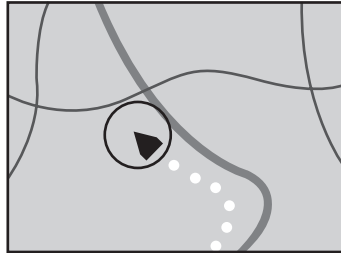


Map matching

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



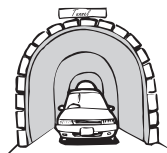
Handling large errors

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.

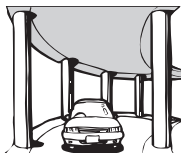
Appendix

When positioning by GPS is impossible

- If signals cannot be received from more than two GPS satellites, GPS positioning does not take place.
- In some driving conditions, signals from GPS satellites may not reach your vehicle. In this case, it is impossible for the system to use GPS positioning.



In tunnels or enclosed parking garages



Under elevated roads or similar structures



When driving among high buildings



When driving through a dense forest or tall trees

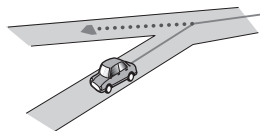
- If a car phone or cellular phone is used near this product, GPS reception may be lost temporarily.
- Do not cover this product with spray paint or vehicle wax, because this may block the reception of GPS signals.
- ☐ If a GPS signal have not been received for a long time, your vehicle's actual position and the current position mark on the map may diverge considerably or may not be updated. In such case, once GPS reception is restored, accuracy will be recovered.

Conditions likely to cause noticeable positioning errors

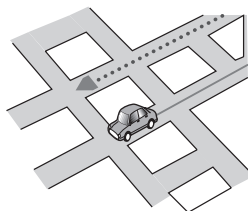
For various reasons, such as the state of the road you are traveling on and the reception status of the GPS signal, the actual position of

your vehicle may differ from the position displayed on the map screen.

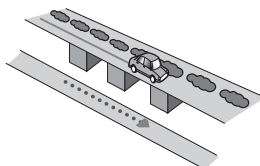
- If you make a shallow turn.



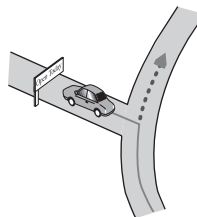
- If there is a parallel road.



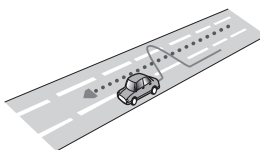
- If there is another road very nearby, such as in the case of an elevated freeway.



- If you take a recently opened road that is not on the map.

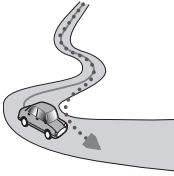


- If you drive in zigzags.

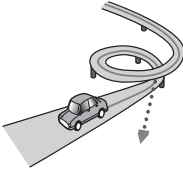


Appendix

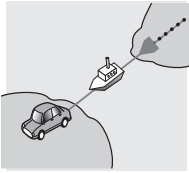
- If the road has connected hairpin bends.



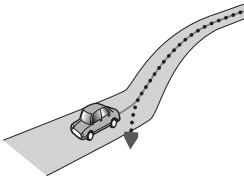
- If there is a loop or similar road configuration.



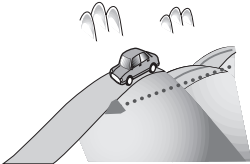
- If you take a ferry.



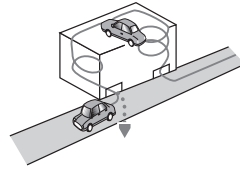
- If you are driving on a long, straight road or a gently curving road.



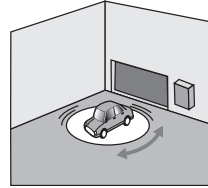
- If you are on a steep mountain road with many height changes.



- If you enter or exit a multi storey parking lot or similar structure using a spiral ramp.



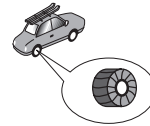
- If your vehicle is turned on a turntable or similar structure.



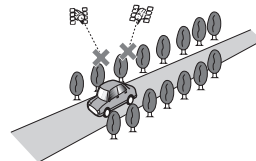
- If your vehicle's wheels spin, such as on a gravel road or in snow.



