

Upgrade Instructions and Operation Manual Addendum

2011 NAVIGATION UPGRADE SDHC CARD

CNSD-239FM

This software upgrade will result in changes to certain features and availability of information. While the changes are intended to improve the overall user experience for most users, Pioneer and its licensors disclaim any warranty or liability for damages in connection with such changes.

Indications of the navigation system may be different from the actual value.
Some of the features of the navigation system do not take in to consideration the type of vehicle it is installed into.

7-Zip

License for use and distribution

7-Zip Copyright (C) 1999-2007 Igor Pavlov.

Licenses for files are:

- 1) 7z.dll: GNU LGPL + unRAR restriction
- 2) All other files: GNU LGPL

The GNU LGPL + unRAR restriction means that you must follow both GNU LGPL rules and unRAR restriction rules.

Note:

You can use 7-Zip on any computer, including a computer in a commercial organization. You don't need to register or pay for 7-Zip.

GNU LGPL information

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

unRAR restriction

The decompression engine for RAR archives was developed using source code of unRAR program. All copyrights to original unRAR code are owned by Alexander Roshal.

The license for original unRAR code has the following restriction:

The unRAR sources cannot be used to re-create the RAR compression algorithm, which is proprietary. Distribution of modified unRAR sources in separate form or as a part of other software is permitted, provided that it is clearly stated in the documentation and source comments that the code may not be used to develop a RAR (WinRAR) compatible archiver.

GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.
59 Temple Place, Suite 330, Boston, MA 02111-1307 USA
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free

program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

GNU LESSER GENERAL PUBLIC LICENSE

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be

distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a “work that uses the Library”. Such a work, in isolation, is not a derivative

work of the Library, and therefore falls outside the scope of this License.

However, linking a “work that uses the Library” with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a “work that uses the library”. The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a “work that uses the Library” uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not.

Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6.

Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a “work that uses the Library” with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

- a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable “work that uses the Library”, as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)
- b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will oper-

ate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

- c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
- d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
- e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the “work that uses the Library” must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

- a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.
- b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms

and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and “any later version”, you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW, EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief idea of what it does.>
Copyright (C) <year> <name of author>

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library 'Frob' (a library for tweaking knobs) written by James Random Hacker,

<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

That's all there is to it!

7-Zip Source Notice

The software program used in this product contains 7-Zip library. 7-Zip contains the software granted permission for the usage under the terms of the GNU Lesser General Public License. A copy of appropriate source code is available at customer necessary expense for the distribution. Please contact our Customer Support Center to obtain a copy. For more information on the GNU Lesser General Public License, visit the GNU's website at <http://www.gnu.org>.

Portions of the software in this product are copyright 1996 – 2007 The FreeType Project (www.freetype.org). All rights reserved. Licensed under the Free-Type Project LICENSE, 2006-Jan-27, (<http://www.freetype.org/FTL.TXT>)

Thank you for buying this Pioneer product.

Please read through these operating instructions so you will know how to operate your model properly.



Important

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

01 Precaution

- Failure to operate **12**
- Visit our website **12**
- SD memory card **13**
- Models to be upgraded **13**
- Manual overview **13**
 - How to use this manual **13**
 - Conventions used in this manual **13**
 - Terms used in this manual **14**
- iPod compatibility **14**

02 License agreement

- PIONEER CNSD-239FM - for U.S.A. **15**
- PIONEER CNSD-239FM - for Canada **17**
- TERMS AND CONDITIONS FOR THE TELE
ATLAS DATA **19**
 - End User Licensing Terms **19**

03 About the database

- About the data for the map database **23**

04 Instructions for upgrading

- The navigation system upgrade process **24**
- Preparation for upgrade **24**
 - Checking the device number **24**
 - Getting the password for authentication **25**
- Upgrade procedures **25**
 - Upgrading the software program and the map database **25**

- Checking whether the upgrade was done properly **26**
- Updating the Bluetooth wireless technology software **26**

05 How to use the navigation menu screens

- Screen switching overview **28**
- What you can do on each menu **29**
- Shortcut Menu **29**
 - Selecting the shortcut **29**
 - Removing a shortcut **30**
- Operating menu screens (e.g. "Navigation Menu" screen) **30**
- Operating list screens (e.g. city list) **30**
- Operating the on-screen keyboard **31**

06 How to use the map

- How to read the map screen **32**
 - Audio information bar **33**
 - Enlarged map of the intersection **33**
 - Display during freeway driving **33**
 - Types of the road stored in the map database **34**
- Operating the map screen **34**
 - Changing the scale of the map **34**
 - Switching the map orientation **34**
 - Switching the map between 2D and 3D **35**
 - Checking the eco-friendly driving status **35**
 - Scrolling the map to the position you want to see **36**
- Viewing information about a specified location **36**

07 Eco-friendly driving functions

- Checking the eco-friendly driving status **37**
 - Reading the screen **37**
- Displaying Eco Drive Level guidance **38**
- Sudden start alert **38**

Changing the eco-function setting 38

08 Searching for and selecting a location

The basic flow of creating your route 40

Searching for a location by address 41

Setting up a route to your home 42

Searching for Points of Interest (POI) 43

- Searching for a POI directly from the name of the facilities 43
- Searching for a nearby POI 43
- Searching for POIs around the destination 44
- Searching for POIs around the city 44

Selecting destination from “Favorites” 45

Searching for POIs by using the data on the SD memory card 45

Selecting a location you searched for recently 45

Searching for a location by coordinates 46

Searching for a location by scrolling the map 47

09 After the location is decided

Setting a route to your destination 48

10 Checking and modifying the current route

Displaying the “Route info” screen 49

Modifying the route calculation conditions 49

- Items that users can operate 49

Checking the current itinerary 50

Editing waypoints 50

- Adding a waypoint 50
- Deleting a waypoint 51
- Sorting waypoints 51

Canceling the route guidance 52

11 Registering and editing locations

Storing favorite locations 53

- Registering a location by “Favorites” 53

- Registering a location by scroll mode 53

Editing registered locations 53

- Editing the favorite location in the list 53
- Editing your home 54
- Sorting the favorite locations in the list 54
- Deleting a favorite location from the list 55

Registering and editing your home 55

- Registering your home 55
- Editing your home 56

Deleting the destination history from the list 56

Exporting and importing favorite locations 57

- Exporting favorite locations 57
- Importing the “Favorites” items edited on AVIC FEEDS 57

12 Using hands-free phoning

Preparing communication devices 59

Displaying the phone menu 59

Registering your cellular phone 59

- Searching for nearby phones 60
- Pairing from your cellular phone 61
- Searching for a specified phone 62
- Deleting a registered phone 63

Connecting and disconnecting a registered cellular phone 63

- Connecting a registered cellular phone 63
- Disconnecting a cellular phone 64

Making a phone call 64

- Direct dialing 64
- Making a call home easily 64
- Calling a number in the “Contacts” 65

– Dialing from the history	65
– Dialing a favorite location	66
– Dialing a facility's phone number	66
– Dialing from the map	66
Receiving a phone call	66
– Answering an incoming call	66
– Rejecting an incoming call	67
Transferring the phone book	67
Clearing memory	68
Changing the phone settings	69
– Setting the phone volume	69
– Stopping Bluetooth wave transmission	69
– Answering a call automatically	69
– Setting the automatic rejection function	70
– Echo canceling and noise reduction	70
– Setting automatic connection	70
– Editing the device name	71
– Updating the Bluetooth wireless technology software	71
Notes for hands-free phoning	72
13 Fuel cost management	
Using the fuel consumption function	73
– Inputting the fuel consumption information for calculating the fuel cost	73
– Calculating the fuel consumption	73
– Exporting the data of fuel cost information	74
Exporting the data of "Gas Mileage" from "Export/Import Menu" screen	74
14 Using Applications	
Preparing in advance	76
– Switching to "PC Mode"	76
– Canceling "PC Mode"	76
Launching the application	76

15 Basic operations of the audio source	
Switching the audio source	79
Turning off the audio source	79
Audio screen switching overview	80
What you can do on each menu	81
Displaying the "Function Menu" screen	81
16 Using the radio (TUNER)	
Reading the screen	82
Using the touch panel keys	82
Operating by hardware buttons	82
Storing and recalling broadcast frequencies	83
Using the function menu	83
Storing the strongest broadcast frequencies	83
Tuning in strong signals	83
17 HD Radio™ reception	
Reading the screen	84
Using the touch panel keys	84
Operating by hardware buttons	85
Storing and recalling broadcast frequencies	85
Using the function menu	85
Storing the strongest broadcast frequencies	85
Tuning in strong signals	86
Switches the seek mode	86
Switching the reception mode	86
18 Playing audio CDs	
Reading the screen	87
Using the touch panel keys	87
Operating by hardware buttons	88
Selecting a track from the list	88
Setting a repeat play range	89
Playing tracks in random order	89
Scanning tracks of a CD	89
Playback and Pause	89

Using Sound Retriever **89**

19 Playing music files on ROM

Reading the screen **90**
 Using the touch panel keys **91**
 Operating by hardware buttons **91**
 Selecting a track from the list **92**
 Setting a repeat play range **92**
 Playing tracks in random order **92**
 Scanning folders and tracks **93**
 Playback and Pause **93**
 Using Sound Retriever **93**

20 Playing music files on USB

Reading the screen **94**
 Using the touch panel keys **95**
 Operating by hardware buttons **95**
 Selecting a file from the list **95**
 Setting a repeat play range **96**
 Playing files in random order **96**
 Scanning folders and files **96**
 Playback and Pause **97**
 Using Sound Retriever **97**

21 Using an iPod

Reading the screen **98**
 Using the touch panel keys **99**
 Operating by hardware buttons **99**
 Selecting a song from the list **99**
 Searching for applicable items
 alphabetically **100**
 Playing songs related to the currently playing
 song **100**
 Playing all songs in random order (shuffle
 all) **101**
 Operating the functions from your iPod **101**
 Using Sound Retriever **101**
 Using the function menu **102**
 Setting a repeat play range **102**
 Playing songs in random order (shuffle) **102**

Playback and Pause **103**
 Setting the audiobook play speed **103**

22 Using the XM tuner

Reading the screen **104**
 Using the touch panel keys **105**
 Operating by hardware buttons **105**
 Storing and recalling broadcast
 stations **105**
 Switching the XM channel select mode **105**

23 Using the SIRIUS tuner

Reading the screen **107**
 Using the touch panel keys **108**
 Operating by hardware buttons **108**
 Storing and recalling broadcast
 stations **108**
 Switching the SIRIUS channel select
 mode **109**
 Using the "Instant Replay" function **109**
 Using the function menu **110**
 Using the Game Alert function **110**
 – Selecting teams for Game Alert **110**
 – Switching the Game Alert on or
 off **110**
 – When a game involving one of your
 favorite teams is broadcast **110**
 Displaying Game Information **111**

24 Using the external unit (EXT1, EXT2)

Reading the screen **112**
 Using the touch panel keys **112**
 Operating by hardware buttons **112**
 Using the function menu **113**
 Operate the external unit by using
 "Function1" — "Function4" **113**
 Switches between automatic and manual
 function **113**

25 Using the AUX source

- Reading the screen **114**
- Selecting "AUX" as the source **114**

26 Customizing preferences

- Displaying the "Settings Menu" screen **115**
- Setting the volume for navigation system **115**

Customizing the regional settings **115**

- Selecting the language **115**
- Setting the time difference **116**
- Changing the unit between km and miles **116**
- Changing the virtual speed of the vehicle **116**
- Setting the keyboard layout **117**

Customizing the map screen settings **117**

- Displaying POI on the map **117**
- Switching the map between 2D and 3D **119**
- Displaying maneuvers **119**
- Changing the setting of navigation interruption screen **119**
- Setting the map color change between day and night **120**
- Changing the road color **120**
- Setting the auto-zoom display **120**
- Setting the "Favorites" icon display **120**
- Setting the current street name display **121**
- Displaying the fuel consumption information **121**

Setting the power-saving function **121**

Checking the version information **121**

Registering and editing your home **121**

Correcting the current location **122**

Checking the connections of leads **122**

Adjusting the response positions of the touch panel (touch panel calibration) **122**

Adjusting the screen brightness **123**

Recording your travel history **123**

Using the demonstration guidance **123**

Restoring the default setting **124**

Turning off the screen **124**

Displaying the "Initial Setting" screen **124**

Setting the illumination color **125**

Switching the auxiliary setting **125**

Setting the rear output and subwoofer controller **125**

Switching the sound muting/attenuation **126**

Displaying the "Audio Menu" screen **126**

Using balance adjustment **126**

Using the equalizer **127**

– Recalling equalizer curves **127**

– Customizing the equalizer curves **127**

Adjusting loudness **128**

Using subwoofer output **128**

Enhancing bass (Bass Booster) **129**

Using the high pass filter **129**

Adjusting source levels **129**

27 Other functions

Monitoring the battery status **131**

Automatic shutdown of the navigation system **131**

Replicating the settings **131**

Returning the navigation system to the default or factory settings **132**

– Setting items to be deleted **133**

Appendix

Troubleshooting **135**

Messages and how to react to them **139**

Messages for audio functions **139**

Display information **140**

– "Navigation Menu" screen **140**

– "Settings Menu" screen **141**

– "Phone Menu" screen **142**

- Read the entire manual before upgrading the program of your navigation system.
- This package is unique, and cannot be installed on more than one unit.
- Web-connected computer is required for online issuance of password.

Failure to operate

- Should the navigation system fail to operate properly, contact your dealer or nearest authorized Pioneer Service Station.
- Do not lose the supplied Media Number Card (MEDIA NUMBER CARD). If the Media Number Card is lost, reissue of the Media Number (MEDIA NUMBER) is not possible. Also you must submit the Media Number Card when repairs are needed. The card is necessary as proof of authenticity if service is required (including recovery).

After-sales service for Pioneer products

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

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

• U.S.A

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

• CANADA

Pioneer Electronics of Canada, Inc.
CUSTOMER SATISFACTION DEPARTMENT
340 Ferrier Street, Unit 2, Markham, Ontario
L3R 2Z5, Canada
1-877-283-5901
905-479-4411

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



Visit our website

Visit us at the following site:

<http://www.pioneerelectronics.com>

In Canada

<http://www.pioneerelectronics.ca>

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

Precaution

SD memory card

- ❑ Keep the SD memory card out of the reach of small children to prevent them from accidentally swallowing it.
- ❑ Do not store the SD memory card in high temperatures or direct sunlight.
- ❑ Do not subject the SD memory card to shock or impact.
- ❑ Do not allow the SD memory card to come into contact with liquids. Damage to the SD memory card and your products could result from contact with liquids.
- ❑ Be careful not to touch terminals on the SD memory card. Doing so may cause connection failures. If any terminals are dirty, wipe them with a clean dry cloth.



CLASS 4

- ❑ SDHC Logo is a trademark of SD-3C, LLC. ■

Models to be upgraded

This package can upgrade the software program and database of the following models: AVIC-U310BT ■

Manual overview

Procedures and information described in this manual are the upgraded and latest content. For both customers who upgrade for the first time, and who have upgraded your navigation system, refer to the procedures and information of this manual.

The operations and information other than those described in this manual are basically the same as those at the time you purchased the hardware.

For the following descriptions, refer to Operation Manual of the purchased hardware.

- Hardware description
- Explanation of other non-operation information

How to use this manual

Finding the operation procedure for what you want to do

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

Finding the operation procedure from a menu name

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

Conventions used in this manual

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

- Buttons on your navigation system are described in **ALL CAPITAL, BOLD** lettering: e.g.) **MODE** button, **SRC/OFF** button.
- Menu items, screen titles, and functional components are described in **bold** with double quotation marks " ": e.g.) "Navigation Menu" screen or "Audio Menu" screen
- Touch panel keys that are available on the screen are described in **bold** in brackets []: e.g.) **[Address]**, **[Settings]**.
- Extra information, alternatives and other notes are presented in the following format: e.g.)

- ❑ If the home location has not been stored yet, set the location first.
- Functions of other keys on the same screen are indicated with ■ at the beginning of the description:
e.g.)
 - Touch [OK].
- References are indicated like this:
e.g.)
 - ➡ For details, refer to *Displaying the "Route info" screen* on page 49.
- iPhone 4: iOS 4.3.1
- iPhone 3GS: iOS 4.3.1
- iPhone 3G: iOS 4.3.1
- iPhone: iOS 2.2
- ❑ In this manual, iPod and iPhone will be referred to as iPod.
- ❑ Operation methods may vary depending on the iPod models and the software version of iPod.
- ❑ Depending on the software version of the iPod, it may not be compatible with this equipment. ■

Terms used in this manual

"USB storage device"

The term for USB memory only is "USB storage device".

"SD memory card"

The SD memory card and SDHC memory card are collectively referred to as the "SD memory card". ■

iPod compatibility

The upgraded version of AVIC-U310BT using CNSD-239FM supports the following iPod models and iPod software versions. Others may not work correctly.

Made for

- iPod touch (4th generation): iOS 4.3.1
- iPod touch (3rd generation): iOS 4.1
- iPod touch (2nd generation): iOS 3.1.1
- iPod touch (1st generation): iOS 3.1.2
- iPod classic 120GB: Ver. 2.0.1
- iPod classic 160GB (2009): Ver. 2.0.3
- iPod classic 80GB: Ver. 1.1.2
- iPod classic 160GB (2007): Ver. 1.1.2
- iPod with video: Ver. 1.3
- iPod nano (6th generation): Ver. 1.1
- iPod nano (5th generation): Ver. 1.0.1
- iPod nano (4th generation): Ver. 1.0.4
- iPod nano (3rd generation): Ver. 1.1.3
- iPod nano (2nd generation): Ver. 1.1.3
- iPod nano (1st generation): Ver. 1.3.1

License agreement

PIONEER CNSD-239FM - for U.S.A.

THIS IS A LEGAL AGREEMENT BETWEEN YOU, AS THE END USER, AND PIONEER ELECTRONICS (USA) INC. ("PIONEER"). PLEASE READ THE TERMS AND CONDITIONS OF THIS AGREEMENT CAREFULLY BEFORE USING THE SOFTWARE INSTALLED ON THE PIONEER PRODUCTS. BY USING THE SOFTWARE INSTALLED ON THE PIONEER PRODUCTS, YOU AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT. THE SOFTWARE INCLUDES A DATABASE LICENSED BY THIRD PARTY SUPPLIER(S) ("SUPPLIERS"), AND YOUR USE OF THE DATABASE IS COVERED BY THE SUPPLIERS' SEPARATE TERMS, WHICH ARE ATTACHED TO THIS AGREEMENT (Refer to page 19). IF YOU DO NOT AGREE WITH ALL OF THESE TERMS, PLEASE RETURN THE PIONEER PRODUCTS (INCLUDING THE SOFTWARE, AND ANY WRITTEN MATERIALS) WITHIN FIVE (5) DAYS OF RECEIPT OF THE PRODUCTS, TO THE AUTHORIZED PIONEER DEALER FROM WHICH YOU PURCHASED THEM. USE OF THE SOFTWARE SHALL BE DEEMED TO BE YOUR CONSENT TO THE LICENSE AGREEMENT.

1 GRANT OF LICENSE

Pioneer grants to you a non-transferable, non exclusive license to use the software installed on the Pioneer products (the "Software") and the related documentation solely for your own personal use or for internal use by your business, only on such Pioneer products. You shall not copy, reverse engineer, translate, port, modify or make derivative works of the Software. You shall not loan, rent, disclose, publish, sell, assign, lease, sublicense, market or otherwise transfer the Software or use it in any manner not expressly authorized by this agreement. You shall not derive or attempt to derive the source code or structure of all or any portion of the Software by reverse engineering, disassembly, decompilation, or any

other means. You shall not use the Software to operate a service bureau or for any other use involving the processing of data for other persons or entities.

Pioneer and its licensor(s) shall retain all copyright, trade secret, patent and other proprietary ownership rights in the Software. The Software is copyrighted and may not be copied, even if modified or merged with other products. You shall not alter or remove any copyright notice or proprietary legend contained in or on the Software.

You may transfer all of your license rights in the Software, the related documentation and a copy of this License Agreement to another party, provided that the party reads and agrees to accept the terms and conditions of this License Agreement.

2 DISCLAIMER OF WARRANTY

The Software and related documentation are provided to you "AS IS". PIONEER AND ITS LICENSOR(S) (for the purpose of provisions 2 and 3, Pioneer and its licensor(s) shall be collectively referred to as "Pioneer") MAKES AND YOU RECEIVE NO WARRANTY FOR THE SOFTWARE, WHETHER EXPRESS OR IMPLIED, AND ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE FOR THE SOFTWARE ARE EXPRESSLY EXCLUDED. SOME STATES DO NOT ALLOW EXCLUSION OF IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. The Software is complex and may contain some nonconformities, defects or errors. Pioneer does not warrant that the Software will meet your needs or expectations, that operation of the Software will be error free or uninterrupted, or that all nonconformities can or will be corrected. Furthermore, Pioneer does not make any representations or warranties regarding the use or results of the use of the Software in terms of its accuracy, reliability or otherwise.