- If you put on chains, or change your tires for ones with a different size.

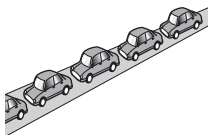


- If trees or other obstacles block the GPS signals for a considerable period.

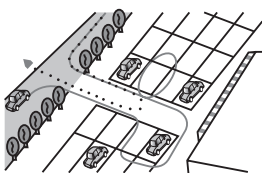


Appendix

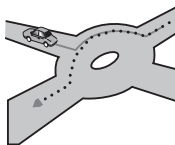
- If you drive very slowly, or in a start and stop manner, as in a traffic congestion.



- If you join the road after driving around a large parking lot.



- When you pass around a traffic circle.



- When starting driving immediately after starting the engine.

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 at the time when the route was calculated is shown. One way streets and street closures may not be taken into consideration. For example, if a street is open dur-

ing 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 pass. If you need to pass a certain street, set the waypoint on that street.)
- If the destination is too far, there may be instances where the route cannot be set. (If you want to set a long distance route going across several areas, set waypoints along the way.)
- During voice guidance, turns and intersections from the freeway are announced. However, if you pass intersections, turns, and other guide points in rapid succession, some may delay or not be announced.
- It is possible that guidance may direct you off a freeway and then back on again.
- In some cases, the route may require you to travel in the opposite direction to your current heading. In such cases, you are instructed to turn around, so please turn around safely by following the actual traffic rules.
- In some cases, a route may begin on the opposite side of a railway or river from your actual current location. If this happens, drive towards your destination for a while, and try route calculation again.
- When there is a traffic congestion ahead, if driving through the traffic congestion is better than taking the detour, a detour route may not be suggested.
- There may be instances when the starting point, the waypoint and the destination point are not on the highlighted route.








Appendix

- The number of traffic circle exits displayed on the screen may differ from the actual number of roads.





Route highlighting

- Once set, the route is highlighted in bright color on the map.
- The immediate vicinity of your starting point and destination may not be highlighted, and neither will areas with particularly complex road layouts. Consequently, the route may appear to be cut off on the display, but voice guidance will continue.

Supplemental information about directions

Symbol	Meanings
	Highway
	Motorway exit left/right
	Roudabout (clockwise and anti clockwise)
	Ferry (start and end)
	Car only road (start and end)
	Car train (start and end)
	Other information

Supplemental information about traffic icon

Icon	Meanings
	Stop and go traffic
	Stopped traffic
	Closed/blocked roads
	Accidents, constructions, etc.

	Road works
	Road narrows, lane closures
	Warnings, other dangers
	Bad weather condition
	Police ahead



Detailed information for playable media

Compatibility

Common notes about the external storage device (USB, SD)

- Depending on the kind of the external storage device (USB, SD) you use, this navigation system may not recognize the storage device or files may not be played back properly.
- Do not leave the external storage device (USB, SD) in any location with high temperatures.
- The text information of some audio and video files may not be correctly displayed.
- File extensions must be used properly.
- There may be a slight delay when starting playback of files on an external storage device (USB, SD) with numerous folder hierarchies.
- Operations may vary depending on the kind of an external storage device (USB, SD).
- It may not be possible to play some music files from SD or USB because of file characteristics, file format, recorded application, playback environment, storage conditions, and so on.
- Video playback from SD or USB will be paused when the navigation is displayed.

Appendix

USB storage device compatibility

- For more details about USB storage device compatibility with this navigation system, refer to *Specifications* on page 128.

Protocol: bulk

Subclass: SCSI (06h)

- You cannot connect a USB storage device to this navigation system via a USB hub.
- Partitioned USB memory is not compatible with this navigation system.
- Firmly secure the USB storage device when driving. Do not let the USB storage device fall onto the floor, where it may become jammed under the brake or gas pedal.
- There may be a slight delay when starting playback of audio files encoded with image data.
- Depending on the USB storage devices connected to this navigation system, noise may be generate on the radio.
- Do not connect anything other than the USB portable audio player/USB memory device.

The sequence of audio files on USB memory

For USB portable audio players, the sequence is different from that of USB memory device and depends on the player.

SD memory card and SDHC memory card

- For more details about SD memory card compatibility with this navigation system, refer to *Specifications* on page 128.

Handling guidelines and supplemental information

- There is no compatibility for Multi Media Card (MMC).
- Copyright protected files cannot be played back.

Appendix

Media compatibility chart

General

Media	USB storage device	SD memory card
File system	FAT16/FAT32	
Maximum number of folders	FAT32: No limit. FAT16: 512 (including files)	
Maximum number of files	FAT32: No limit. FAT16: 512 (including folders)	
Playable file types	MP3, WMA, AAC, WAV, AVI, MPEG 4	

MP3 compatibility

Media	USB storage device	SD memory card
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, 2.3	
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. • There is no compatibility with the followings: MP3i (MP3 interactive), mp3 PRO, m3u playlist 		

WMA compatibility

Media	USB storage device	SD memory card
File extension	.wma	
Bit rate	Ver. 9: 5 kbps to 320 kbps (CBR), VBR Ver. 7 or 8: 128 kbps to 192 kbps (CBR), VBR	
Sampling frequency	8 kHz to 48 kHz	
Note:		
<ul style="list-style-type: none"> • There is no compatibility with the followings: Windows Media Audio 9 Professional, Lossless, Voice 		

Appendix

WAV compatibility

Media	USB storage device	SD memory card
File extension	.wav	
Format	Linear PCM (LPCM), IMA ADPCM	
Sampling frequency	LPCM: 16 kHz to 48 kHz IMA ADPCM: 22.05 kHz and 44.1 kHz	
Quantization bits	LPCM: 8 bits and 16 bits IMA ADPCM: 3 bits and 4 bits	
Note: The sampling frequency shown in the display may be rounded.		

AAC compatibility

Media	USB storage device	SD memory card
File extension	.m4a	
Bit rate	8 kbps to 320 kbps (CBR)	
Sampling frequency	8 kHz to 44.1 kHz	
Notes:		
<ul style="list-style-type: none"> The navigation system plays back AAC files encoded by iTunes®. There is no compatibility with the followings: Apple Lossless, files encoded with VBR 		

AVI compatibility

Media	USB storage device	SD memory card
File extension	.avi	
Compatible video codec	MPEG 4	
Compatible audio codec	ADPCM	
Recommended video specifications	Image size: VGA (640 x 480) Bit rate: 480 kbps Frame rate: 24 fps	

Appendix

MPEG-4 compatibility

Media	USB storage device	SD memory card
File extension	.mp4	
Compatible video codec	MPEG 4	
Compatible audio codec	AAC	
Recommended video specifications	Image size: VGA (640 x 480) Bit rate: 480 kbps Frame rate: 24 fps	

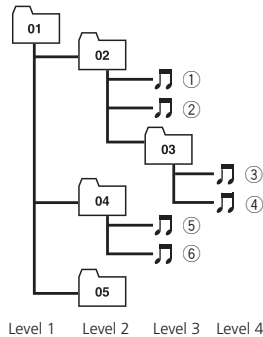
Common notes

- 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.
- There is no compatibility with packet write data transfer.
- This navigation system can recognize 32 characters beginning with the first character, including extension for the file and folder name. Depending on the display area, the navigation system try to display them with changing the font size to smaller. However, the maximum number of the characters that you can display varies according to the width of each character or display area.
- Folder selection sequence or other operation 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 external storage device. The numbers in the figure indicate the order in which folder numbers are assigned and the order to be played back.

 Folder
 File



Notes

- This product assigns folder numbers. The user can not 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. (The blank list will appear.) Also, these folders will be skipped without displaying the folder number. 

Appendix

About Bluetooth



Bluetooth is a short range wireless radio connectivity technology that is developed as a cable replacement for mobile phones, handheld PCs and other devices. Bluetooth operates in 2.4 GHz frequency range and transmits voice and data at speeds up to 1 megabit per second. Bluetooth was launched by a special interest group (SIG) that comprises of Ericsson Inc., Intel Corp., Nokia Corp., Toshiba and IBM in 1998, and it is currently developed by nearly 2000 companies worldwide.