3 LIMITATION OF LIABILITY

IN NO EVENT SHALL PIONEER BE LIABLE FOR ANY DAMAGES, CLAIM OR LOSS INCURRED BY YOU (INCLUDING, WITHOUT LIMITATION, COMPENSATORY, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES, LOST PROFITS, LOST INCOME, LOST SALES OR BUSINESS, EXPENDITURES, INVESTMENTS, OR COMMITMENTS IN CONNECTION WITH ANY BUSINESS, LOSS OF ANY GOODWILL, OR DAMAGES) RESULTING FROM THE USE OF OR INABILITY TO USE THE SOFTWARE, EVEN IF PIONEER HAS BEEN INFORMED OF, KNEW OF, OR SHOULD HAVE KNOWN OF THE LIKELIHOOD OF SUCH DAMAGES. THIS LIMITATION APPLIES TO ANY AND ALL CAUSES OF ACTION INDIVIDUALLY OR IN THE AGGREGATE, INCLUDING WITHOUT LIMITATION BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE, STRICT LIABILITY, MISREPRESENTATION, AND OTHER TORTS. IF PIONEER'S WARRANTY DISCLAIMER OR LIMITATION OF LIABILITY SET FORTH IN THIS AGREEMENT SHALL OR FOR ANY REASON WHATSOEVER BE HELD UNENFORCEABLE OR INAPPLICABLE, YOU AGREE THAT PIONEER'S LIABILITY SHALL NOT EXCEED FIFTY PERCENT (50 %) OF THE PRICE PAID BY YOU FOR THE ENCLOSED PIONEER PRODUCT.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty disclaimer and limitation of liability shall not be applicable to the extent that they are prohibited by any applicable federal, state or local law which provides that such a disclaimer or limitation cannot be waived or preempted.

4 EXPORT LAW ASSURANCES

You agree and certify that neither the Software nor any other technical data received from Pioneer, nor the direct product thereof, will be exported outside the United States except as authorized and as permitted by the laws and

regulations of the United States. If the Software has been rightfully obtained by you outside of the United States, you agree that you will not re-export the Software nor any other technical data received from Pioneer, nor the direct product thereof, except as permitted by the laws and regulations of the United States and the laws and regulations of the jurisdiction in which you obtained the Software.

5 TERMINATION

This Agreement is effective until terminated. You may terminate it at any time by destroying the Software. The Agreement also will terminate if you do not comply with any terms or conditions of this Agreement. Upon such termination, you agree to destroy the Software.

6 U.S. GOVERNMENT END USERS

If the Software is being acquired by or on behalf of the United States government or any other entity seeking or applying rights similar to those customarily claimed by the United States government, the Data is licensed with "Limited Rights". Utilization of the Software is subject to the restrictions specified in the "Rights in Technical Data" clause at DFARS 252.227-7013, or the equivalent clause for non-defense agencies. Pioneer Electronics (USA) Inc., 1925 E. Dominguez Street, Long Beach, CA 90810.

7 MISCELLANEOUS

This is the entire Agreement between Pioneer and you regarding its subject matter. No change in this Agreement shall be effective unless agreed to in writing by Pioneer. Pioneer retailers do not have the authority to change this Agreement. This Agreement shall be governed by and construed in accordance with the internal laws of the State of California. If any provision of this Agreement is declared invalid or unenforceable, the remaining provisions of this Agreement shall remain in full force and effect. ■

License agreement

PIONEER CNSD-239FM - for Canada

THIS IS A LEGAL AGREEMENT BETWEEN YOU, AS THE END USER, AND PIONEER ELECTRONICS OF CANADA, INC. ("PIONEER"). PLEASE READ THE TERMS AND CONDITIONS OF THIS AGREEMENT CAREFULLY BEFORE USING THE SOFTWARE INSTALLED ON THE PIONEER PRODUCTS. BY USING THE SOFTWARE INSTALLED ON THE PIONEER PRODUCTS, YOU AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT. THE SOFTWARE INCLUDES A DATABASE LICENSED BY THIRD PARTY SUPPLIER (S) ("SUPPLIERS"), AND YOUR USE OF THE DATABASE IS COVERED BY THE SUPPLIERS' SEPARATE TERMS, WHICH ARE ATTACHED TO THIS AGREEMENT (Refer to page 19). IF YOU DO NOT AGREE WITH ALL OF THESE TERMS, PLEASE RETURN THE PIONEER PRODUCTS (INCLUDING THE SOFTWARE, AND ANY WRITTEN MATERIALS) WITHIN FIVE (5) DAYS OF RECEIPT OF THE PRODUCTS, TO THE AUTHORIZED PIONEER DEALER FROM WHICH YOU PURCHASED THEM. USE OF THE SOFTWARE SHALL BE DEEMED TO BE YOUR CONSENT TO THE LICENSE AGREEMENT.

1 GRANT OF LICENSE

Pioneer grants to you a non-transferable, non exclusive license to use the software installed on the Pioneer products (the "Software") and the related documentation solely for your own personal use or for internal use by your business, only on such Pioneer products. You shall not copy, reverse engineer, translate, port, modify or make derivative works of the Software. You shall not loan, rent, disclose, publish, sell, assign, lease, sublicense, market or otherwise transfer the Software or use it in any manner not expressly authorized by this agreement. You shall not derive, or attempt to derive, the source code or structure of all or any portion of the Software by reverse engineering, disassembly, decompilation, or any

other means. You shall not use the Software to operate a service bureau or for any other use involving the processing of data for other persons or entities.

Pioneer and its licensor(s) shall retain all copyright, trade secret, patent and other proprietary ownership rights in the Software. The Software is copyrighted and may not be copied, even if modified or merged with other products. You shall not alter or remove any copyright notice or proprietary legend contained in or on the Software.

You may transfer all of your license rights in the Software, the related documentation and a copy of this License Agreement to another party, provided that the party reads and agrees to accept the terms and conditions of this License Agreement.

2 DISCLAIMER OF WARRANTY

The Software and related documentation are provided to you "AS IS". PIONEER AND ITS LICENSOR(S) (for the purpose of provisions 2 and 3, Pioneer and its licensor(s) shall be collectively referred to as "Pioneer") MAKES AND YOU RECEIVE NO WARRANTY FOR THE SOFTWARE, WHETHER EXPRESS OR IMPLIED, AND ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE FOR THE SOFTWARE ARE EXPRESSLY EXCLUDED. SOME STATES DO NOT ALLOW EXCLUSION OF IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. The Software is complex and may contain some nonconformities, defects or errors. Pioneer does not warrant that the Software will meet your needs or expectations, that operation of the Software will be error free or uninterrupted, or that all nonconformities can or will be corrected. Furthermore, Pioneer does not make any representations or warranties regarding the use or results of the use of the Software in terms of its accuracy, reliability or otherwise.

3 LIMITATION OF LIABILITY

IN NO EVENT SHALL PIONEER BE LIABLE FOR ANY DAMAGES, CLAIM OR LOSS INCURRED BY YOU (INCLUDING, WITHOUT LIMITATION, COMPENSATORY, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES, LOST PROFITS, LOST SALES OR BUSINESS, EXPENDITURES, INVESTMENTS, OR COMMITMENTS IN CONNECTION WITH ANY BUSINESS, LOSS OF ANY GOODWILL, OR DAMAGES) RESULTING FROM THE USE OF OR INABILITY TO USE THE SOFTWARE, EVEN IF PIONEER HAS BEEN INFORMED OF, KNEW OF, OR SHOULD HAVE KNOWN OF THE LIKELIHOOD OF SUCH DAMAGES. THIS LIMITATION APPLIES TO ALL CAUSES OF ACTION IN THE AGGREGATE, INCLUDING WITHOUT LIMITATION BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE, STRICT LIABILITY, MISREPRESENTATION, AND OTHER TORTS. IF PIONEER'S WARRANTY DISCLAIMER OR LIMITATION OF LIABILITY SET FORTH IN THIS AGREEMENT SHALL OR FOR ANY REASON WHATSOEVER BE HELD UNENFORCEABLE OR INAPPLICABLE, YOU AGREE THAT PIONEER'S LIABILITY SHALL NOT EXCEED FIFTY PERCENT (50%) OF THE PRICE PAID BY YOU FOR THE ENCLOSED PIONEER PRODUCT.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty disclaimer and limitation of liability shall not be applicable to the extent that they are prohibited by any applicable federal, state or local law which provides that such a disclaimer or limitation cannot be waived or preempted.

4 EXPORT LAW ASSURANCES

You agree and certify that neither the Software nor any other technical data received from Pioneer, nor the direct product thereof, will be exported outside Canada except as authorized and as permitted by the laws and regulations of Canada. If the Software has been rightfully

obtained by you outside of Canada, you agree that you will not re-export the Software nor any other technical data received from Pioneer, nor the direct product thereof, except as permitted by the laws and regulations of Canada and the laws and regulations of the jurisdiction in which you obtained the Software.

5 TERMINATION

This Agreement is effective until terminated. You may terminate it at any time by destroying the Software. The Agreement also will terminate if you do not comply with any terms or conditions of this Agreement. Upon such termination, you agree to destroy the Software.

6 MISCELLANEOUS

This is the entire Agreement between Pioneer and you regarding its subject matter. No change in this Agreement shall be effective unless agreed to in writing by Pioneer. Pioneer retailers do not have the authority to change this Agreement. This Agreement shall be governed by and construed in accordance with the internal laws of the Province of Ontario and the federal laws of Canada applicable therein. If any provision of this Agreement is declared invalid or unenforceable, the remaining provisions of this Agreement shall remain in full force and effect. ■

License agreement

TERMS AND CONDITIONS FOR THE TELE ATLAS DATA

End User Licensing Terms

THIS IS A LEGAL AGREEMENT (THE "AGREEMENT") BETWEEN YOU, THE END USER, AND PIONEER and its licensors of Data product (sometimes collectively "Licensors"). BY USING YOUR COPY OF THE LICENSED DATA, YOU AGREE TO THE TERMS AND CONDITIONS OF THIS AGREEMENT.

1 Grant of License.

Licensors grant you a non-transferable, nonexclusive license to use the map data and business points of interest information (the "POIs") owned by Tele Atlas, (together, the "Data") contained on these discs, solely for personal, non-commercial use and not to operate a service bureau or for any other use involving the processing of data of other persons or entities. You may not copy, reproduce, modify, make derivative works, derive the structure of or reverse engineer the Data. The Data is restricted for use with the PIONEER Product(s). The Data contains confidential and proprietary information and materials, and may contain trade secrets, so you agree to hold the Data in confidence and in trust and not to disclose the Data or any portions in any form, including by renting, leasing, publishing, leasing, sublicensing or transferring the Data to any third party. You are explicitly prohibited from downloading the digital maps and programmes contained in the Data or from transferring these to another data carrier or computer. You are prohibited from removing or obscuring any copyright, trademark notice or restricted legend.

2 Ownership.

The Data is copyrighted by Tele Atlas and its Licensors and they retain all ownership rights in the Data. You agree not to alter, remove, obliterate, or obscure any copyright notice or proprietary legend contained in or on the Data.

3 Limitation of Liability.

TELE ATLAS, PIONEER AND THEIR SUPPLIERS SHALL NOT BE LIABLE TO ANY END USERS FOR ANY INCIDENTAL, CONSEQUENTIAL, SPECIAL, INDIRECT OR EXEMPLARY DAMAGES ARISING OUT OF THIS AGREEMENT, INCLUDING LOST PROFITS OR COSTS OF COVER, LOSS OF USE OR BUSINESS INTERRUPTION OR THE LIKE, REGARDLESS OF WHETHER THE PARTY WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, TELE ATLAS AND PIONEER AND THEIR SUPPLIERS SHALL HAVE NO MONETARY LIABILITY TO ANY END USERS FOR ANY CAUSE (REGARDLESS OF THE FORM OF ACTION) UNDER OR RELATING TO THIS AGREEMENT.

4 Warranty Disclaimer.

THE DATA IS PROVIDED ON AN "AS IS" AND "WITH ALL FAULTS BASIS" AND TELE ATLAS, PIONEER, ITS LICENSORS, AND ITS LICENSED DISTRIBUTORS AND SUPPLIERS (COLLECTIVELY, "SUPPLIERS") EXPRESSLY DISCLAIM ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY, EFFECTIVENESS, COMPLETENESS, ACCURACY, TITLE AND FITNESS FOR A PARTICULAR PURPOSE. TELE ATLAS, PIONEER, ITS LICENSORS AND SUPPLIERS DO NOT WARRANT THAT THE DATA WILL MEET YOUR REQUIREMENTS OR THAT THE OPERATION OF THE DATA WILL BE UNINTERRUPTED OR ERROR FREE. NO ORAL OR WRITTEN ADVICE GIVEN BY TELE ATLAS, PIONEER, ITS LICENSORS, SUPPLIERS OR ANY OF THEIR RESPECTIVE EMPLOYEES CREATES A WARRANTY OR IN ANY WAY INCREASES TELE ATLAS', PIONEER'S, ITS LICENSORS' OR SUPPLIERS' LIABILITY, AND YOU MAY NOT RELY ON ANY SUCH INFORMATION OR ADVICE. THIS DISCLAIMER IS AN ESSENTIAL CONDITION OF THIS AGREEMENT AND YOU ACCEPT THE DATA ON THIS BASIS.

5 Termination.

This Agreement will terminate immediately and automatically, without notice, if you breach any term of this Agreement. You agree that in the event of termination of the Agreement, you shall return the Data (including all documentation and all copies) to PIONEER and its suppliers.

6 Indemnity.

You agree to indemnify, defend and hold PIONEER, its Licensors, and its suppliers (including their respective licensors, suppliers, assignees, subsidiaries, affiliated companies, and the respective officers, directors, employees, shareholders, agents and representatives) free and harmless from and against any liability, loss, injury (including injuries resulting in death), demand, action, cost, expense, or claim of any kind or character, including but not limited to attorney's fees, arising out of or in connection with any breach by you of any term of this Agreement.

7 U.S. GOVERNMENT RIGHTS.

If End User is an agency, department, or other entity of the United States Government, or funded in whole or in part by the United States Government, then use, duplication, reproduction, release, modification, disclosure or transfer of this commercial product and accompanying documentation, is restricted in accordance with the LIMITED or RESTRICTED rights as described in any applicable DFARS or FAR. In case of conflict between any of the FAR and/or DFARS that may apply to the Licensed Tele Atlas Product, the construction that provides greater limitations on the Government's rights shall control. Contractor/manufacturer is Tele Atlas North America, Inc., 11 Lafayette Street, Lebanon, NH 03766-1445. Phone: 603.643. 0330. The Licensed Tele Atlas Products are © 2006-2011 by Tele Atlas. ALL RIGHTS RESERVED. For purpose of any public disclosure provision under any federal, state or local law, it is agreed that the Licensed Tele Atlas Products are a trade secret and a

proprietary commercial product and not subject to disclosure.

8 Additional provisions for Tele Atlas® Premium Points of Interest (the "POIs"). With respect to the POI Licensed Tele Atlas Products:

End User specifically agrees that End User shall not:

- (a) except as otherwise specifically set forth herein, license or otherwise provide the POI Licensed Tele Atlas Products to any third party for the purposes of resale, sublicensing, redistribution or for the purpose of compiling, enhancing, verifying, supplementing, adding to or deleting from any mailing list, geographic or trade directories, business directories, classified directories, classified advertising which is sold, rented, published, furnished or in any manner provided to a third party;
- (b) make the POI Licensed Tele Atlas Products available in an on-line environment unless properly secured and/or encrypted to prevent unauthorized access to the POI Licensed Tele Atlas Products; and
- (c) use the POI Licensed Tele Atlas Products, either in whole or in part, as a factor in (i) establishing an individual's eligibility for credit or insurance; (ii) connection with underwriting individual insurance; (iii) evaluating an individual for employment or promotions, reassignment or retention as an employee; (iv) in connection with a determination of an individual's eligibility for a license or other benefit granted by a governmental authority; or (v) for soliciting survivors of deceased persons.
- (d) create mailing or telemarketing lists unless authorized in this Agreement.
- (e) End User will house the POI Licensed Tele Atlas Products on the Internet behind firewalls and will implement a system of controls that will (i) protect the integrity of the POI Licensed Tele Atlas Products; (ii) control access to the POI Licensed Tele Atlas Products and (iii) prevent unauthorized usage or copying of the POI Licensed Tele Atlas Products.

License agreement

(f) End User shall display the POI Licensed Tele Atlas Product copyright notice at all times in conjunction with the Tele Atlas copyright notice. As of the Effective Date of this Agreement, the copyright notice for the POI Licensed Tele Atlas Product is:



9 Additional provisions for Tele Atlas® Brand Icon Licensed Tele Atlas Product (the "Brand Icon Licensed Tele Atlas Product"):

- a End User's use of the Brand Icon Licensed Tele Atlas Product and any portion thereof, is limited to use solely for the purpose of enhancing the value and/or use of the spatial vector data furnished or made by Tele Atlas. Notwithstanding anything to the contrary herein, or in any attachment or exhibit hereto, in no event shall End User use the Brand Icon Licensed Tele Atlas Product or any portion thereof in connection with or in conjunction with spatial street vector data furnished or made by a party other than Tele Atlas. End User may only use the icons, brand names, logos, trademarks or other features within (and not separate from) the map data. In addition, End User shall not modify or alter the color, shape, size, and orientation of the Brand Icon Licensed Tele Atlas Product as provided to End User without Tele Atlas's prior written approval.
- b End User agrees that the use of Brand Icon Licensed Tele Atlas Product subject to the terms and conditions set forth in this Agreement and that there may be additional third party terms, conditions and restrictions to which the use of the Brand Icon Licensed Tele Atlas Product will be subject provided to the End User from time to time in the release notes applicable to the Value Added Product.

10 Copyright Notices.

End User shall allow the display of the then current copyright notice for the Licensed Tele Atlas Products on the initial splash screen, in the code, on the storage medium, on the packaging, in the "Help/About" section, in the operator's manual, and in any displayed or printed map image, for each Value Added Product that is based upon:

- 1 *Tele Atlas® MultiNet®* North America: As of the Effective Date, the copyright notice is: "© 2006 – 2011 Tele Atlas. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned or licensed to Tele Atlas. Tele Atlas is an authorized distributor of selected Statistics Canada computer files under Agreement number 6776. The product includes information copied with permission from Canadian authorities, including © Canada Post Corporation, Geo-Base®, and Department of Natural Resources Canada, All rights reserved. The product is sourced in part from Geography Division, Statistics Canada, 2008 Road Network File (RNF), 92-500-XWE/XWF. The incorporation of data sources from Statistics Canada within this product shall not be construed as constituting an endorsement by Statistics Canada of such product. The use of this material is subject to the terms of a License Agreement. You will be held liable for any unauthorized copying or disclosure of this material."

11 Miscellaneous.

This is the exclusive and complete Agreement between the Licensors and you regarding its subject matter. Nothing in this Agreement shall create a joint venture, partnership or principal-agent relationship between the Licensors and you. The internal laws of the State of California shall govern this Agreement and you consent to the jurisdiction of California.

Sections 2, 5 and 6 - 10 shall survive the expiration or termination of this Agreement. This Agreement may be amended, altered, or modified only by PIONEER. You may not assign any part of this Agreement without PIONEER's prior written consent. You acknowledge and understand that the Data may be subject to restrictions on exportation and agree to comply with any applicable export laws. In the event that any provision or part of a provision of this Agreement is determined to be invalid, illegal, or unenforceable, such provision or part thereof shall be stricken from this Agreement and the remainder of this Agreement shall be valid, legal, and enforceable to the maximum extent possible. Any notice under this Agreement shall be delivered by courier to PIONEER, Attention Legal Department, Pioneer Electronics (USA) Inc., 1925 E. Dominguez Street, Long Beach, CA 90810. ■

About the data for the map database

- Modifications related to roads, streets/highways, terrain, construction and other things before/during the development period may not be reflected in this database. Inevitably, those modifications after that period are not reflected in this database.
- Regardless of existing and newly-built things, the data may be different from the actual condition.
- For details about the map coverage of this navigation system, refer to the information on our website.
- It is strictly prohibited to reproduce and use any part or the whole of this map in any form without permission from the copyright owner.
- If the local traffic regulations or conditions deviate from this data, follow the local traffic regulations (such as signs, indications, etc.) and conditions (such as construction, weather, etc.).
- The traffic regulation data used in the map database applies only to standard sized passenger vehicles. Note that regulations for larger vehicles, motorbikes, and other non-standard vehicles are not included in the database.
- As for Map Version, Tele Atlas. Rel. 09/2010.
- © 2011 INCREMENT P CORP. ALL RIGHTS RESERVED. ■

The navigation system upgrade process

- 1

Check the device number of your navigation system.
➤ For details of the operation, refer to *Checking the device number* on this page.

↓
- 2

Get the password for authentication.
➤ For details, refer to *Getting the password for authentication* on the next page.

↓
- 3

Upgrade the software program of your navigation system.
➤ For details of the operation, refer to *Upgrading the software program and the map database* on the next page.

↓
- 4

Check whether the upgrade was done properly.
➤ For details of the operation, refer to *Checking whether the upgrade was done properly* on page 26.

↓
- 5

Update the Bluetooth firmware.
➤ For details of the operation, refer to *Updating the Bluetooth wireless technology software* on page 26.



Preparation for upgrade

Checking the device number

For customers upgrading the hardware for the first time

First, check your device number (DEVICE NUMBER, displayed such as Device # or Device Number) of your navigation system for later procedures. To display the device number, do the following.

1 Touch [Menu] on the map screen.
The “Navigation Menu” screen appears.

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

3 Touch [Service Info].
The “Service Information Screen” screen appears.

4 Write down your device number (Device Number) onto the supplied Media Number Card (MEDIA NUMBER CARD) to avoid mistakes.

- ❑ Also write down “Version” information which would be used to confirm completion of the update.

For customers who have previously upgraded the hardware

First, check your device number (DEVICE NUMBER, displayed such as Device # or Device Number) of your navigation system for later procedures. To display the device number, do the following.

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

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

3 Touch [Service Info].
The “Service Information Screen” screen appears.

Instructions for upgrading

4 Write down your device number (Device Number) onto the supplied Media Number Card (MEDIA NUMBER CARD) to avoid mistakes.

- Also write down "**Version**" information which would be used to confirm completion of the update.

Getting the password for authentication

For upgrade, a unique password issued online is necessary. Access the website with your PC and get your password.

The following information is required.

- Media Number (MEDIA NUMBER) printed on supplied Media Number Card (MEDIA NUMBER CARD)
 - Device Number (DEVICE NUMBER) of your navigation system
- If you don't have the web-connected computer for the online issuance of password, please contact your Authorized Pioneer Electronics retailer or call the companies listed at "*After-sales service for Pioneer products* on page 12".

1 Access on the following website to issue your password.

<http://www.pioneernavigationupdate.com>

In Canada:

<http://www.pioneernavigationupdate.ca>

For issuing the password, follow the instruction on the website.

2 Record the password that you received.

You need to input this password accurately.

Write down your password to avoid mistakes. □

Upgrade procedures

NEVER stop the engine of your vehicle or turn off the power supply to the navigation system until the installation is completed. Turning the power off during upgrade process causes a malfunction or failure of the navigation system.

Upgrading the software program and the map database

This section describes the upgrade procedures for your navigation system.

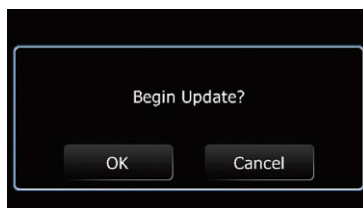
- The upgrade takes approximately 20 minutes in total.

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

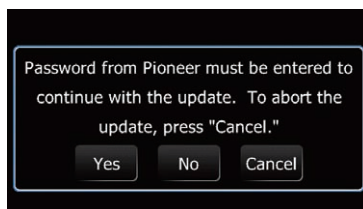
2 Insert the upgrade SD memory card into the SD card slot.

The message confirming whether or not to start the update will appear.

3 Touch [OK].



4 Touch [Yes].



After a short pause, the keyboard for entering the password will appear.

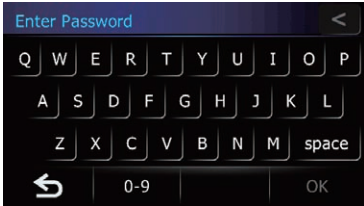
- Touch [No].

Shows the device number (Device #) of your navigation system.

- Touch [Cancel].

Cancels the update.

5 Enter the password for authentication that you obtained, then touch [OK].

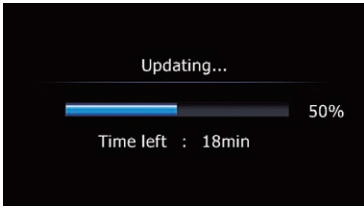


A message confirming whether to restart the navigation system appears.

6 Touch [OK].

The navigation system restarts and then the installation begins.

7 Wait until the upgrade process is complete.



After the installation is complete, the navigation system restarts.

Checking whether the upgrade was done properly

Display “Service Information Screen” screen to compare the current version number with the previous one.

1 Touch [Home] on the map screen.

The “Top Menu” screen appears.

- ➡ For details of the operations, refer to *Screen switching overview* on page 28.

2 Touch [Settings].

The “Settings Menu” screen appears.

3 Touch [Service Info].

4 Check the version information.

Updating the Bluetooth wireless technology software

Access the Pioneer website to check your phone's compatibility. If your phone is on the list and you wish to update, manually update the Bluetooth firmware after the automatic upgrade is finished.

<http://www.pioneerelectronics.com>

In Canada

<http://www.pioneerelectronics.ca>

- ❑ Registered phones that are listed on the “Connection List” screen are cleared by the software update.

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

2 Touch [Home] on the map screen.

The “Top Menu” screen appears.

3 Touch [Phone].

The “Phone Menu” screen appears.

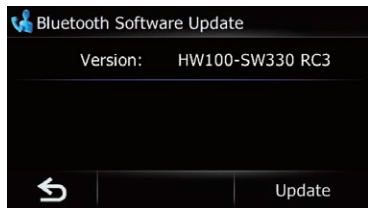
4 Touch [Setting].

The “Bluetooth Settings” screen appears.

5 Touch [Bluetooth Software Update].

The current version is displayed.

6 Touch [Update].



A message confirming whether to start updating the software appears.

7 Touch [Yes].

Update starts.

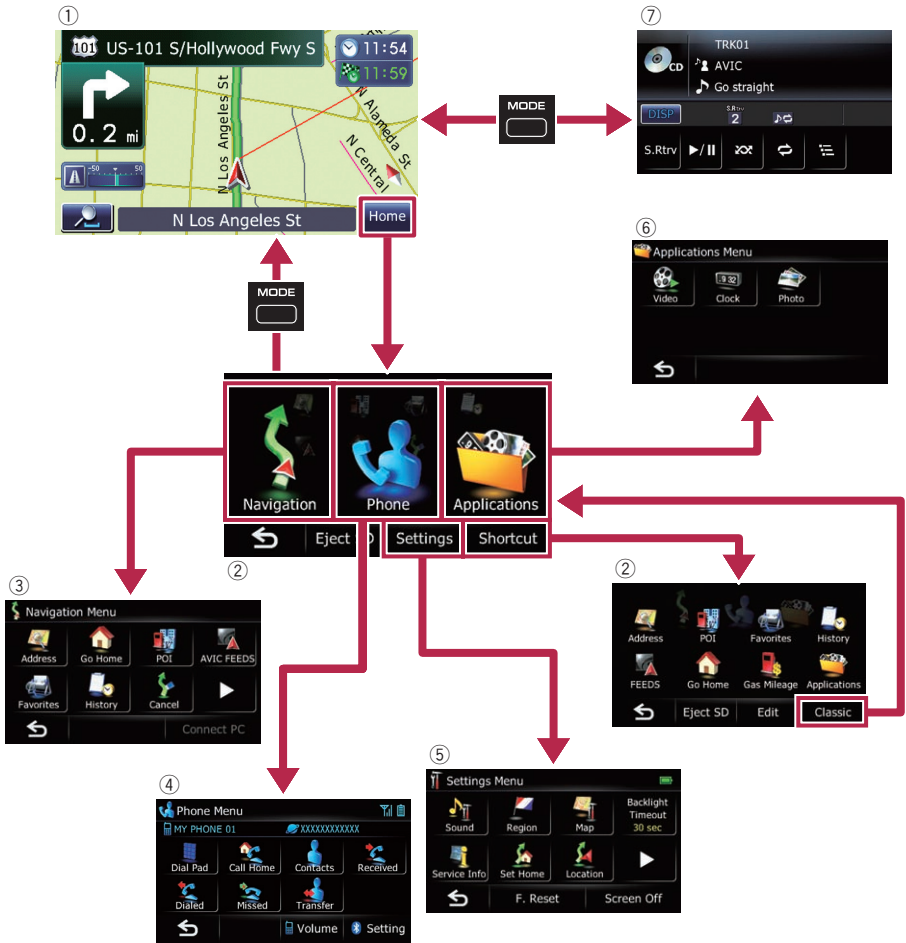
8 Wait until the upgrade process is complete.

A message will appear after the update is complete.

9 Touch [OK].

Update is completed. ❑

Screen switching overview



How to use the navigation menu screens

What you can do on each menu

① Map screen

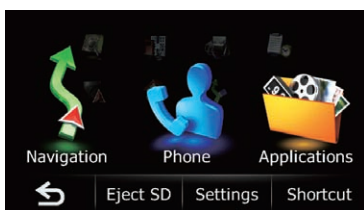
Press the **MODE** button to display the navigation map screen.

② Top Menu

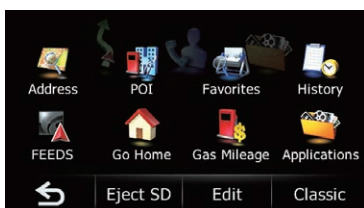
Touch **[Home]** on the map screen to display the “**Top Menu**” screen.

This is the starting menu to access the desired screens and operate the various functions.

There are two types of the “**Top Menu**” screen.



Classic Menu



Shortcut Menu

□ In this manual, Classic Menu will be referred to as “**Top Menu**”.

③ “Navigation Menu” screen

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

Other features include useful functions to support your navigation.

④ “Phone Menu” screen

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

⑤ “Settings Menu” screen

You can access the screen to customize settings.

⑥ “Applications Menu” screen

You can launch applications downloaded to an SD memory card via the utility program AVIC FEEDS.

⑦ Audio operation screen

This is the screen that normally appears when you play the audio source. □

Shortcut Menu

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

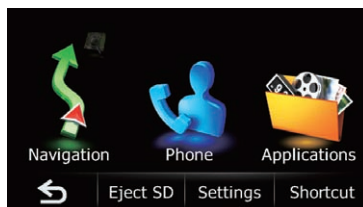
Selecting the shortcut

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

1 Touch **[Home]** on the map screen.

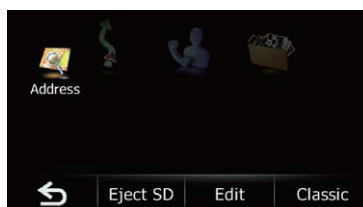
The “**Top Menu**” screen appears.

2 Touch **[Shortcut]**.

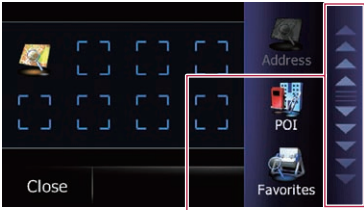


□ When you use the navigation system for the first time or no items are set on shortcut, a message will appear. Touch **[Yes]** to start the shortcut selection.

3 Touch **[Edit]**.



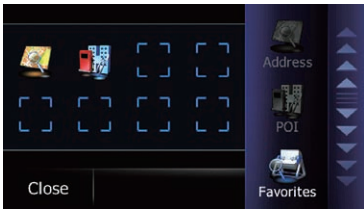
4 Touch the tab on the right edge or scroll the bar to display the icon that you want to set to shortcut.



Scroll bar

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

6 Move the icon to the left side of the screen, and then release it.
The selected item is added to shortcut.

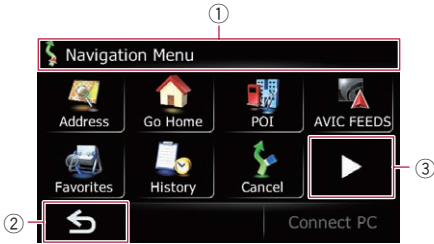


7 To finish the selection, touch [Close].

Removing a shortcut

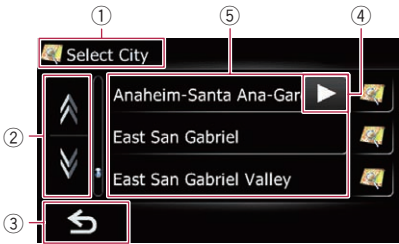
- 1 Touch and hold the icon of the shortcut you want to remove.
- 2 Move the icon to the right side of the screen, and then release it.
- 3 To finish the selection, touch [Close].

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



- 1 Screen title
- 2 The previous screen returns.
- 3 Shows the next or previous page.

Operating list screens (e.g. city list)



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

How to use the navigation menu screens

Operating the on-screen keyboard



① Text box

Displays the characters that are entered. If there is no text in the box, an informative guide with text appears.

② Keyboard

Touch the keys to enter the characters.

③

The previous screen returns.

④ 0-9, Sym., Others

You can enter other characters of alphabet. You can also enter text with marks such as [&] or numbers. Touch to toggle the selection.

☐ Even if you use any of "Å", "Ä", "Å", "Æ", the displayed result is the same.

⑤ OK

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

⑥

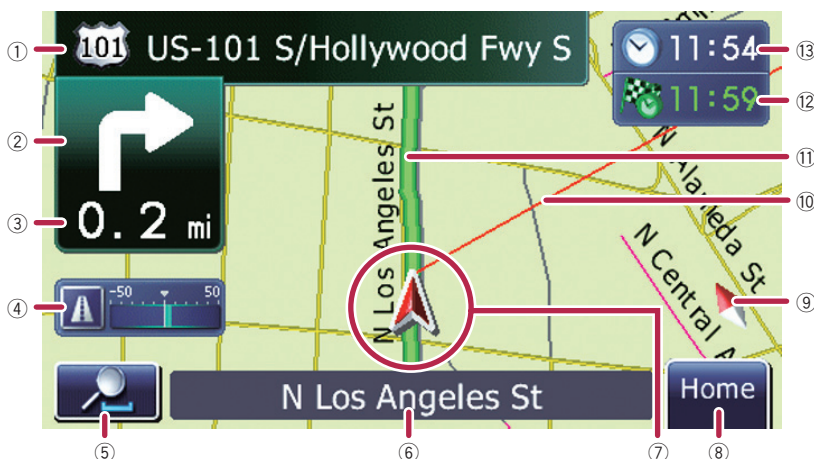
Deletes the input text one letter at a time, beginning at the end of the text. Continuing to touch the key deletes all of the text.

- ☐ You can select the type of keyboard to be used for inputting characters.
 - For details, refer to *Setting the keyboard layout* on page 117. ☐

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

How to read the map screen

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



❑ Information with an asterisk (*) appears only when the route is set.

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

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

Touching this item enables you to hear the next guidance again.

② **Next direction of travel***

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

③ **Distance to the guidance point***

Shows the distance to the next guidance point.

④ **Eco-Meter**

Displays a graph comparing the past average fuel mileage and the average fuel mileage since the navigation system was last started. Touching this item displays the "Eco Graph" screen.

➔ For details, refer to *Checking the eco-friendly driving status* on page 37.

⑤ **Map control**

Touching  displays touch panel keys for changing the map scale and the map orientation.

⑥ **Street name (or city name) that your vehicle is traveling along**

➔ For details, refer to *Setting the current street name display* on page 121.

⑦ **Current position**

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

❑ The apex of the triangular mark is the proper current position of the vehicle.

⑧ **Home key**

Touch [Home] on the map screen to display the "Top Menu" screen.

➔ For details of the operations, refer to *Screen switching overview* on page 28.

⑨ **Map orientation indicator**

• When "North up" is selected, **N** is displayed.

How to use the map

- When “Heading up” is selected,  is displayed.

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

⑩ Direction line*

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

⑪ Current route*

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

⑫ Multi-Info window

Each touch of Multi-Info window changes the display information as follows.

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

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

- Travel time to your destination or waypoint***

⑬ Current time

Meaning of guidance flags



Destination

The checkered flag indicates your destination.



Waypoint

The blue flags indicate your waypoints.

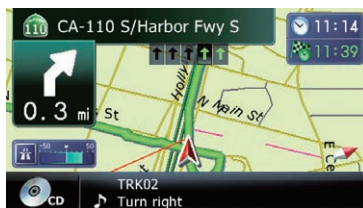


Guidance point

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

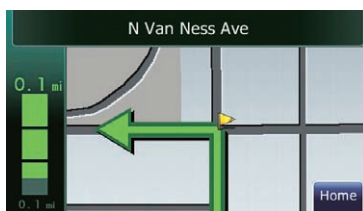
Audio information bar

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



Enlarged map of the intersection

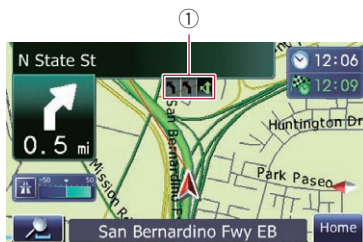
When “Close Up View” in the “Map” screen is “On”, an enlarged map of the intersection appears.



- ➡ For details, refer to *Setting the auto-zoom display* on page 120.

Display during freeway driving

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



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



- ① Lane information
- ② Freeway exit information

Displays the freeway exit.

- ③ Freeway signs

These show the road number and give directional information.

- ☐ If the data for these items is not contained in the built-in memory, the information is not available even if there are the signs on the actual road.

Types of the road stored in the map database

Roads included in the route guidance

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

Roads without turn-by-turn instructions

Routable roads (the route displayed and highlighted in violet) have only basic data and can only be used to plot a navigable route. Pioneer Navigation will only display a navigable route on the map (only the arrival guidance for the destination or a waypoint is available). Please review and obey all local traffic rules along the highlighted route for your safety. No turn-by-turn directions will be displayed on these roads.

Non routable roads (pink color road)

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

Operating the map screen

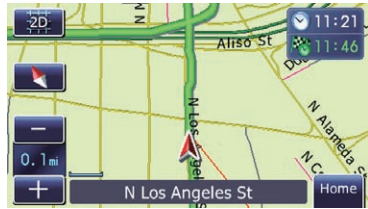
Changing the scale of the map

You can change the map scale between 25 yard and 1 000 miles (25 meters and 2 000 kilometers).

- 1 Display the map screen.

- 2 Touch  on the map screen.

 and  with the map scale appear.



- 3 Touch  or  to change the map scale.

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

Switching the map orientation

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

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

How to use the map

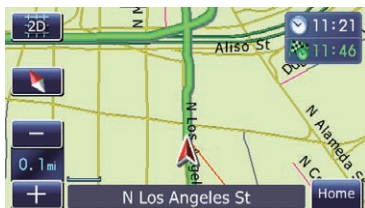
- ❑ The map orientation is fixed at "Heading up" when the 3D map screen is displayed.

1 Display the map screen.

2 Touch on the map screen.

 or  appears.

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



3 Touch or to switch the vehicle's direction.

Each time you touch the key changes the setting.

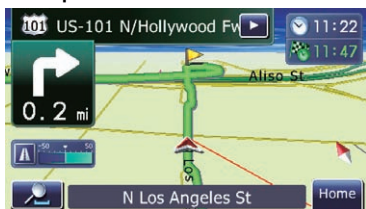
- ❑ If you do not operate the function for a few seconds, the initial map screen automatically returns.

Switching the map between 2D and 3D

2D map screen



3D map screen

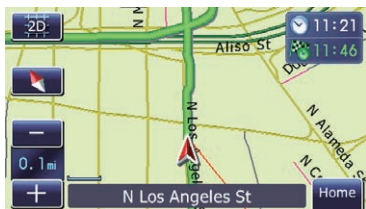


1 Display the map screen.

2 Touch on the map screen.

 or  appears.

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



3 Touch or .

Each time you touch the key changes the setting.

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

Checking the eco-friendly driving status

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

1 Display the map screen.

2 Touch on the map screen.

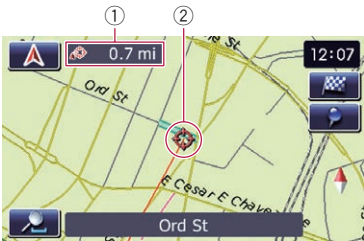
The "Eco Graph" screen appears.



- ❑ Touch  or press the **MODE** button to move from the “**Eco Graph**” screen to the map screen.
- ➡ For details, refer to Chapter 7.

Scrolling the map to the position you want to see

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



- ① Distance from the current position
- ② Cursor

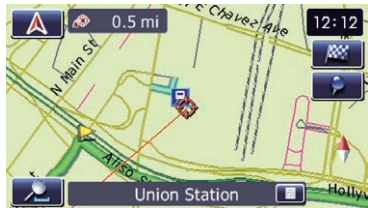
Positioning the cursor to the desired location results displaying in a brief informational overview about the location at the bottom of screen, with the street name and other information for this location. (The information shown varies depending on the position.)

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

Viewing information about a specified location

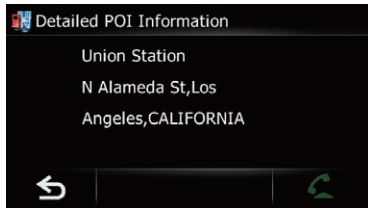
An icon appears at registered places (home location, specific places, **Favorites** entries) and places where there is a POI icon. Place the scroll cursor over the icon to view detailed information.