- The Bluetooth word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Pioneer Corporation is under license. Other trademarks and trade names are those of their respective owners. □

About SD and SDHC logo



SD Logo is a trademark.



SDHC Logo is a trademark. □

About WMA



The Windows Media™ logo printed on the box indicates that this unit can play back WMA data. WMA is short for Windows Media Audio and refers to an audio compression technology that is developed by Microsoft Corporation. WMA data can be encoded by using Windows Media Player version 7 or later. Windows Media and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries. □

About 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 4.6.

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

Detailed information regarding connectable iPods

⚠ CAUTION

- Pioneer accepts no responsibility for data lost on the iPod even if that data is lost while using the navigation system.
- Do not leave the iPod in direct sunlight for extended amounts of time. Extended exposure to direct sunlight can result in iPod malfunction due to the resulting high temperature.
- Do not leave the iPod in any location with high temperatures.

Appendix

- Firmly secure the iPod when driving. Do not let the iPod fall onto the floor, where it may become jammed under the brake or gas pedal.

For details, refer to the iPod's manuals. 

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 the LCD screen can 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.
- To protect the LCD screen from damage, be sure to touch the touch panel keys only with your fingers. (Keep the use of other instruments at a minimum, and only in cases in which the touch panel calibration is necessary.)

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 problem with the LCD screen.


- The LCD screen will be difficult to see if it is exposed to direct sunlight.
- When using a cellular phone, keep the antenna of the cellular phone away from the LCD screen to prevent disruption of the video in the form of disturbances such as spots or colored stripes.

Maintaining the LCD screen

- When removing dust from the LCD screen or cleaning it, first turn the system power off, then wipe with a soft dry cloth.
- When wiping the LCD screen, take care not to scratch the surface. Do not use harsh or abrasive chemical cleaners.

LED (light-emitting diode) backlight

A light emitting diode is used inside the display to illuminate the LCD screen.

- At low temperatures, using the LED backlight may increase image lag and degrade the image quality because of the characteristics of the LCD screen. Image quality will improve with an increase in temperature.
- The product lifetime of the LED backlight is more than 10 000 hours. However, it may decrease if used in high temperatures.
- If the LED backlight reaches the end of its product lifetime, the screen will become dark and the image will no longer be projected. In this case, please consult your dealer or the nearest authorized PIONEER Service Station. 

Appendix

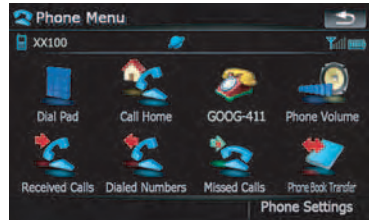
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Settings Menu

Navi Settings

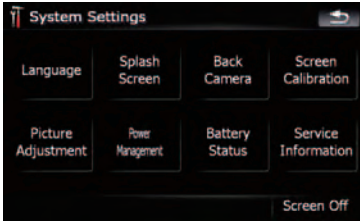


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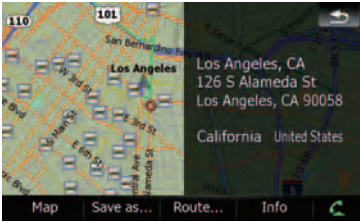


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Appendix

Glossary

AAC

AAC is short for Advanced Audio Coding and refers to an audio compression technology standard used with MPEG 2 and MPEG 4.

Aspect ratio

This is the width to height ratio of a TV screen. A regular display has an aspect ratio of 4:3. Wide screen displays have an aspect ratio of 16:9, providing a bigger picture for exceptional presence and atmosphere.

Bit rate

This expresses data volume per second, or bps units (bits per second). The higher the rate, the more information is available to reproduce the sound. Using the same encoding method (such as MP3), the higher the rate, the better the sound.

Current location

The present location of your vehicle; your current location is shown on the map by a red triangle mark.

Destination

A location you choose as the end point of your journey.

Favorites

A frequently visited location (such as your workplace or a relative's home) that you can register to allow easy routing.

GPS

Global Positioning System. A network of satellites that provides navigation signals for a variety of purposes.

Guidance mode

The mode in which guidance is given as you drive to your destination; the system automatically switches to this mode as soon as a route has been set.