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



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

- 3 Touch the item that you want to check the detailed information.
Information for a specified location appears.



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

- ➡ For details, refer to *Setting the “**Favorites**” icon display* on page 120.
- ➡ For details, refer to *Displaying POI on the map* on page 117.
- ❑ Touching  enables you to call the position if a telephone number is available. (Pairing with cellular phone featuring Bluetooth wireless technology is required.)
➡ For details, refer to *Dialing from the map* on page 66. .

Eco-friendly driving functions

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

This chapter describes this function.

- The fuel mileage calculated is based on a theoretical value determined from vehicle speed and position information from the navigation system. The fuel mileage displayed is only a reference value, and does not guarantee the mileage displayed can be obtained.
- The eco-friendly driving functions are an estimate of the real time fuel consumption to average fuel consumption ratio and is not an actual value.
- The eco-friendly driving functions and calculations take into consideration the location of the GPS position and speed of the vehicle in determining a value.

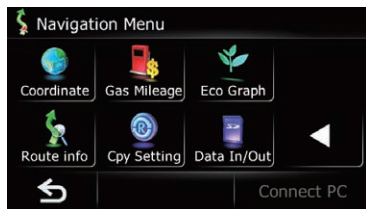
Checking the eco-friendly driving status

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

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

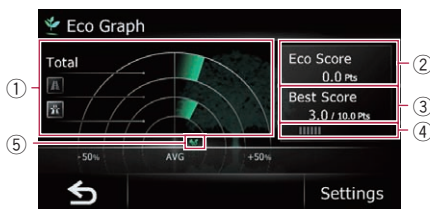
- For details of the operations, refer to *Screen switching overview* on page 28.

2 Touch [Eco Graph].



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

Reading the screen



① Average fuel mileage comparison graph

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

There are three different graph bars.

• Total

A comparison of the past average fuel mileage and the average fuel mileage of the current drive.

• : Ordinary Road

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

• : Freeway

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

② Eco Score

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

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

③ Best Score

Displays the best score to date.

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

④ Eco-gauge

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

The "Eco Score" is updated every 5 minutes.

- ❑ This is not displayed when "Eco Score" is set to "Off" or when no route is set.

5 Animal icons

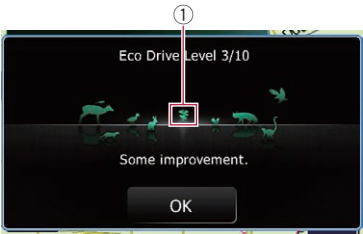
The number of displayed animal icons increases or decreases according to the value of "Eco Score".

- ❑ Even if you use the "Eco Graph" function immediately after you start using the navigation system for the first time,  may be displayed and the function may not be available.
 - ➔ For details, refer to *Troubleshooting* on page 135.
- ❑ The display settings can be changed.
 - ➔ For details, refer to *Changing the eco-function setting* on this page. 

Displaying Eco Drive Level guidance

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

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



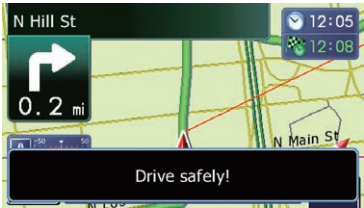
1 Tree icon

As the level increases, a tree icon changes from a young tree to a big tree.

- ❑ This is not displayed when "Eco Drive Level" is set to "Off".
- ➔ For details, refer to *Changing the eco-function setting* on this page. 

Sudden start alert

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



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

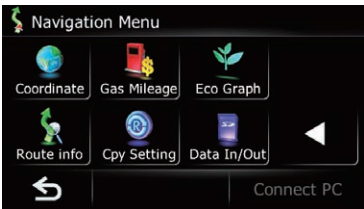
Changing the eco-function setting

You can change the eco-function setting.

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

- ➔ For details of the operations, refer to *Screen switching overview* on page 28.

2 Touch [Eco Graph].



Eco-friendly driving functions

3 Touch [Settings].



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

4 Touch the desired option.



Eco Score

- **On** (default):
Displays “**Eco Score**”.
 - **Off**:
Hides “**Eco Score**”.
- ➞ For details, refer to *Checking the eco-friendly driving status* on page 37.

Eco Drive Level

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

Rapid Start Warning

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

Clear Record

Fuel consumption data are cleared.

5 Touch [OK].

The settings are complete. ■

! CAUTION

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

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

The basic flow of creating your route

- 1 Park your vehicle in a safe place and apply the parking brake.
↓
- 2 Display the **"Top Menu"** screen.
➡ For details of the operations, refer to *Screen switching overview* on page 28.
↓
- 3 Select the method of searching for your destination.
↓
- 4 Enter the information about your destination to calculate route.
↓
- 5 Confirm the location on the map.
➡ For details, refer to *Setting a route to your destination* on page 48.
↓
- 6 The navigation system calculates the route to your destination, and then shows the route on the map.
↓
- 7 Check and decide the route.
➡ For details, refer to *Setting a route to your destination* on page 48.
↓
- 8 Your navigation system sets the route to your destination, and the map of your surroundings appears.
↓
- 9 Release the parking brake, drive in accordance with navigation guidance.



Searching for and selecting a location

Searching for a location by address

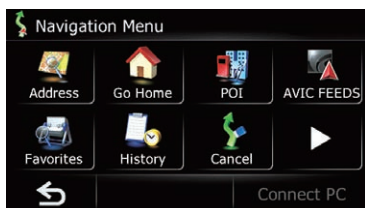
The most frequently used function is “**Address**”, in which the address is specified and the location is searched.

- ❑ Depending on the search results, some steps may be skipped.
- ❑ When you enter characters, the system will automatically search the database for all possible options. Only the characters you enter are active.
- ❑ If the search candidates number reaches 20 or less, the screen automatically changes to the search result screen.

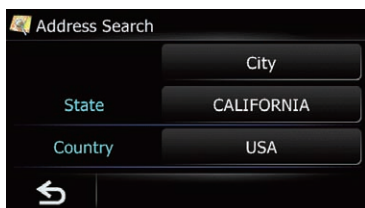
1 Touch [Home] on the map screen and then touch [Navigation].

- ➡ For details of the operations, refer to *Screen switching overview* on page 28.

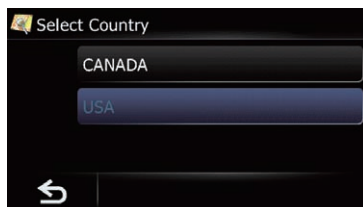
2 Touch [Address].



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



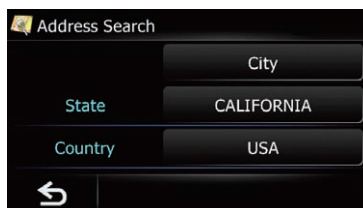
4 Touch one of the items on the list to set the country as search area.



The screen returns to the previous screen.

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

5 Touch the key next to “State”.



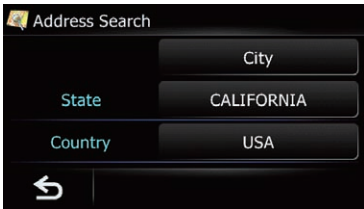
6 Touch one of the items on the list to set it as search area.



The screen returns to the previous screen.

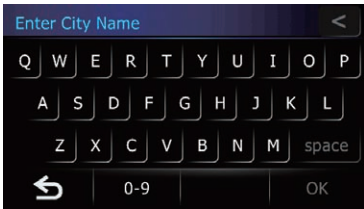
- ❑ Once the state, province, or territory has been selected, you only have to change states, provinces, or territories when your destination is outside of the state, province, or territory you selected.

7 Touch [City].



The “Enter City Name” screen appears.

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



The “Select City” screen appears.

9 Touch the desired city name.

The “Enter Street Name” screen appears.

- Touch .

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

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

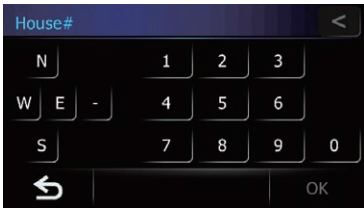


The “Select Street” screen appears.

11 Touch the street you want.

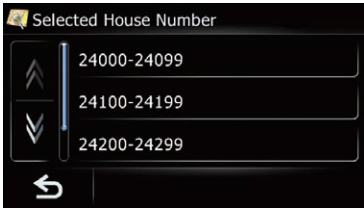
The “House#” screen appears.

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



The “Selected House Number” screen appears.

13 Touch the desired house number range.



The searched location appears on the map screen.

- For the subsequent operations, refer to *Setting a route to your destination* on page 48. 

Setting up a route to your home

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

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

- For details of the operations, refer to *Screen switching overview* on page 28.

2 Touch [Go Home].

- If you have not registered your home location, a message appears. Touch [Register] to start registration.
 - For details, refer to *Registering and editing your home* on page 55. 

Searching for and selecting a location

Searching for Points of Interest (POI)

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

Searching for a POI directly from the name of the facilities

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

- For details of the operations, refer to *Screen switching overview* on page 28.

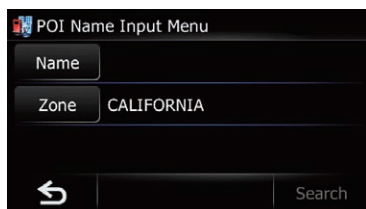
2 Touch [POI].

The “POI Search” screen appears.

3 Touch [Spell Name].

The “POI Name Input Menu” screen appears.

4 Touch [Zone].



The “State/Province Selection” screen appears.

If the destination is in another country, touch [Country] to change the country setting when the “State/Province Selection” screen is displayed.

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

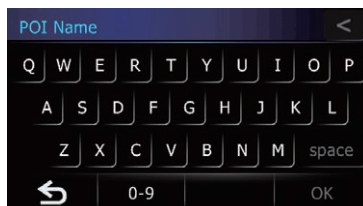
5 Touch one of the items on the list to set the country as search area.

The “POI Name Input Menu” screen returns.

6 Touch [Name].

The “POI Name” screen appears.

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



The “POI Name Input Menu” screen returns.

8 Touch [Search].

The “POI List” screen appears.

9 Touch the POI you want.

The searched location appears on the map screen.

▪ Touch [Sort].

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

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

• ABC ↓ :

Sorts the items in the list alphabetically.

• 📍 ↓ :

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

- For the subsequent operations, refer to *Setting a route to your destination* on page 48.

Searching for a nearby POI

You can search for POIs in your surroundings.

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

- For details of the operations, refer to *Screen switching overview* on page 28.

2 Touch [POI].

The “POI Search” screen appears.

3 Touch [Near Me].

POIs are divided into several categories.

4 Touch the category you want.

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

The “POI List” screen appears.

5 Touch the POI you want.

The searched location appears on the map screen.

- ➡ For the subsequent operations, refer to *Setting a route to your destination* on page 48.

Searching for POIs around the destination

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

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

- ➡ For details of the operations, refer to *Screen switching overview* on page 28.

2 Touch [POI].

The “POI Search” screen appears.

3 Touch [Near Dest.].

POIs are divided into several categories.

4 Touch the category you want.

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

The “POI List” screen appears.

5 Touch the POI you want.

The searched location appears on the map screen.

- ➡ For the subsequent operations, refer to *Setting a route to your destination* on page 48.

Searching for POIs around the city

You can search for POIs around a specified city.

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

- ➡ For details of the operations, refer to *Screen switching overview* on page 28.

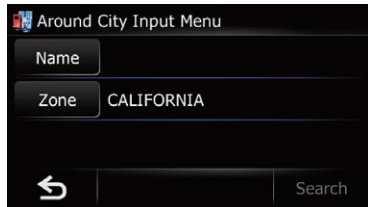
2 Touch [POI].

The “POI Search” screen appears.

3 Touch [Around City].

The “Around City Input Menu” screen appears.

4 Touch [Zone].



The “State/Province Selection” screen appears.

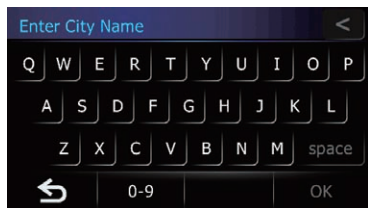
If the destination is in another country, touch [Country] to change the country setting when the “State/Province Selection” screen is displayed.

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

5 Touch [Name].

The “Enter City Name” screen appears.

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



The “Around City Input Menu” screen returns.

7 Touch [Search].

The “Select City” screen appears.

8 Touch the desired city name.

POIs are divided into several categories.

Searching for and selecting a location

- Touch .

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

9 Touch the category you want.

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

10 Touch the POI you want.

The searched location appears on the map screen.

- ➔ For the subsequent operations, refer to *Setting a route to your destination* on page 48. .

Selecting destination from "Favorites"

Storing locations you visit frequently saves time and effort.

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

- This function is not available if no locations have been registered in "Favorites".
- ➔ For details, refer to *Storing favorite locations* on page 53.

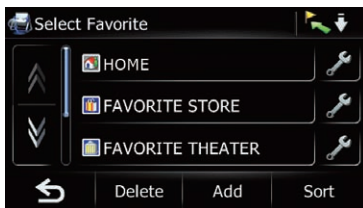
1 Touch [Home] on the map screen and then touch [Navigation].

- ➔ For details of the operations, refer to *Screen switching overview* on page 28.

2 Touch [Favorites].

The "Select Favorite" screen appears.

3 Touch the entry you want.



The searched location appears on the map screen.

- ➔ For the subsequent operations, refer to *Setting a route to your destination* on page 48. .

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

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

1 Use the utility program AVIC FEEDS to store customized POI data to an SD memory card.

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

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

- ➔ For details of the operations, refer to *Screen switching overview* on page 28.

4 Touch [AVIC FEEDS].

The "Select List" screen appears.

5 Touch the item you want.

The "Select POI" screen appears.

6 Touch the POI you want.

The searched location appears on the map screen.

- ➔ For the subsequent operations, refer to *Setting a route to your destination* on page 48. .

Selecting a location you searched for recently

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

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

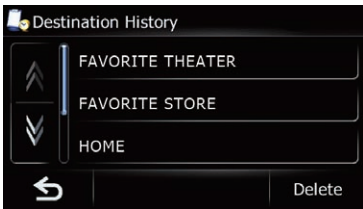
1 Touch **[Home]** on the map screen and then touch **[Navigation]**.

➡ For details of the operations, refer to *Screen switching overview* on page 28.

2 Touch **[History]**.

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

3 Touch the entry you want.



The searched location appears on the map screen.

➡ For the subsequent operations, refer to *Setting a route to your destination* on page 48. ■

Searching for a location by coordinates

Entering a latitude and longitude pinpoints the location.

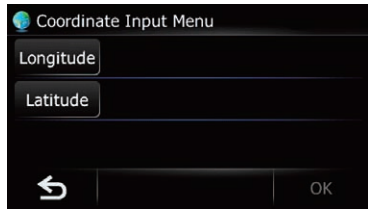
1 Touch **[Home]** on the map screen and then touch **[Navigation]**.

➡ For details of the operations, refer to *Screen switching overview* on page 28.

2 Touch **[Coordinate]**.

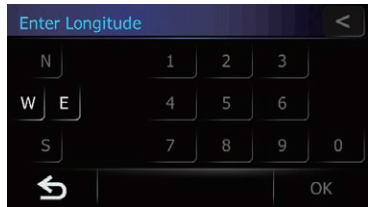
The “**Coordinate Input Menu**” screen appears.

3 Touch **[Longitude]**.



The “**Enter Longitude**” screen appears.

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



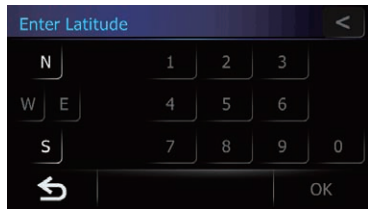
The screen returns to the previous screen.

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

5 Touch **[Latitude]**.

The “**Enter Latitude**” screen appears.

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



The screen returns to the previous screen.

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

7 Touch **[OK]**.

The searched location appears on the map screen.

➡ For details, refer to *Setting a route to your destination* on page 48. ■

Searching for a location by scrolling the map

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

- 1 **Display the map screen.**
- 2 **Touch and drag the screen to scroll the map to the position you want.**
- 3 **Touch .**
 - ➡ For details, refer to *Setting a route to your destination* on the next page. .

Setting a route to your destination

1 Search for a location.

- ➔ For details, refer to Chapter 8.
After searching for the destination, the Location confirmation screen appears.

2 Touch [OK].

Location confirmation screen



The destination is set, and then route calculation starts.

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

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

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

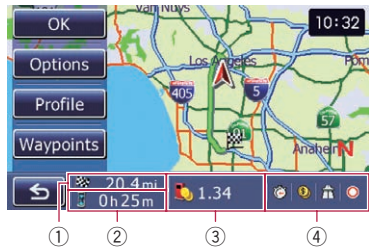
- Touch **[Waypoint]**.

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

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

3 Touch [OK].

Route confirmation screen



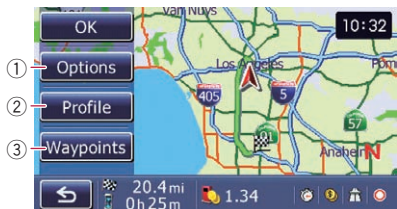
The displayed route is set as your route, and the route guidance starts.

- ① Distance to the destination
- ② Travel time to your destination
- ③ Estimated fuel cost to your destination
 - ➔ For details, refer to *Inputting the fuel consumption information for calculating the fuel cost* on page 73.
- ④ Route calculation condition

- Touch **[↩]**.

The message confirming whether to cancel the calculated route appears.

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



① Options

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

② Profile

- ➔ For details, refer to *Checking the current itinerary* on page 50.

③ Waypoints

- ➔ For details, refer to *Editing waypoints* on page 50. ■

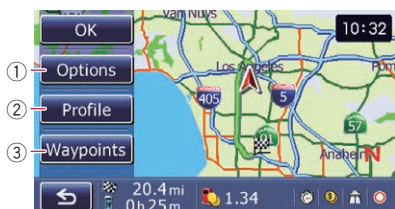
Checking and modifying the current route

Displaying the “Route info” screen

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

➡ For details of the operations, refer to *Screen switching overview* on page 28.

- 2 Touch [Route info].



- ① Options

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

- ② Profile

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

- ③ Waypoints

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

- ❑ “Route info” is active only when the route is set.

- 3 Touch [OK].

Modifying the route calculation conditions

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

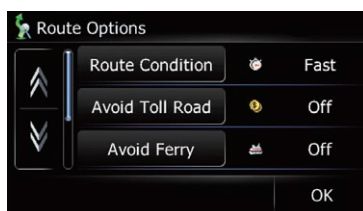
- 1 Display the “Route info” screen.

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

- 2 Touch [Options].

The “Route Options” screen appears.

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



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

Items that users can operate

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

Route Condition

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

Determines which condition takes priority for route calculation.

Fast*:

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

Short:

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

Major:

Calculates a route that passes major arterial roads as a priority.

Avoid Toll Road

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

 Off*:

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

 On:

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

- ☐ The system may calculate a route that includes toll roads even if **"On"** is selected.

Avoid Ferry

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

 Off*:

Calculates a route that may include ferries.

 On:

Calculates a route that avoids ferries.

- ☐ The system may calculate a route that includes ferries even if **"On"** is selected.

Avoid Freeway

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

 Off*:

Calculates a route that may include freeways.

 On:

Calculates a route that avoids freeways.

- ☐ The system may calculate a route that includes freeways even if **"On"** is selected.

Time restrictions

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

- ☐ If you want to set your route to avoid raised draw bridges, select **"On"**.

 On*:

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

 Off:

Calculates a route while ignoring traffic restrictions.

- ☐ The system may calculate a route that includes streets or bridges that are subject to traffic restrictions during a certain time even if **"On"** is selected.

 CAUTION

If the time difference is not set correctly, the navigation system cannot consider traffic regulations correctly. Set the time difference correctly.

-  For details, refer to *Setting the time difference* on page 116. 

Checking the current itinerary

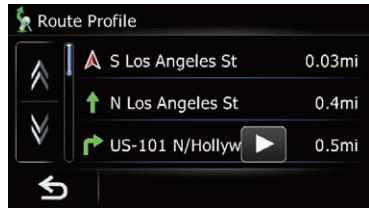
You can check the route details.

1 Display the "Route info" screen.

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

2 Touch [Profile].

The **"Route Profile"** screen appears.



Editing waypoints

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

Adding a waypoint

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

Checking and modifying the current route

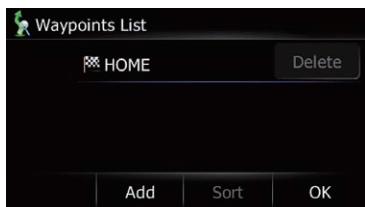
1 Display the "Route info" screen.

- For details, refer to *Displaying the "Route info" screen* on page 49.

2 Touch [Waypoints].

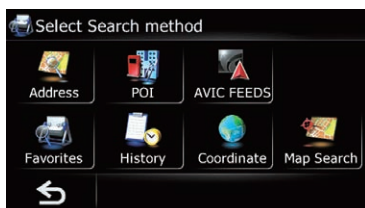
The "Waypoints List" screen appears.

3 Touch [Add].



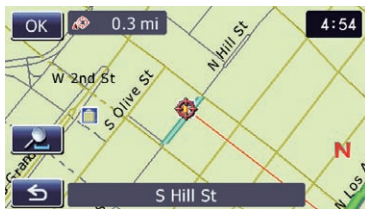
The "Select Search method" screen appears.

4 Search for a location.

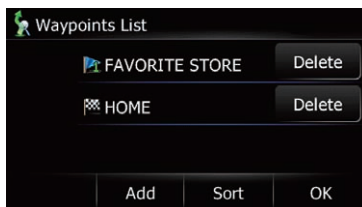


- For details, refer to Chapter 8.

5 Touch [OK].



6 Touch [OK] on the "Waypoints List" screen.



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

Deleting a waypoint

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

1 Display the "Route info" screen.

- For details, refer to *Displaying the "Route info" screen* on page 49.

2 Touch [Waypoints].

The "Waypoints List" screen appears.

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

The touched waypoint will be deleted from the list.

4 Touch [OK] on the "Waypoints List" screen.

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

5 Touch [OK].

The map of the current position appears.

Sorting waypoints

You can sort waypoints and recalculate the route.

- ❑ You cannot sort waypoints that you have already passed.

1 Display the “Route info” screen.

- For details, refer to *Displaying the “Route info” screen* on page 49.

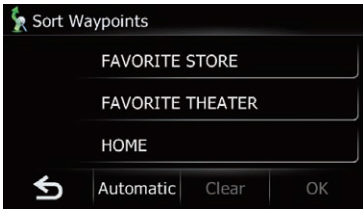
2 Touch [Waypoints].

The “Waypoints List” screen appears.

3 Touch [Sort].

The “Sort Waypoints” screen appears.

4 Touch the waypoint or destination.



Put them in the desired order.

- Touch [Automatic].

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

- Touch [Clear].

Waypoint sort is canceled.

5 Touch [OK].

The “Waypoints List” screen appears.

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

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

7 Touch [OK].

The map of the current position appears. ◻

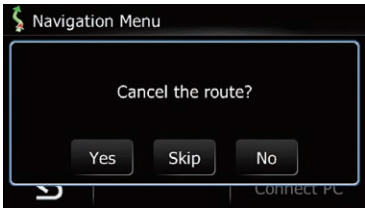
1 Touch [Home] on the map screen and then touch [Navigation].

- For details of the operations, refer to *Screen switching overview* on page 28.

2 Touch [Cancel].

A message confirming the cancellation of the current route appears.

3 Touch [Yes].



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

- Touch [Skip].

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

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

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

- Touch [No].

The previous screen returns without deleting the route. ◻

Canceling the route guidance

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

Registering and editing locations

Storing favorite locations

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.

Registering a location by "Favorites"

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

- ❑ **"Favorites"** can store up to 400 locations.
- ❑ Home location is counted as one of the items in **"Favorites"**.

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

- ➔ For details of the operations, refer to *Screen switching overview* on page 28.

2 Touch [Favorites].

The **"Select Favorite"** screen appears.

3 Touch [Add].

The **"Select Search method"** screen appears.

4 Search for a location.

- ➔ For details, refer to Chapter 8.

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

The location is registered, and then the **"Edit Favorite"** screen appears.

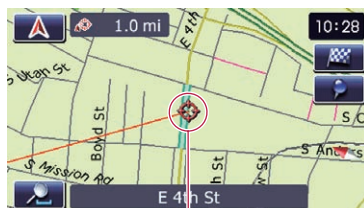
- ➔ For details, refer to *Editing the favorite location in the list* on this page.

6 Touch [OK].

The registration is complete.

Registering a location by scroll mode

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



Cursor

2 Touch [Pin].

The location is registered, and then the **"Edit Favorite"** screen appears.

- ➔ For details, refer to *Editing the favorite location in the list* on this page.

3 Touch [OK].

The registration is complete. ❑

Editing registered locations

Editing the favorite location in the list

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

- ➔ For details of the operations, refer to *Screen switching overview* on page 28.

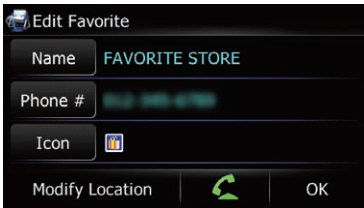
2 Touch [Favorites].

The **"Select Favorite"** screen appears.

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

The **"Edit Favorite"** screen appears.

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



- ☐ Up to 17 characters can be input for the name.
- Touch **[Name]**.
You can enter the desired name.
- Touch **[Phone #]**.
You can edit the registered phone number. To dial the number, touch .
The maximum digits you can enter for the phone number is 15.
- ☐ Touching  enables you to call the position if a telephone number is available. (Pairing with cellular phone featuring Bluetooth wireless technology is required.)
 - ➔ For details, refer to *Dialing from the map* on page 66.
- Touch **[Icon]**.
You can change the symbol displayed on the map and “Favorites”.
- Touch **[Modify Location]**.
You can change the registered location by scrolling the map.

5 Touch **[OK]**.
The registration is complete.

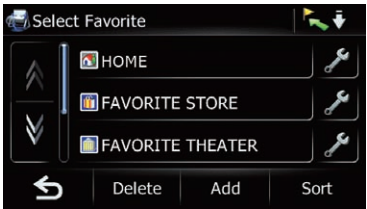
Editing your home

1 Touch **[Home]** on the map screen and then touch **[Navigation]**.
➔ For details of the operations, refer to *Screen switching overview* on page 28.

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

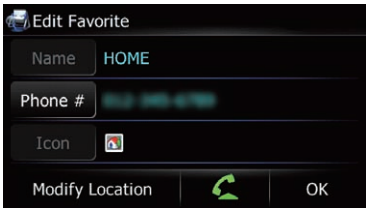
- ☐ Home location is displayed on the top of the list.

3 Touch next to the home location.



The “Edit Favorite” screen appears.

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



- Touch **[Phone #]**.
You can edit the registered phone number. To dial the number, touch .
- ☐ Touching  enables you to call the position if a telephone number is available. (Pairing with cellular phone featuring Bluetooth wireless technology is required.)
 - ➔ For details, refer to *Dialing from the map* on page 66.
- Touch **[Modify Location]**.
You can change the registered location by scrolling the map.
- ☐ For home information, **[Name]** and **[Icon]** are not editable.

5 Touch **[OK]**.
The registration is complete.

Sorting the favorite locations in the list

1 Touch **[Home]** on the map screen and then touch **[Navigation]**.
➔ For details of the operations, refer to *Screen switching overview* on page 28.

Registering and editing locations

2 Touch [Favorites].

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

3 Touch [Sort].

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

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

Deleting a favorite location from the list

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

- ➔ For details of the operations, refer to *Screen switching overview* on page 28.

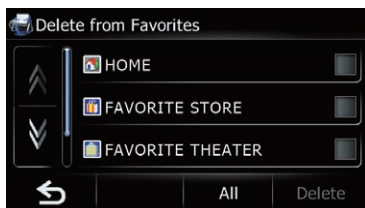
2 Touch [Favorites].

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

3 Touch [Delete].

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

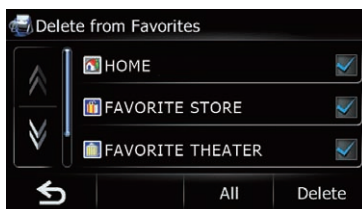
4 Select the location you want to delete.



A check mark appears next to the selected location.

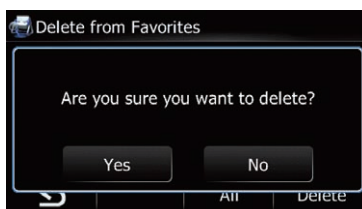
- Touch [All] or [None].
Selects or deselects all entries.

5 Touch [Delete].



A message will appear asking you to confirm the deletion.

6 Touch [Yes].



The data you selected is deleted.

- Touch [No].
Cancels the deletion. ☐

Registering and editing your home

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

Registering your home

1 Touch [Home] on the map screen.

The “**Top Menu**” screen appears.

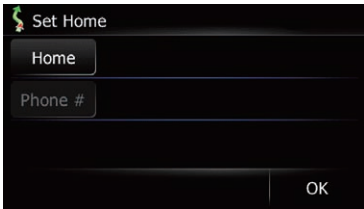
2 Touch [Settings].

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

3 Touch [Set Home].

The “**Set Home**” screen appears.

4 Touch [Home].



The “Select Search method” screen appears.

5 Search for a location.

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

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

➡ For details, refer to Chapter 8.

6 Touch [Phone #].

You can register your home phone number.

7 Touch [OK].

The registration is complete.

Editing your home

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

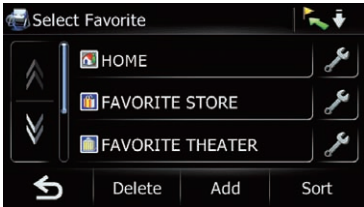
➡ For details of the operations, refer to *Screen switching overview* on page 28.

2 Touch [Favorites].

The “Select Favorite” screen appears.

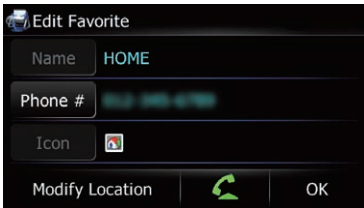
- ☐ Home location is displayed on the top of the list.

3 Touch next to the home location.



The “Edit Favorite” screen appears.

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



▪ Touch [Phone #].

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

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

➡ For details, refer to *Dialing from the map* on page 66.

▪ Touch [Modify Location].

You can change the registered location by scrolling the map.

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

5 Touch [OK].

The registration is complete. ☐

Deleting the destination history from the list

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

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

➡ For details of the operations, refer to *Screen switching overview* on page 28.

2 Touch [History].

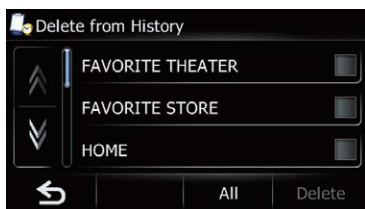
The “Destination History” screen appears.

3 Touch [Delete].

The “Delete from History” screen appears.

Registering and editing locations

4 Select the location you want to delete.

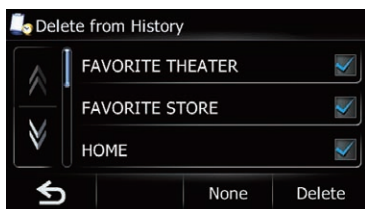


A check mark appears next to the selected location.

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

Selects or deselects all entries.

5 Touch **[Delete]**.



A message will appear asking you to confirm the deletion.

6 Touch **[Yes]**.

The data you selected is deleted.

- Touch **[No]**.

Cancels the deletion. ☐

Exporting and importing favorite locations

Exporting favorite locations

You can export the **"Favorites"** data to an SD memory card for editing by using the utility program AVIC FEEDS which is available separately, on your PC.

- ☐ The utility program AVIC FEEDS is available from our website. For details, refer to the information on our website.
- ☐ If there is previous data in the SD memory card, the data is overwritten with new data.

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

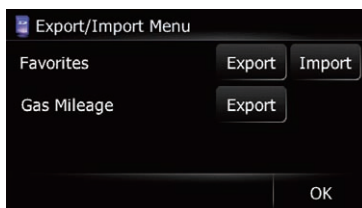
2 Touch **[Home]** on the map screen and then touch **[Navigation]**.

- For details of the operations, refer to *Screen switching overview* on page 28.

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

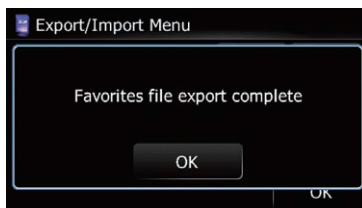
The **"Export/Import Menu"** screen appears.

4 Touch **[Export]** next to **"Favorites"**.



Data export starts.

After the data is exported, the completion message appears.



5 Touch **[OK]**.

The **"Navigation Menu"** screen appears.

Importing the **"Favorites"** items edited on AVIC FEEDS

You can import the locations that you have edited on the utility program AVIC FEEDS to **"Favorites"**.

- ☐ When a location that is already registered in **"Favorites"** is imported, the location is overwritten.
- ☐ The utility program AVIC FEEDS is available from our website. For details, refer to the information on our website.

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

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

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

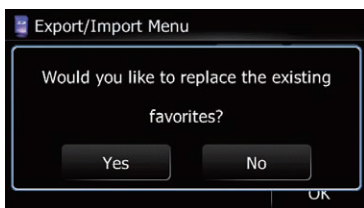
➡ For details of the operations, refer to *Screen switching overview* on page 28.

4 Touch [Data In/Out].

The “Export/Import Menu” screen appears.

5 Touch [Import] next to “Favorites”.

The following message appears.



6 Touch [Yes].

Data import starts.

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

Using hands-free phoning

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

Preparing communication devices

This navigation system has a built-in function to use 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 72.
- ❑ When the navigation system is turned off, the Bluetooth connection is also disconnected. When the system restarts, the system automatically attempts to reconnect the previously connected cellular phone. Even when the connection is severed for some reason, the system automatically reconnects the specified cellular phone (except when the connection is severed due to cellular phone operation). ☐

Displaying the phone menu

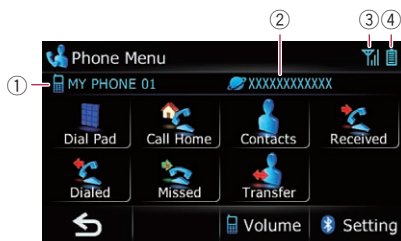
Use the “**Phone Menu**” if you connect the cellular phone to the navigation system for utilization.

1 Touch [Home] on the map screen.

The “**Top Menu**” screen appears.

2 Touch [Phone].

The “**Phone Menu**” screen appears.



- ① Name of connected cellular phone
- ② Network name of the cellular phone company
- ③ Reception status of the cellular phone
- ④ Battery status of the 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 3 phones can be registered. Three registration methods are available:

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

Searching for nearby phones

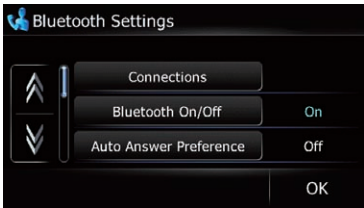
The system searches for available cellular phones near the navigation system, displays them in a list, and registers them for connection.

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

2 Display the “Phone Menu” screen.
➔ For details of the operations, refer to *Displaying the phone menu* on the previous page.

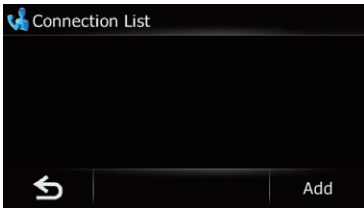
3 Touch [Setting] on the “Phone Menu” screen.
The “Bluetooth Settings” screen appears.

4 Touch [Connections].



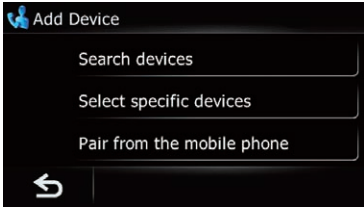
The “Connection List” screen appears.

5 Touch [Add].



The “Add Device” screen appears.

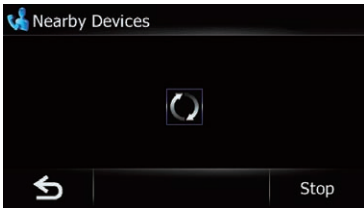
6 Touch [Search devices].



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

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

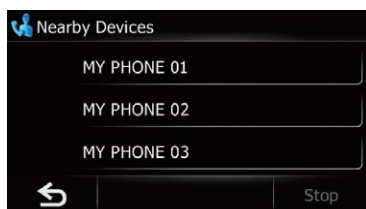
7 Wait until your cellular phone appears in the list.



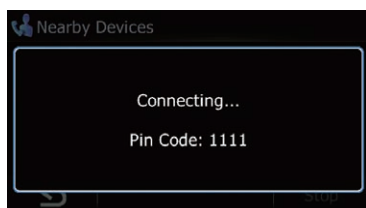
- ❑ If you cannot find the cellular phone you want to connect, check that the cellular phone is ready for the Bluetooth wireless technology connection.

Using hands-free phoning

- 8 Touch the cellular phone name you want to register.**



A message prompting you to enter a PIN code appears.



- 9 Enter the PIN code "1111" using the cellular phone.**

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

Pairing from your cellular phone

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

- 1 Activate the Bluetooth wireless technology on your cellular phone.**

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

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

- ➡ For details of the operations, refer to *Displaying the phone menu* on page 59.

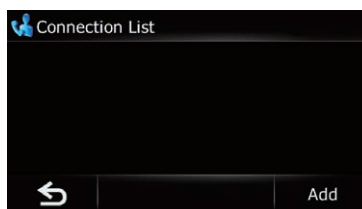
- 3 Touch [Setting] on the "Phone Menu" screen.**

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

- 4 Touch [Connections].**

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

- 5 Touch [Add].**



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

- 6 Touch [Pair from the mobile phone].**

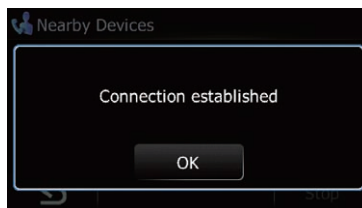
The navigation system waits for a Bluetooth wireless technology connection.



- 7 Register the navigation system on your 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.

8 Touch [OK].

Searching for a specified phone

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

1 Activate the Bluetooth wireless technology on your cellular phone.

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

2 Display the “Phone Menu” screen.

- ➡ For details of the operations, refer to *Displaying the phone menu* on page 59.

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

The “Bluetooth Settings” screen appears.

4 Touch [Connections].

The “Connection List” screen appears.

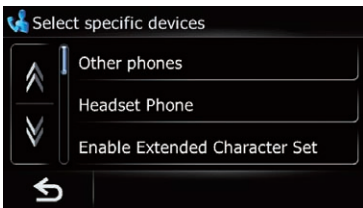
5 Touch [Add].

The “Add Device” screen appears.

6 Touch [Select specific devices].

The “Select specific devices” screen appears.

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

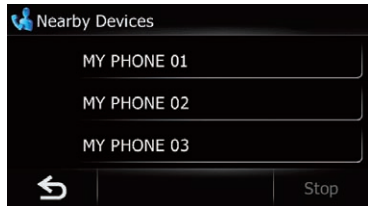
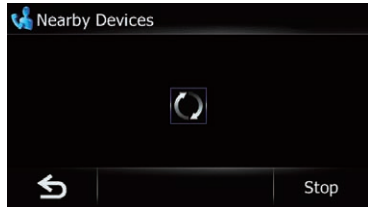


The system searches for cellular phones featuring Bluetooth technology that are ready for

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

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

8 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 ready for the Bluetooth wireless technology connection.

9 Touch the cellular phone name you want to register.

A message prompting you to enter a PIN code appears.

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

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

Using hands-free phoning

Deleting a registered phone

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

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

1 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the phone menu* on page 59.

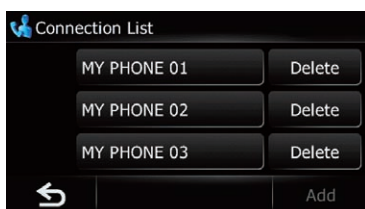
2 Touch [Setting].

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

3 Touch [Connections].

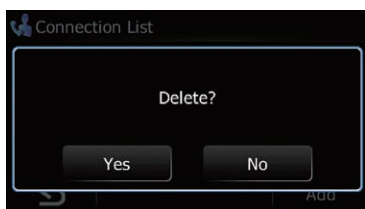
The “**Connection List**” screen appears.

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



A message prompting you to delete a registered device appears.

5 Touch [Yes].



The device is deleted.

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

Connecting and disconnecting a registered cellular phone

Connecting a registered cellular phone

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

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

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

- ➔ For details, refer to *Setting automatic connection* on page 70.

1 Activate the Bluetooth wireless technology on your cellular phone.

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

2 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the phone menu* on page 59.

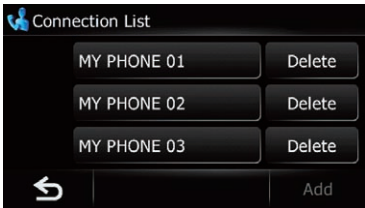
3 Touch [Setting].

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

4 Touch [Connections].

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

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



Connection starts.

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

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

Disconnecting a cellular phone

1 Display the “Phone Menu” screen.

- ➡ For details of the operations, refer to *Displaying the phone menu* on page 59.