Guidance point

These are important landmarks along your route, generally intersections. The next guidance point along your route is indicated on the map by the yellow flag icon.

Home location

Your registered home location.

ID3 tag

This is a method of embedding track related information in a MP3 file. This embedded information can include the track title, the artist's name, the album title, the music genre, the year of production, comments and other data. The contents can be freely edited using software with ID3 Tag editing functions. Although the tags are restricted by the number of characters, the information can be viewed when the track is played back.

JPEG

This stands for Joint Photographic Experts Group, and is an international still image compression standard.

MP3

MP3 is short for MPEG Audio Layer 3. It is an audio compression standard established by a working group (MPEG) of the ISO (International Standards Organization). MP3 is able to compress audio data to about 1/10th the size of a conventional disc.

MPEG

This stands for Moving Pictures Experts Group, and is an international video image compression standard.

Phone book

An address book on user's phone is collectively referred to as "Phone book". Depending on the cellular phone, "Phone book" may be called a name such as "Contacts", "Business card" or something else.

Appendix

Point of Interest (POI)

Point Of Interest; any of a range of locations stored in the data, such as railway stations, shops, restaurants, and amusement parks.

Route setting

The process of determining the ideal route to a specific location; route setting is done automatically by the system when you specify a destination.

Set route

The route marked out by the system to your destination. It is highlighted in bright color on the map.

Track log

Your navigation system logs your course that you already pass through if the track logger is activated. This recorded course is called "track log". It is handy when you want to check a route traveled or if returning along a complex route.

VBR

VBR is short for variable bit rate. Generally speaking CBR (constant bit rate) is more widely used. But by flexibly adjusting the bit rate according to the needs of audio compression, it is possible to achieve compression priority sound quality.

Voice guidance

The giving of directions by navigation voice while in guidance.

Waypoint

A location that you choose to visit before your destination; a journey can be built up from multiple way points and the destination.

WMA

WMA is short for Windows Media™ Audio and refers to an audio compression technology that is developed by Microsoft Corporation.

Appendix

Specifications

General

Rated power source	5 V DC
Grounding system	Negative type
Max. current consumption	3.0 A
Dimensions (W × H × D) ...	184.8 mm × 98.1 mm × 29.7 mm (7 1/4 in. × 3 7/8 in. × 1 1/8 in.)
Weight	450 g (1 lbs)
NAND flash memory	2 GB
Durable temperature range:	
Power on	14 °F to 113 °F with DC IN (32 °F to 113 °F in battery mode)
Power off	4 °F to +176 °F

Navigation

GPS Receiver:	
System	L1, C/Acode GPS SPS (Standard Positioning Service)
Reception system	30 channel multi channel reception system
Reception frequency ...	1 575.42 MHz
Sensitivity	140 dBm (typ)
Position update frequency	Approx. once per second

Display

Screen size/aspect ratio	5.8 inch wide/16:9 (effective display area: 128 mm × 72 mm)
Pixels	384 000 (800 × 480)
Display method	TFT Active matrix driving
Color system	NTSC compatible

Audio

Preout output level (max) ...	0.5 V
Preout impedance	1 kohm

Headphone

Output level (max)	0.2 V
Load impedance	16 Ω

Vehicle power charger

Rated power source	14.4 V DC (allowable voltage range: 10.8 V to 15.1 V DC)
Grounding system	Negative type
Max. current consumption	3.0 A

USB

USB standard spec.	USB 2.0 High Speed
Max current supply	500 mA
Max capacity memory	2 GB
File system	FAT16, FAT32
USB class	Mass storage class
Decoding format	MP3/WMA/AAC/WAVE/ MPEG4

SD

Compatible physical format	Version 2.00
Max capacity memory	8 GB
File system	FAT16, FAT32
Decoding format	MP3/WMA/AAC/WAVE/ MPEG4

Bluetooth

Version	Bluetooth 1.2 certified
Output power	+4 dBm Max. (Power class 2)



Note

Specifications and design are subject to possible modifications without notice due to improvements. ■

Register your product at

<http://www.pioneerelectronics.com>

in Canada **<http://www.pioneerelectronics.ca>**

See "Visit our website" page

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