2 Touch [Setting].

The “Bluetooth Settings” screen appears.

3 Touch [Connections].

The “Connection List” screen appears.

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



Making a phone call

You can make a phone call in many different ways.

Direct dialing

1 Display the “Phone Menu” screen.

- ➡ For details of the operations, refer to *Displaying the phone menu* on page 59.

2 Touch [Dial Pad].

The “Enter Phone Number” screen appears.

3 Touch the number keys to enter the phone number.



The phone number that was input is displayed.

And  is activated.

- Touch .

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

- Touch .

The previous screen returns.

4 Touch  to make a call.

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

5 Touch  to end the call.

Making a call home easily

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

Using hands-free phoning

1 Display the "Phone Menu" screen.

- For details of the operations, refer to *Displaying the phone menu* on page 59.

2 Touch [Call Home].

Dialing home starts.

- ❑ If you have not registered your home number, a message appears. Touch **[Register]** to start registration.
- For details, refer to *Registering and editing your home* on page 55.

Calling a number in the "Contacts"

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

- ❑ Before using this function, you need to transfer the phone book entries stored in your cellular phone to the navigation system.
- For details, refer to *Transferring the phone book* on page 67.

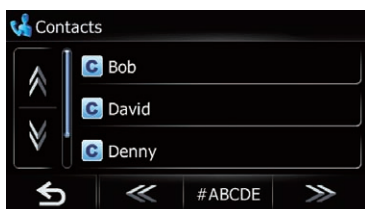
1 Display the "Phone Menu" screen.

- For details of the operations, refer to *Displaying the phone menu* on page 59.

2 Touch [Contacts].

The "Contacts" screen appears.

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



- Touch or .

Shows the next or previous alphabet tab. Switching the alphabet tab also switches the list display.

- Touch alphabet tabs.

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

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

Touching **[#ABCDE]** displays all entries that start with 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 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.

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

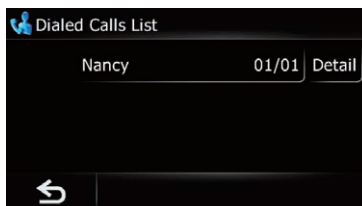
1 Display the "Phone Menu" screen.

- For details of the operations, refer to *Displaying the phone menu* on page 59.

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

The selected call history list appears.

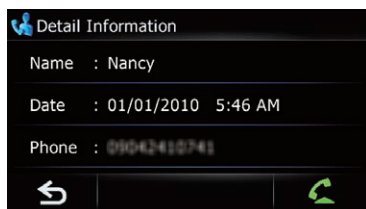
3 Touch an entry on the list.



Dialing starts.

- ❑ To cancel the call after the system starts dialing, touch .
- Touch **[Detail]**.

The "Detail Information" screen appears.



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

4 Touch to end the call.

Dialing a favorite location

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

1 Display the "Navigation Menu" screen.

- ➔ For details of the operations, refer to *Screen switching overview* on page 28.

2 Touch [Favorites].

The "Select Favorite" screen appears.

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

The "Edit Favorite" screen appears.

4 Touch to make a call.

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

5 Touch to end the call.

Dialing a facility's phone number

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

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

1 Display the "Navigation Menu" screen.

- ➔ For details of the operations, refer to *Screen switching overview* on page 28.

2 Touch [POI].

The "POI Search" screen appears.

3 Search for the POI.

The "POI List" screen appears.

- ➔ For details of the operation, refer to *Searching for Points of Interest (POI)* on page 43.

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

The "Detailed POI Information" screen appears.

5 Touch to make a call.

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

6 Touch to end the call.

Dialing from the map

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

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

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

2 Touch .

Detailed information is displayed.

3 Touch to make a call.

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

4 Touch to end the call. ☐

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.

Using hands-free phoning

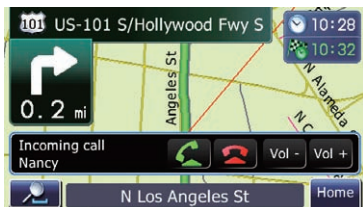
If “**Auto Answer Preference**” is set to “**Off**”, answer the call manually. Answering is available if any screen is displayed, such as the map screen or the setting screen.

- ☐ You can set this navigation system to automatically answer incoming calls.
 - ➔ For details, refer to *Answering a call automatically* on page 69.

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

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

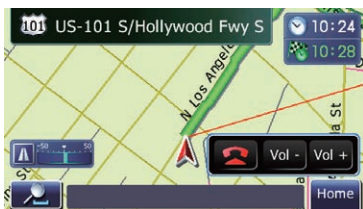
2 To answer an incoming call, touch .



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

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

3 Touch to end the call.



The call ends.

- ☐ If the voice on the other end of the call is too quiet to hear, you can adjust the volume of the received voice.
 - ➔ For details, refer to *Setting the phone volume* on page 69.
- ☐ You may hear a noise when you hang up the phone.

Rejecting an incoming call

You can reject an incoming call.

- ➔ For details, refer to *Setting the automatic rejection function* on page 70.

● 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 page 65. .

Transferring the phone book

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

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

- ❑ 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 63.

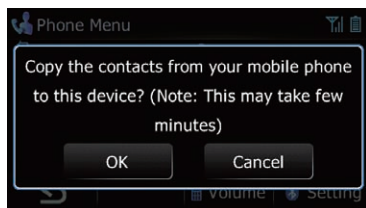
2 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the phone menu* on page 59.

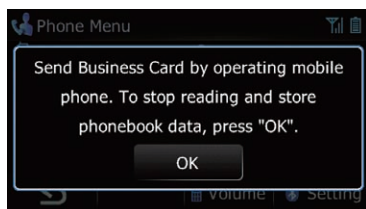
3 Touch [Transfer] on the “Phone Menu” screen.

The confirmation messages appear.

4 Touch [OK].



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

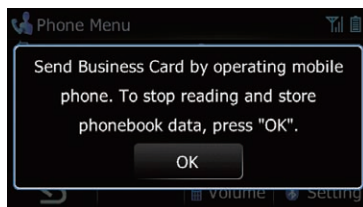


- ❑ You can send the phone book entries repeatedly before touching [OK]. If your cellular phone supports one-by-one transfer

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

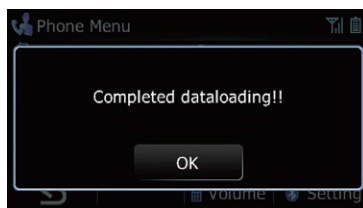
- ❑ If your phone has a capability for automatic transfer of phone book, this screen is skipped and transfer will start.
- ❑ The transferred data cannot be edited on the navigation system.

6 Touch [OK].



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

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



Transfer ends. ◻

Clearing memory

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

1 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the phone menu* on page 59.

2 Touch [Setting].

The “Bluetooth Settings” screen appears.

Using hands-free phoning

3 Touch [Clear Memory].

The “Clear Memory” screen appears.



On this screen, you can select the following items:

- **Contacts:**
Clears the registered phone book.
- **Received Calls List:**
Clears the received call history list.
- **Diald Calls List:**
Clears the diald call history list.
- **Missed Calls List:**
Clears the missed call history list.

■ Touch [Clear All].

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

4 Touch [Yes].

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

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

Changing the phone settings

Setting the phone volume

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

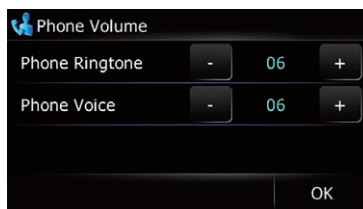
1 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the phone menu* on page 59.

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

The “Phone Volume” screen appears.

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



• Phone Ringtone:

This setting controls the incoming ring tone volume.

• Phone Voice:

This setting controls the incoming voice volume.

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

- ➔ For details concerning operations, refer to *Answering an incoming call* on page 66.

Stopping Bluetooth wave transmission

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

1 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the phone menu* on page 59.

2 Touch [Setting].

The “Bluetooth Settings” screen appears.

3 Touch [Bluetooth On/Off].

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

Answering a call automatically

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

1 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the phone menu* on page 59.

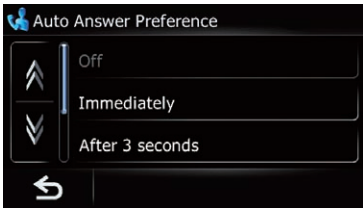
2 Touch [Setting].

The “Bluetooth Settings” screen appears.

3 Touch [Auto Answer Preference].

The “Auto Answer Preference” screen appears.

4 Touch the desired option.



On this screen, you can select the following items:

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

Setting the automatic rejection function

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

1 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the phone menu* on page 59.

2 Touch [Setting].

The “Bluetooth Settings” screen appears.

3 Touch [Refuse All Calls].

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

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

Echo canceling and noise reduction

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

1 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the phone menu* on page 59.

2 Touch [Setting].

The “Bluetooth Settings” screen appears.

3 Touch [Echo Cancel].

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

Setting automatic connection

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

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

1 Display the “Phone Menu” screen.

- ➔ For details of the operations, refer to *Displaying the phone menu* on page 59.

2 Touch [Setting].

The “Bluetooth Settings” screen appears.

Using hands-free phoning

3 Touch [Auto Connect].

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

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

Editing the device name

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

1 Display the "Phone Menu" screen.

- ➡ For details of the operations, refer to *Displaying the phone menu* on page 59.

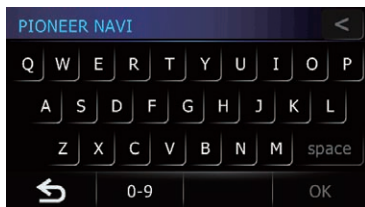
2 Touch [Setting].

The "Bluetooth Settings" screen appears.

3 Touch [Edit Name].

The keyboard to enter the name appears.

4 Enter the new name by using the keyboard.



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

5 Touch [OK].

The name is changed.

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

Updating the Bluetooth wireless technology software

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

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

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

2 Display the "Phone Menu" screen.

- ➡ For details of the operations, refer to *Displaying the phone menu* on page 59.

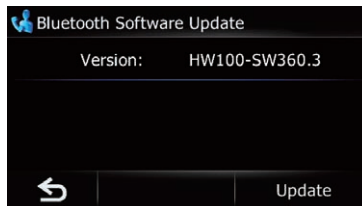
3 Touch [Setting].

The "Bluetooth Settings" screen appears.

4 Touch [Bluetooth Software Update].

The current version is displayed.

5 Touch [Update].



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

6 To finish the update, touch [OK].

Update is completed. 

Notes for hands-free phoning

General notes

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

Registration and connection

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

Making and receiving calls

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

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

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

The received call history and the dialed number history

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

Phone book transfers

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

Fuel cost management

Using the fuel consumption function

Inputting the fuel consumption information for calculating the fuel cost

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

➤ For details, refer to *Setting a route to your destination* on page 48.

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

➤ For details of the operations, refer to *Screen switching overview* on page 28.

2 Touch [Gas Mileage].

The "Gas Mileage" screen appears.

3 Enter the fuel consumption information.

Enter the following items:

- **Surface Road:**
Enter the fuel cost when you drive on ordinary roads.
☐ Fuel cost depends on the "Gas Unit" setting.
— When "Gas Unit" is set to "Gallon".
Enter how many miles (kilometers) you get to a gallon.
— When "Gas Unit" is set to "Liter".
Enter how much fuel you need to travel 60 miles (100 kilometers).
- **HWY Gas Mile:**
Enter the fuel cost when you drive on the freeway.
☐ Fuel cost depends on the "Gas Unit" setting.
— When "Gas Unit" is set to "Gallon".
Enter how many miles (kilometers) you get to a gallon.
— When "Gas Unit" is set to "Liter".
Enter how much fuel you need to travel 60 miles (100 kilometers).
- **Gas Price/Unit:**
Enter the fuel unit price.

- **Gas Price:**

➤ For details, refer to *Calculating the fuel consumption* on this page.

- **Gas Unit:**

Set the fuel unit.

- **Currency:**

Set the unit of currency.

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

Calculating the fuel consumption

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

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

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

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

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

➤ For details of the operations, refer to *Screen switching overview* on page 28.

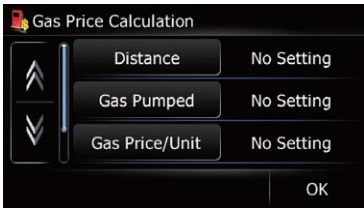
2 Touch [Gas Mileage].

The "Gas Mileage" screen appears.

3 Touch [Gas Price].

The "Gas Price Calculation" screen appears.

4 Enter the fuel consumption information.

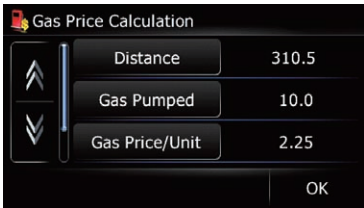


Enter the following items:

- **Distance:**
Enter the distance traveled since the previous fueling.
☐ The distance is entered automatically only when the distance traveled since the previous fueling is recorded.
- **Gas Pumped:**
Enter the amount of fuel pumped.
- **Gas Price/Unit:**
Enter the fuel unit price.

When all the items are entered, the fuel consumption is displayed next to “**Gas Mileage**”.

5 Touch [OK].



The “**Gas Mileage**” screen appears.

Exporting the data of fuel cost information

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

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

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

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

➔ For details of the operations, refer to *Screen switching overview* on page 28.

3 Touch [Gas Mileage].

The “**Gas Mileage**” screen appears.

4 Touch [Export].



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

The “**Gas Mileage**” screen appears when it is done. ■

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

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

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

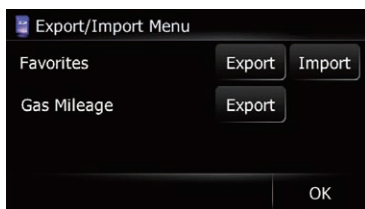
➔ For details of the operations, refer to *Screen switching overview* on page 28.

3 Touch [Data In/Out].

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

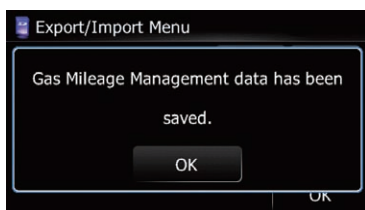
Fuel cost management

4 Touch [Export] next to “Gas Mileage”.



Data export starts.

After the data is exported, the completion message appears.



5 Touch [OK].

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

This product enables you to use applications downloaded via the utility program AVIC FEEDS, providing for navigation functions and a wide variety of entertainment functions.

Preparing in advance

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

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

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

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

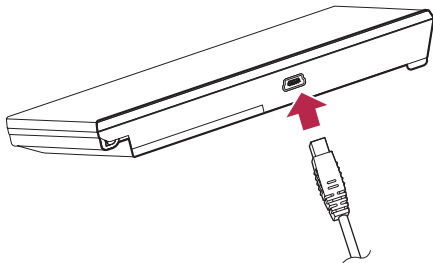
Switching to “PC Mode”

1 Detach the detachable device from the head unit.

- ➔ For detailed operations, refer to Operation Manual for AVIC-U310BT.

2 Turn off the power switch of detachable device.

3 Connect the USB cable supplied with AVIC-U310BT to USB port (Mini-B).



4 Connect the USB cable to your PC.

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

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

6 Turn on the power switch of detachable device.

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

- ➔ For details of the operations, refer to *Screen switching overview* on page 28.

8 Touch [Connect PC].

A message confirming whether to restart the navigation system appears.

9 Touch [OK].

The navigation system restarts.

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

Canceling “PC Mode”

1 Disconnect the detachable device from your PC.

2 Touch [End].

“PC Mode” is canceled, and then the system restarts.

Launching the application

You can launch applications downloaded to an SD memory card via the utility program AVIC FEEDS.

- ❑ Navigation functions are unavailable when an application is running. Close the application to use navigation functions.
- ❑ When an application is running, you may not use the hands-free phoning function to place a call.
You may answer the telephone when you receive a call.

Using Applications

- ❑ The navigation system can recognize a maximum of 8 applications.
- ❑ The navigation system can run one application at a time.
- ❑ When running an application that outputs sound, set the audio source to “**Off**”.
- ❑ For details of applications, refer to the utility program AVIC FEEDS.

1 Use the utility program AVIC FEEDS to download an application to an SD memory card.

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

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

- ➡ For details of the operations, refer to *Screen switching overview* on page 28.

4 Touch [Applications].

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

5 Touch the application that you want to launch.

A message confirming whether to restart the navigation system appears.

6 Touch [OK].

The navigation system restarts, and the application is launched. 

Basic operations of the audio source

This chapter describes the basic operations of the audio source.

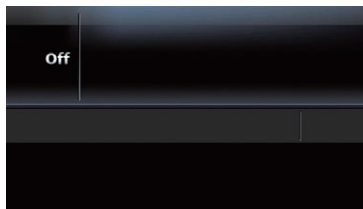
You can play or use the following sources with your Pioneer navigation system.

- TUNER (FM, AM)
- CD
- ROM (MP3, AAC, WAV, WMA)
- USB

The following sources can be played back or used by connecting an auxiliary device.

- XM (XM tuner)
- SIRIUS (SIRIUS tuner)
- "HD" (HD Radio tuner)
- iPod
- External unit 1 (EXT1)
- External unit 2 (EXT2)
- AUX (auxiliary device)

Turning off the audio source



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

The audio source is switched off.

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

Switching the audio source

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

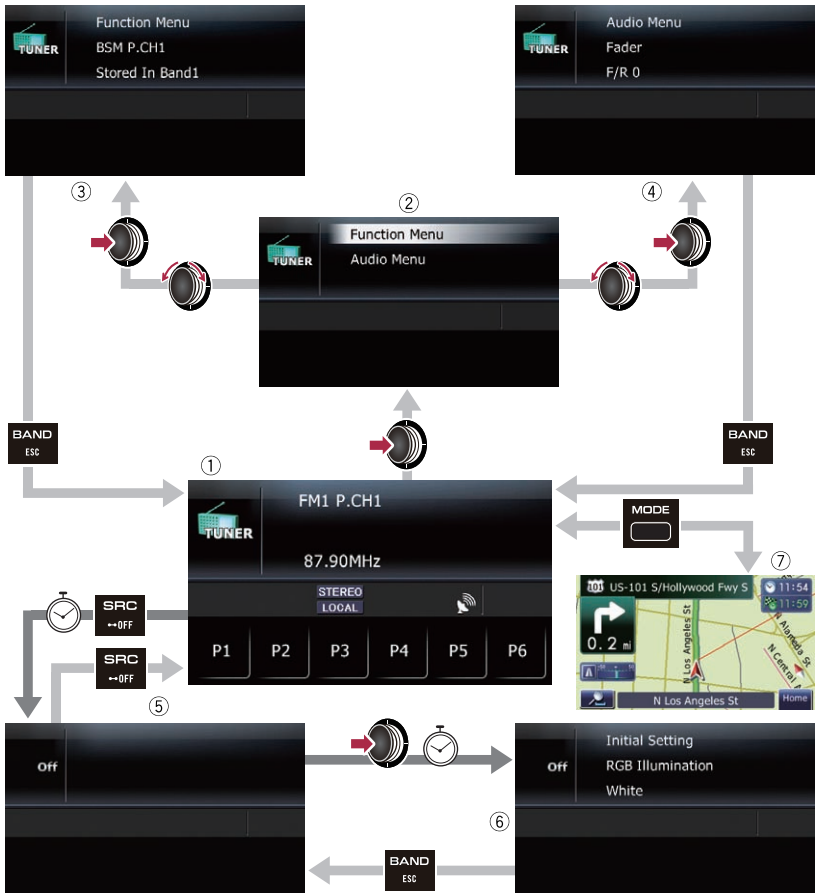
The audio operation screen appears.

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

XM (XM tuner) — **SIRIUS** (SIRIUS tuner) — **"HD"** (HD Radio tuner)/**TUNER** (tuner) — **CD** (built-in CD player) — **USB** (USB storage device)/**iPod** (iPod connected using USB input) — **EXT1** (external unit 1) — **EXT2** (external unit 2) — **AUX** (auxiliary device)

- In the following cases, the sound source cannot be used:
 - When a unit corresponding to each source is not connected to the navigation system.
 - When no disc is set in the navigation system.
 - When **"AUX"** in the **"Initial Setting"** screen is set to **"Off"**.
 - ➞ For details, refer to *Switching the auxiliary setting* on page 125.
- If the HD Radio tuner is connected to the navigation system, **"TUNER"** is skipped in the audio source selection. 

Audio screen switching overview



Press the button.



Press and hold the button for a few seconds.



Press the center of **MULTI-CONTROL**



Turn **MULTI-CONTROL** to select the item.



Basic operations of the audio source

What you can do on each menu

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

Displaying the “Function Menu” screen

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

- ☐ Depending on the audio source, “**Function Menu**” may not exist.

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

Using the radio (TUNER)

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

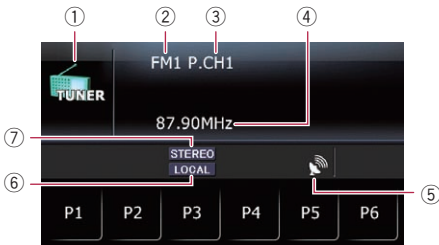
1 Press the SRC/OFF button to display the “TUNER” screen.

➡ For details, refer to *Switching the audio source* on page 79.

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

If you want to select AM, press **BAND/ESC** button repeatedly until “AM” appears in the display.

Reading the screen



- ① **Source icon**
Shows which source has been selected.
- ② **Band**
Shows which band the radio is tuned to: **FM1**, **FM2**, **FM3** or **AM**.
- ③ **Preset number indicated next to “P.CH”**
Shows what preset item has been selected.
- ④ **Frequency**
- ⑤ **Signal level indicator**
- ⑥ **LOCAL indicator**
Shows when local seek tuning is on.
➡ For details, refer to *Tuning in strong signals* on the next page.
- ⑦ **STEREO indicator**
Shows when the selected frequency is being broadcast in stereo. ■

Using the touch panel keys



- ① **P1 to P6:**
Recalls radio stations.
➡ For details, refer to *Storing and recalling broadcast frequencies* on the next page. ■

Operating by hardware buttons

Pressing the BAND/ESC button

Band can be selected from among **FM1**, **FM2**, **FM3**, or **AM**.

Pressing MULTI-CONTROL up or down

You can recall radio stations assigned to pre-set tuning keys **P1** to **P6**.

Pressing MULTI-CONTROL left or right

The frequencies move up or down step by step.

Pressing and holding MULTI-CONTROL left or right

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

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

Pressing the center of MULTI-CONTROL

The function select screen appears. ■

Using the radio (TUNER)

Storing and recalling broadcast frequencies

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

1 When you find a frequency that you want to store in memory, keep touching a preset tuning key **P1 to **P6** until the preset number (e.g., **PCH1**) stops flashing.**

The selected radio station has been stored in memory.

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

2 Touch the same preset tuning key **P1 to **P6**.**

The radio station frequencies are recalled from memory. ☐

Using the function menu

1 Display the “Function Menu” screen.

- For details of the operation, refer to *Displaying the “Function Menu” screen* on page 81.

2 Turn MULTI-CONTROL to select a function.

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

BSM (best stations memory) — **Local** (local seek tuning) ☐

Storing the strongest broadcast frequencies

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

1 Display the “Function Menu” screen.

- For details of the operation, refer to *Displaying the “Function Menu” screen* on page 81.

2 Turn MULTI-CONTROL to display “BSM”.

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

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

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

Tuning in strong signals

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

1 Display the “Function Menu” screen.

- For details of the operation, refer to *Displaying the “Function Menu” screen* on page 81.

2 Turn MULTI-CONTROL to display “Local”.

3 Press the center of MULTI-CONTROL.

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

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

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

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

❑ This HD Radio Ready™ receiver (this navigation system) is ready to receive HD Radio broadcasts when connected to the GEX-P20HD, sold separately.

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

❑ HD Radio™, HD Radio Ready™ and HD Radio Ready logos are proprietary trademarks of iBiquity Digital Corporation.

● **Press SRC/OFF button to display the digital radio screen.**

➔ For details, refer to *Switching the audio source* on page 79.

Reading the screen



① **Source icon**

Shows which source has been selected.

② **Text display area**

• **Band**

Shows which band the radio is tuned to: FM1, FM2, FM3 or AM.

• **Preset number indicated next to "P.CH"**

Shows what preset item has been selected.

• **Frequency**

• **Multicasting indicator**

Shows the number of multicasting channels in the current frequency.

• **Channel name**

Shows the channel name of broadcast channel.

• **[F]: Artist name**

Shows the artist name for the current song.

• **[S]: Song title**

Shows the title of the song currently playing.

• **[P]: Program type**

Shows the type of current program.

③ **Signal level indicator**

④ **Blending mode indicator**

➔ For details, refer to *Switching the reception mode* on page 86.

⑤ **LOCAL indicator**

Shows when local seek tuning is on.

➔ For details, refer to *Tuning in strong signals* on page 86.

⑥ **STEREO indicator**

Shows when the selected frequency is being broadcast in stereo. ■

Using the touch panel keys



① **[DISP]:**

Switches the combination of displayed items in the text display area.

❑ Touching and holding [DISP] scrolls displayed information.

❑ Only when the tuner has been tuned in to an HD Radio station, can the display be changed.

② **[P1] to [P6]:**

Recalls radio stations.

HD Radio™ reception

- ➔ For details, refer to *Storing and recalling broadcast frequencies* on this page. ■

Operating by hardware buttons

Pressing the BAND/ESC button

Band can be selected from among **FM1**, **FM2**, **FM3**, or **AM**.

Pressing MULTI-CONTROL up or down

You can recall radio stations assigned to preset tuning keys **P1** to **P6**.

Pressing MULTI-CONTROL left or right

The frequencies move up or down step by step.

Pressing and holding MULTI-CONTROL left or right

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

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

Pressing the center of MULTI-CONTROL

The function select screen appears. ■

Storing and recalling broadcast frequencies

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

1 When you find a frequency that you want to store in memory, keep touching a preset tuning key **P1** to **P6** until the preset number (e.g., **PCH1**) stops flashing.

The selected radio station has been stored in memory.

2 Touch the same preset tuning key **P1** to **P6**.

The radio station frequencies are recalled from memory. ■

Using the function menu

1 Display the “Function Menu” screen.

- ➔ For details of the operation, refer to *Displaying the “Function Menu” screen* on page 81.

2 Turn MULTI-CONTROL to select a function.

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

BSM (best stations memory) — **Local** (local seek tuning) — **Seek Mode** (seek mode) — **Blending** (reception mode) ■

Storing the strongest broadcast frequencies

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

1 Display the “Function Menu” screen.

- ➔ For details of the operation, refer to *Displaying the “Function Menu” screen* on page 81.

2 Turn MULTI-CONTROL to display “BSM”.

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

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

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

Tuning in strong signals

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

1 Display the “Function Menu” screen.

- For details of the operation, refer to *Displaying the “Function Menu” screen* on page 81.

2 Turn MULTI-CONTROL to display “Local”.

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

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

There are four levels of sensitivity for FM and two levels for AM:

- **FM: Level 1 — Level 2 — Level 3 — Level 4**
- **AM: Level 1 — Level 2**

- ☐ The FM “4” (AM “2”) setting allows reception of only the strongest stations, while lower settings let you receive weaker stations. 

Switches the seek mode

You can select the method of seek tuning.

1 Display the “Function Menu” screen.

- For details of the operation, refer to *Displaying the “Function Menu” screen* on page 81.

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

3 Press the center of MULTI-CONTROL to switch between “Seek All” and “Seek HD”.

- **Seek All:**
Seeks stations from both analog and digital broadcasting.
- **Seek HD:**
Seeks from digital broadcasting only.
- ☐ If you select “**Seek HD**” on this setting while “**Blending**” is set to “**Off**”, the setting

on “**Blending**” turns to “**On**” automatically. 

Switching the reception mode

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

1 Display the “Function Menu” screen.

- For details of the operation, refer to *Displaying the “Function Menu” screen* on page 81.

2 Turn MULTI-CONTROL to display “Blending”.

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

- **Off:**
Receives analog broadcasting only.
- **On:**
Automatically switches to the analog broadcast of the same frequency level as the digital broadcast.
-  is displayed while “**Blending**” is set to “**On**”.
- ☐ If you select “**Off**” on this setting while “**Seek Mode**” is set to “**Seek HD**”, the setting on “**Seek Mode**” turns to “**Seek All**” automatically. 

Playing audio CDs

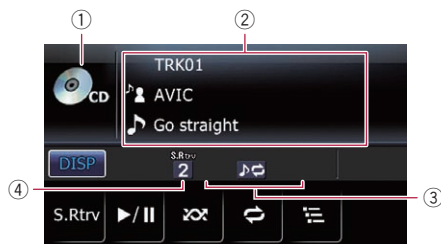
You can play a normal music CD using the built-in drive of the navigation system. This section describes how.

● Insert the disc you want to play into disc-loading slot.

Playback starts from the first track of the CD.

- If the disc is already inserted, press the **SRC/OFF** button to display the “CD” screen.
- ➡ For details, refer to *Switching the audio source* on page 79.

Reading the screen



① Source icon

Shows which source has been selected.

② Text display area

The titles of the items marked with an asterisk (*) will be displayed only when the CD-TEXT disc is used. When using a normal music CD, they are not displayed.

• Track number indicated next to “TRK”

Shows the number of the track currently playing.

• Play time

Shows the elapsed playing time within the current track.

• Artist name of the disc*

Shows the artist name of the disc currently playing (when available).

• Artist name of the track*

Shows the artist name of the track currently playing (when available).

• Disc title*

Shows the title of the disc currently playing (when available).

• Track title*

Shows the title of the track currently playing (when available).

③ Playback condition indicator

Indicates the current playback condition.

Playing tracks in random order

Indicator:	Meaning
No indicator	Does not play tracks in random order.
	Plays all tracks in the current disc in random order.

Setting a repeat play range

Indicator:	Meaning
No indicator	Repeats the current disc.
	Repeats just the current track.

Scanning tracks of a CD

Indicator:	Meaning
No indicator	Cancels the scan play.
	Plays the beginning of each track in the current repeat play range for about 10 seconds.

④ Sound Retriever indicator

➡ For details, refer to *Using Sound Retriever* on page 89.

Using the touch panel keys



①

Switches the combination of displayed items in the text display area.

- ② **S.Rtrv:**
Sets Sound Retriever function.
➡ For details, refer to *Using Sound Retriever* on the next page.
- ③ :
Playback and Pause
- ④ :
Plays tracks in random order.
➡ For details, refer to *Playing tracks in random order* on the next page.
- ⑤ :
Repeats playback.
➡ For details, refer to *Setting a repeat play range* on the next page.
- ⑥ :
Performs scan play of a CD.
➡ For details, refer to *Scanning tracks of a CD* on the next page. ■

Operating by hardware buttons

Pressing the BAND/ESC button

This operation is available only when playing a disc containing both CD-DA and compressed audio files.

- ➡ For details, refer to *Pressing the BAND/ESC button* on page 91.

Pressing MULTI-CONTROL right

Skips to the start of the next track.

Pressing and holding MULTI-CONTROL right

Performs fast forward.

Pressing MULTI-CONTROL left

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

Pressing and holding MULTI-CONTROL left

Performs fast reverse.

- Fast reverse stops when it reaches the beginning of the first track on the disc.

Pressing the center of MULTI-CONTROL

The function select screen appears.

Pressing the LIST button

Shows the list to select a track.

- This function is available only when the CD-TEXT disc is played.
- ➡ For details, refer to *Selecting a track from the list* on this page. ■

Selecting a track from the list

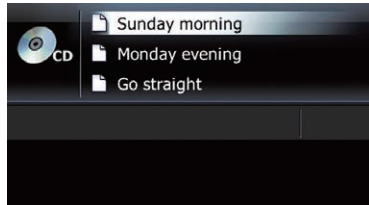
Track title list lets you see the list of track titles on a CD-TEXT disc and select one of them to play back.

1 Press the LIST button.

The list of track titles appears.

- To return to the previous screen, press the **BAND/ESC** or **LIST** button.

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



- Pressing **MULTI-CONTROL** up or down enables you to perform the equivalent operation.

3 Press the center of MULTI-CONTROL to play the selected track.

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

Playing audio CDs

Setting a repeat play range

The repeat play range can be changed by touching only one key.

- **Touch repeatedly until the desired repeat range indicator appears.**

- :
Repeats just the current track.
- No indicator (disc repeat):
Repeats the current disc.
- If you skip a track forward or backward while the repeat play range is set to , the repeat play range changes to disc repeat automatically. 

Playing tracks in random order

All of the tracks in the disc can be played at random by touching only one key.

- **Touch .**

Random play begins.

When you turn random play on,  appears.

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

Scanning tracks of a CD

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

- **Touch .**

Scan play begins.

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

- To turn scan play off, touch  again.
- If you touch  while the repeat play range is set to , the repeat play range changes to disc repeat automatically and scanning tracks will begin.

- If you skip a track forward or backward during scan play, the scan play is automatically canceled.
- If you touch  during scan play, the scan play is automatically canceled and playback of the current track will be repeated.
- If you touch  during scan play, the scan play is automatically canceled and tracks will be played in random order. 

Playback and Pause

- **Touch .**

Playback of the current track pauses, and "Pause" is displayed.

- To turn pause off, touch  again. 

Using Sound Retriever

Sound Retriever function automatically enhances compressed audio and restores rich sound.

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

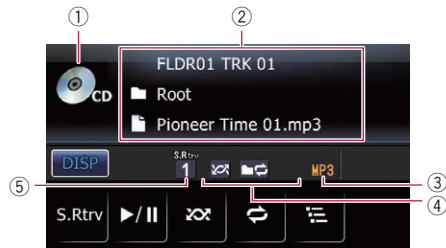
Each touch of [S.Rtrv] changes the settings as follows:

- :
Sound Retriever function (level 1) is activated.
- :
Sound Retriever function (level 2) is activated.
- No indicator:
Sets to off.
- "S.Rtrv2" has a stronger effect than "S.Rtrv1" and is more effective when playing back highly compressed audio data. 

You can play a disc that contains compressed audio files using the built-in drive of the navigation system. This section describes these operations.

- ❑ In the following description, the MP3, WMA, AAC, WAV files are collectively referred to as “Compressed audio file”.
- **Insert the disc you want to play into disc-loading slot.**
Playback starts from the first file of the ROM.
 - ❑ If the disc is already inserted, press the **SRC/OFF** button to display the “CD” screen.
 - ➡ For details, refer to *Switching the audio source* on page 79.
 - ❑ When playing a disc containing a mixture of various media file types, you can switch between media file types to play.
 - ➡ For details, refer to *Pressing the BAND/ESC button* on the next page.

Reading the screen



- ① **Source icon**
Shows which source has been selected.
- ② **Text display area**
 - **Folder number indicated next to “FLDR”**
Shows the folder number currently playing.
 - **Track number indicated next to “TRK”**
Shows the track number currently playing.
 - **Play time**

Shows the elapsed playing time within the current track.

- **Comment**
Shows the comment of the file currently playing (when available).
- **Folder name**
Shows the folder name currently playing.
- **File name**
Shows the file name currently playing.
- **Track title**
Shows the title of the track currently playing (when available).
- **Artist name**
Shows the artist name for the current song. (when available.)
- **Album title**
Shows the title of the album for the current song. (when available.)
 - ❑ The item is blank if there is no corresponding information.
- ③ **File type indicator**
Shows the type of audio file currently playing.
- ④ **Playback condition indicator**
Indicates the current playback condition.

Playing files in random order

Indicator:	Meaning
No indicator	Does not play tracks in random order.
	Plays all audio files in the current repeat play range in random order.

Setting a repeat play range

Indicator:	Meaning
No indicator	Repeats all compressed audio files.
	Repeats just the current file.
	Repeats the current folder.

Playing music files on ROM

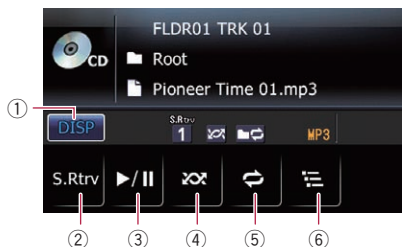
Scanning folders and files

Indicator:	Meaning
No indicator	Cancels the scan play.
	Plays the first audio files of each folder for about 10 seconds when the repeat range is set to all repeat. Plays the beginning of each audio file in the current folder for about 10 seconds when the repeat range is set to  .

⑤ Sound Retriever indicator

- ➔ For details, refer to **Using Sound Retriever** on page 93. 

Using the touch panel keys



- ① **DISP**:
Switches the combination of displayed items in the text display area.
- ② **S.Rtrv**:
Sets Sound Retriever function.
➔ For details, refer to **Using Sound Retriever** on page 93.
- ③ :
Playback and Pause
- ④ :
Plays tracks in random order.
➔ For details, refer to **Playing tracks in random order** on the next page.
- ⑤ :
Repeats playback.
➔ For details, refer to **Setting a repeat play range** on the next page.

⑥

Scans folders and tracks.

- ➔ For details, refer to **Scanning folders and tracks** on page 93. 

Operating by hardware buttons

Pressing the BAND/ESC button

Switches between CD (audio data (CD-DA)) and ROM (compressed audio file).

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

Pressing and holding the BAND/ESC button

Playback returns to the root folder.

Pressing MULTI-CONTROL up or down

Selects the previous or next folder and plays the first track on the folder.

-  You cannot select a folder that does not have a compressed audio file recorded in it.

Pressing MULTI-CONTROL right

Skips to the start of the next track.

Pressing and holding MULTI-CONTROL right

Performs fast forward.

Pressing MULTI-CONTROL left

Skips to the start of the current track.

Pressing it twice continuously will skip to the previous track.

Pressing and holding MULTI-CONTROL left

Performs fast reverse.

-  Fast reverse stops when it reaches the beginning of the first track on the disc.

Pressing the center of MULTI-CONTROL

The function select screen appears.

Pressing the LIST button

Shows the list to select a track.

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

Selecting a track from the list

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

1 Press the LIST button.

The list of track titles and folder names appears.

- ☐ To return to the previous screen, press the **BAND/ESC** or **LIST** button.
- ☐ If the selected folder does not contain any playable file, the file list is not displayed.

2 Turn MULTI-CONTROL to select the desired folder or track.

- ☐ Pressing **MULTI-CONTROL** up or down enables you to perform the equivalent operation.

3 Press the center of MULTI-CONTROL to display the content of the folder or play the selected track.

When a folder is selected, the content of the lower folder is displayed.

When a track is selected, it is played.

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

- ☐ When a folder is selected, the first track of the selected folder is played by pressing and holding the center of **MULTI-CONTROL**.
- ☐ When the lower folder is listed, the list returns to the upper folder by pressing **MULTI-CONTROL** left.
 - If the root folder is listed, this operation is not available.
- ☐ The content of the root folder is displayed by pressing and holding **MULTI-CONTROL** left.
 - If the root folder is listed, this operation is not available.

Setting a repeat play range

● Touch repeatedly until the desired repeat range indicator appears.

- : Repeats just the current track.
- : Repeats the folder currently playing.
- No indicator (all repeat): Repeats all.
- ☐ If you return to the root folder while the repeat play range is set to or , the repeat play range changes to disc repeat automatically.
- ☐ If you skip a track forward or backward while the repeat play range is set to , the repeat play range changes to automatically.

Playing tracks in random order

You can play in a selected repeat range, in random order.

● Touch .

Random play begins.

When you turn random play on, appears.

- ☐ To turn random play off, touch again.

Playing music files on ROM

- ❑ If you touch  while the repeat play range is set to , the repeat play range changes to  automatically and tracks will be played in random order. 

Scanning folders and tracks

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

● Touch .

Scan play begins.

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

- ❑ To turn scan play off, touch  again.
- ❑ If you touch  while the repeat play range is set to , the repeat play range changes to  automatically and scanning tracks will begin.
- ❑ If you touch  while the repeat play range is set to disc, scan play is performed for only the first tracks of each folder.
- ❑ If you skip a track forward or backward, or return to the root folder during scan play, the scan play is automatically canceled.
- ❑ If you touch  during scan play, the scan play is automatically canceled and playback of the current track will be repeated.
- ❑ If you touch  during scan play, the scan play is automatically canceled and tracks will be played in random order. 

Playback and Pause

● Touch .

Playback of the current track pauses, and "Pause" is displayed.

- ❑ To turn pause off, touch  again. 

Using Sound Retriever

Sound Retriever function automatically enhances compressed audio and restores rich sound.

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

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

- :
Sound Retriever function (level 1) is activated.
- :
Sound Retriever function (level 2) is activated.
- No indicator:
Sets to off.
- ❑ "S.Rtrv2" has a stronger effect than "S.Rtrv1" and is more effective when playing back highly compressed audio data. 

You can play the compressed audio files stored in the USB storage device.

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

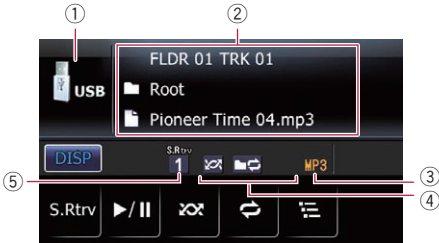
1 Plug the USB storage device into the USB connector.

- ➡ For detailed operations, refer to Operation Manual for AVIC-U310BT.

2 Press the SRC/OFF button to display the “USB” screen.

- ➡ For details, refer to *Switching the audio source* on page 79.

Reading the screen



- ① **Source icon**
Shows which source has been selected.
- ② **Text display area**
 - **Folder number indicated next to “FLDR”**
Shows the folder number currently playing.
 - **Track number indicated next to “TRK”**
Shows the track number currently playing.
 - **Play time**
Shows the elapsed playing time of the current file.
 - **Comment**
Shows the comment of the file currently playing (when available).
 - **Folder name**

Shows the folder name currently playing.

- **File name**
Shows the file name currently playing.
 - **Track title**
Shows the title of the track currently playing (when available).
 - **Artist name**
Shows the artist name currently playing (when available).
 - **Album title**
Shows the title of the album of the current track (when available).
 - ❑ The item is blank if there is no corresponding information.
- ③ **File type indicator**
Shows the type of audio file currently playing.
- ④ **Playback condition indicator**
Indicates the current playback condition.

Playing files in random order

Indicator:	Meaning
No indicator	Does not play files in random order.
	Plays all audio files in the current repeat play range in random order.

Setting a repeat play range

Indicator:	Meaning
No indicator	Repeats all compressed audio files.
	Repeats just the current file.
	Repeats the current folder.

Scanning folders and files

Indicator:	Meaning
No indicator	Cancels the scan play.
	Plays the first audio files of each folder for about 10 seconds when the repeat range is set to all repeat.
	Plays the beginning of each audio file in the current folder for about 10 seconds when the repeat range is set to .

Playing music files on USB

⑤ Sound Retriever indicator

- ➔ For details, refer to **Using Sound Retriever** on page 97.

Using the touch panel keys



- ① **DISP**: Switches the combination of displayed items in the text display area.
- ② **S.Rtrv**: Sets Sound Retriever function.
 - ➔ For details, refer to **Using Sound Retriever** on page 97.
- ③ **▶/||**: Playback and Pause
- ④ **⌘**: Plays files in random order.
 - ➔ For details, refer to *Playing files in random order* on the next page.
- ⑤ **↺**: Repeats playback.
 - ➔ For details, refer to *Setting a repeat play range* on the next page.
- ⑥ **≡**: Performs scan play of folders and files.
 - ➔ For details, refer to *Scanning folders and files* on the next page.

Operating by hardware buttons

Pressing and holding the BAND/ESC button

Playback returns to the root folder.

Pressing MULTI-CONTROL up or down

Plays the first playable file on the previous or next folder.

- The folders where there are no playable files are skipped.

Pressing MULTI-CONTROL right

Skips to the start of the next file.

Pressing and holding MULTI-CONTROL right

Performs fast forward.

Pressing MULTI-CONTROL left

Skips to the start of the current file.

Pressing it twice in a row will skip to the start of the previous file.

Pressing and holding MULTI-CONTROL left

Performs fast reverse.

- There is no sound on fast reverse or forward.

Pressing the center of MULTI-CONTROL

The function select screen appears.

Pressing the LIST button

Shows the list to select a file.

- ➔ For details, refer to *Selecting a file from the list* on this page.

Selecting a file from the list

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

1 Press the LIST button.

The list of file and folder names appears.

- To return to the previous screen, press the **BAND/ESC** or **LIST** button.
- If the selected folder does not contain any playable file, the file list is not displayed.

2 Turn MULTI-CONTROL to select the desired file name.



- ❑ Pressing **MULTI-CONTROL** up or down enables you to perform the equivalent operation.

3 Press the center of MULTI-CONTROL to display the content of the folder or play the selected file.

When a folder is selected, the content of the lower folder is displayed.

When a file is selected, it plays the selected file.

- ❑ Pressing **MULTI-CONTROL** right enables you to perform the equivalent operation.
- ❑ When a folder is selected, the first file of the selected folder is played by pressing and holding the center of **MULTI-CONTROL**.
- ❑ When the lower folder is listed, the list returns to the upper folder by pressing **MULTI-CONTROL** left.
 - If the root folder is listed, this operation is not available.
- ❑ The content of the root folder is displayed by pressing and holding **MULTI-CONTROL** left.
 - If the root folder is listed, this operation is not available. ■

Setting a repeat play range

● Touch repeatedly until the desired repeat range indicator appears.

- :
Repeats just the current file.
- :
Repeats the folder currently playing.

- No indicator (all repeat):
Repeats all.
- ❑ If you perform returning to the root folder while the repeat play range is set to  or , the repeat play range changes to all repeat automatically. ■

Playing files in random order

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

● Touch .

Random play begins.

When you turn random play on,  appears.

- ❑ To turn random play off, touch  again.
- ❑ If you touch  while the repeat play range is set to , the repeat play range changes to  automatically and files will be played in random order. ■

Scanning folders and files

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

● Touch .

Scan play begins.

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

- ❑ To turn scan play off, touch  again.
- ❑ If you touch  while the repeat play range is set to , the repeat play range changes to  automatically and scanning files will begin.
- ❑ If you touch  while the repeat play range is set to all, scan play is performed for only the first files of each folder.
- ❑ If you skip a file forward, backward, or return to the root folder during scan play, the scan play is automatically canceled.
- ❑ If you touch  during scan play, the scan play is automatically canceled and playback of the current file will be repeated.

Playing music files on USB

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

Playback and Pause

- Touch .

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

- ❑ To turn pause off, touch  again. 

Using Sound Retriever

Sound Retriever function automatically enhances compressed audio and restores rich sound.

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

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

- : Sound Retriever function (level 1) is activated.
 - : Sound Retriever function (level 2) is activated.
 - No indicator: Sets to off.
- ❑ "**S.Rtrv2**" has a stronger effect than "**S.Rtrv1**" and is more effective when playing back highly compressed audio data. 

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

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

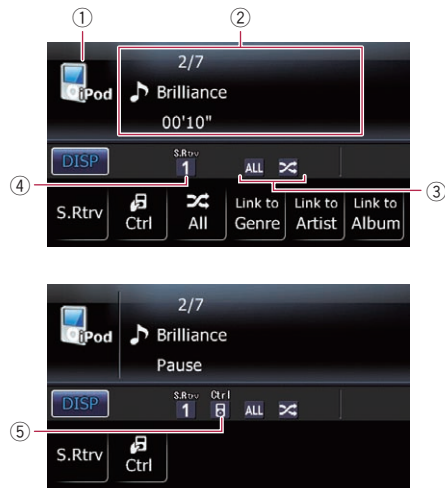
1 Connect your iPod.

- ➔ For detailed operations, refer to Operation Manual for AVIC-U310BT.

2 Press the SRC/OFF button to display the “iPod” screen.

- ➔ For details, refer to *Switching the audio source* on page 79.

Reading the screen



- ① **Source icon**
Shows which source has been selected.
- ② **Text display area**
 - **Song number**
Shows the number of the song currently playing and total number of songs in the selected list.
 - **Play time**
Shows the elapsed playing time within the current song.
 - **[Song icon]: Song title (episode)**

Shows the title of the current song.
When a podcast is played, the episode is displayed.

- **[Artist icon]: Artist name**
Shows the artist name for the current song.
- **[Album icon]: Album title (podcast title)**
Shows the title of the album of the current song.
When a podcast is played, the podcast title is displayed.

③ Playback condition indicator

Indicates the current playback condition.

Setting a repeat play range

Indicator:	Meaning
	Repeats all songs or videos in the selected list.
	Repeats just the current song or video.

Setting the shuffle play for music

Indicator:	Meaning
No indicator	Cancels the shuffle play.
	Plays back songs or videos in random order within the selected list. Selects an album randomly, and then plays back all songs in that album in order.

④ Sound Retriever indicator

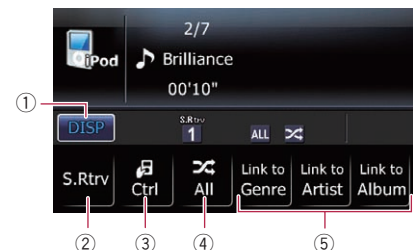
- ➔ For details, refer to *Using Sound Retriever* on page 101.

⑤ iPod control mode indicator

- ➔ For details, refer to *Operating the functions from your iPod* on page 101. ❑

Using an iPod

Using the touch panel keys



- ① **DISP:**
Switches the combination of displayed items in the text display area.
- ② **S.Rtrv:**
Sets Sound Retriever function.
➔ For details, refer to **Using Sound Retriever** on page 101.
- ③ **Ctrl:**
Sets iPod control mode.
➔ For details, refer to *Operating the functions from your iPod* on page 101.
- ④ **All:**
Sets shuffle all.
➔ For details, refer to *Playing all songs in random order (shuffle all)* on page 101.
- ⑤ **Link to Genre:**
Link to Artist:
Link to Album:
Starts playing the list of songs related to the currently playing song.
➔ For details, refer to *Playing songs related to the currently playing song* on the next page. ■

Operating by hardware buttons

Pressing MULTI-CONTROL right

Skips to the start of the next song.

Pressing and holding MULTI-CONTROL right

Performs fast forward.

Pressing MULTI-CONTROL left

Skips to the start of the current song.

Pressing it twice continuously will skip to the previous song.

Pressing and holding MULTI-CONTROL left

Performs fast reverse.

Pressing the center of MULTI-CONTROL

The function select screen appears.

Pressing the LIST button

Shows the list to select a song.

➔ For details, refer to *Selecting a song from the list* on this page. ■

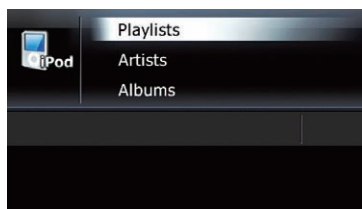
Selecting a song from the list

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

1 Press the LIST button to display the top category menu.

- To return to the previous screen, press the **BAND/ESC** button.

2 Turn MULTI-CONTROL to select a category.



- **Playlists** (playlists)
- **Artists** (artists)
- **Albums** (albums)
- **Songs** (songs)
- **Podcasts** (podcasts)
- **Genres** (genres)
- **Composers** (composers)
- **Audiobooks** (audiobooks)

- ❑ Pressing **MULTI-CONTROL** up or down enables you to perform the equivalent operation.

3 Press the center of **MULTI-CONTROL** to narrow down the content of the category.

When a category is selected, the content of the category will be narrowed down.

When a song is selected, it plays the selected song.

- ❑ Pressing **MULTI-CONTROL** right enables you to perform the equivalent operation.
- ❑ When a category is selected, the first song of the selected category is played by pressing and holding the center of **MULTI-CONTROL**.
 - Pressing **MULTI-CONTROL** right enables you to perform the equivalent operation.
- ❑ When the lower tier of items are listed, the list returns to the uppermost tier of items by pressing and holding **MULTI-CONTROL** left.
 - If the uppermost tier of items are listed, this operation is not available.
- ❑ Selecting "**All**" on the list displays all options in the current category. For example, if you select "**All**" after selecting "**Artists**", you can proceed to the next screen with all artists in the list selected.

4 On the song (or episode) list, press the center of **MULTI-CONTROL** to play the selected song (or episode). ▢

Searching for applicable items alphabetically

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

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

1 Press the **LIST** button to display the top category menu.

- ❑ To return to the previous screen, press the **BAND/ESC** button.

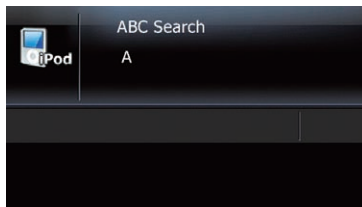
2 Turn **MULTI-CONTROL** to display the desired category.

3 Press the center of **MULTI-CONTROL** to confirm the selected item.

The lower categories are displayed.

4 Press the **LIST** button to change the search mode to alphabetical search.

5 Turn **MULTI-CONTROL** to select the desired character.



6 Press the center of **MULTI-CONTROL** to begin a search.

- ❑ An article listed below and space at the beginning of the artist name will be ignored and the next character will be taken into account for searching.
 - "A" or "a"
 - "AN", "An", or "an"
 - "THE", "The", or "the"
- ❑ If alphabetical search is aborted, **Not Found** is displayed.

7 On the song (or episode) list, press the center of **MULTI-CONTROL** to play the selected song (or episode). ▢

Playing songs related to the currently playing song

You can play songs related to the currently playing song, using of the following lists.

Using an iPod

- Album list of currently playing genre
- Album list of currently playing artist
- Song list of currently playing album
- ☐ Depending on the number of files in the iPod, there may be a delay when displaying a list.

● Touch [Link to Genre], [Link to Artist], or [Link to Album] to select a search mode.

- **Link to Genre:**
Plays the album of currently playing genre.
- **Link to Artist:**
Plays the album of currently playing artist.
- **Link to Album:**
Plays the song of currently playing album.

“Searching” flashes while searching the list and then the playback of the list starts.

- ☐ The link play mode is canceled by pressing the **BAND/ESC** or **LIST** button when “Searching” flashes.
- ☐ If the related albums or songs are not found, **Not Found** is displayed. 

Playing all songs in random order (shuffle all)

● Touch All to turn shuffle all on.

All songs on the iPod will play randomly.

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

Operating the functions from your iPod

You can control the functions by using iPod itself while iPod is connected to the navigation system. Sound can be heard from the car’s speakers, and operation can be conducted from your iPod.

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

This function can be operated with the following iPod models:

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

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

1 Touch Ctrl to switch the control mode.

Each touch of  Ctrl changes the settings as follows:

- :
This navigation system’s iPod function can be operated from the connected iPod.
- No indicator:
This navigation system’s iPod function can be operated from this navigation system.

2 When you select , operate the connected iPod to select a song and play.

- ☐ Switching the control mode to  pauses song playback. Operate the iPod to start playback.
- ☐ Even if the control mode is set to , following functions are available from this navigation system.
 - Adjusting the volume
 - Fast reverse or forward
 - Skip forward or backward
 - Playback and Pause
 - Sound Retriever 

Using Sound Retriever

Sound Retriever function automatically enhances compressed audio and restores rich sound.

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

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

- : Sound Retriever function (level 1) is activated.
- : Sound Retriever function (level 2) is activated.
- No indicator:
Sets to off.
- ☐ **"S.Rtrv2"** has a stronger effect than **"S.Rtrv1"** and is more effective when playing back highly compressed audio data. 

Using the function menu

1 Display the "Function Menu" screen.

- ➔ For details of the operation, refer to *Displaying the "Function Menu" screen* on page 81.

2 Turn MULTI-CONTROL to select a function.

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

Play Mode (play mode) — **Shuffle Mode** (shuffle mode) — **Pause** (pause) — **Audio-books** (audiobooks)

- ☐ Only **Pause** is available while the control mode is set to iPod ().
- ➔ For details, refer to *Operating the functions from your iPod* on the previous page. 

Setting a repeat play range

1 Display the "Function Menu" screen.

- ➔ For details of the operation, refer to *Displaying the "Function Menu" screen* on page 81.

2 Turn MULTI-CONTROL to select "Play Mode".

3 Press the center of MULTI-CONTROL to set.

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

- **Repeat All:**
Repeats all songs in the selected list.
- **Repeat One:**
Repeats just the current song.
- ☐ Icons below are displayed as the repeat play indicator.
When the setting is **"Repeat All"**,  appears.
When the setting is **"Repeat One"**,  appears. 

Playing songs in random order (shuffle)

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

1 Display the "Function Menu" screen.

- ➔ For details of the operation, refer to *Displaying the "Function Menu" screen* on page 81.

2 Turn MULTI-CONTROL to display "Shuffle Mode".

3 Press the center of MULTI-CONTROL to set.

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

- **Shuffle Off:**
Plays back songs in normal order.
- **Shuffle Songs:**
Plays back songs in random order within the selected list.
- **Shuffle Albums:**
Selects an album randomly, and then plays back all songs in that album in order. 

Using an iPod

Playback and Pause

- 1 **Display the “Function Menu” screen.**
 ➤ For details of the operation, refer to *Displaying the “Function Menu” screen* on page 81.
- 2 **Turn MULTI-CONTROL to select “Pause”.**
- 3 **Press the center of MULTI-CONTROL to set.**
- 4 **Press the center of MULTI-CONTROL to switch between “On” and “Off”.** 

Setting the audiobook play speed

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

- 1 **Display the “Function Menu” screen.**
 ➤ For details of the operation, refer to *Displaying the “Function Menu” screen* on page 81.
- 2 **Turn MULTI-CONTROL to display “Audiobooks”.**
- 3 **Press the center of MULTI-CONTROL repeatedly until the desired setting appears in the display.**
 Each press of **MULTI-CONTROL** changes the settings as follows:
 - **Normal:**
Plays back audiobooks in normal speed.
 - **Faster:**
Plays back audiobooks faster than normal speed.
 - **Slower:**
Plays back audiobooks slower than normal speed. 

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

The following XM satellite digital tuner units cannot be connected:
GEX-P900XM, GEX-P910XM

Reading the screen

Channel mode



Category mode



- ① **Source icon**
Shows which source has been selected.
- ② **Text display area**

- **Band**
Shows the XM band that has been selected.
- **Channel number indicated next to "CH"**
Shows the XM channel number the tuner is currently tuned to.
- **Preset number indicated next to "PCH"**
Shows what preset item has been selected.
- **Detail information**
Shows the detailed information of the broadcast channel currently being received.
- **[Icon]: Artist name**
Shows the artist name for the current song.
- **[Icon]: Song title**
Shows the title of the current song and program.
- **[Icon]: Category name**
Shows the category of broadcast channel.

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

Using the XM tuner

Using the touch panel keys



- ① **DISP** :
Switches the combination of displayed items in the text display area.
- ② **SAT** :
Switching the XM channel select mode.
➡ For details, refer to *Switching the XM channel select mode* on this page.
- ③ **P1** to **P6** :
Recalls channels from the preset.
➡ For details, refer to *Storing and recalling broadcast stations* on this page.

Operating by hardware buttons

Pressing the BAND/ESC button

Band can be selected from among **XM1**, **XM2**, or **XM3**. This is useful for switching the preset item.

Pressing MULTI-CONTROL up or down

During **Channel** mode:

You can recall radio stations assigned to preset tuning keys **P1** to **P6**.

During **Category** mode:

The categories move up or down one at a time.

Pressing MULTI-CONTROL left or right

During **Channel** mode:

The channels move up or down one at a time.

During **Category** mode:

The channels move up or down one at a time within a selected category.

Pressing and holding MULTI-CONTROL left or right

During **Channel** mode:

You can skip the broadcasting channels.

During **Category** mode:

You can skip the broadcasting channels within a selected category.

Pressing the center of MULTI-CONTROL

The function select screen appears.

Storing and recalling broadcast stations

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

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

2 Keep touching a preset tuning key **P1 to **P6** until the XM preset number (e.g., P.CH1) stops flashing.**

The selected station has been stored in memory.

- Up to 18 stations, six for each of three XM bands can be stored in memory.

3 Touch the same preset tuning key **P1 to **P6**.**

The stations are recalled from memory.

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

Switching the XM channel select mode

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

- Touch **SAT** repeatedly to set the desired channel select mode.

The setting is changed as follows:

- **Channel**: **Channel mode**
You can select a channel from all channels when you operate this function.
- **Category**: **Category mode**
You can select a channel within a selected category that you operate this function. 

Using the SIRIUS tuner

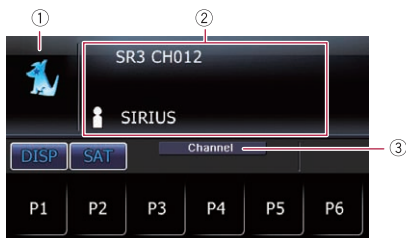
You can use the navigation system to control a Pioneer Sirius Satellite Radio tuner, which is sold separately.

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

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

Reading the screen

Channel mode



Category mode



Instant Replay mode



① Source icon

Shows which source has been selected.

② Text display area

• Band

Shows the SIRIUS band that has been selected.

• Channel number indicated next to "CH"

Shows the SIRIUS channel number that the tuner is tuned to.

• Preset number indicated next to "P.CH"

Shows what preset item has been selected.

• Play time

Shows the elapsed playing time within the stored broadcast.

- ❑ Play time is displayed during the "Instant Replay" mode.

• Channel name

Shows the channel name of broadcast channel.

• Category name

Shows the category of broadcast channel.

• Artist name

Shows the artist name for the current song.

• Song title and program title

Shows the title of the current song and program.

• Composer name indicator

Shows the composer name of the song currently playing.

③ SIRIUS channel select mode indicator

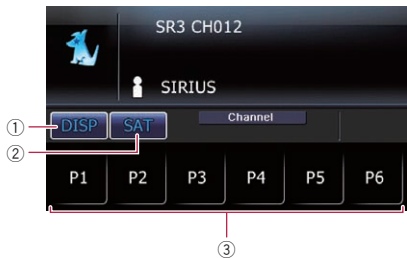
Shows what channel select mode has been selected. You can select a channel from all channels in **Channel** mode, and select a channel from the selected category in **Category** mode.

➡ For details, refer to *Switching the SIRIUS channel select mode* on the next page.

④ **Instant Replay mode indicator**

Shows when the “Instant Replay” mode is on. 

Using the touch panel keys



① **DISP**

Switches the combination of displayed items in the text display area.

Each touch of **DISP** changes the display information.

☐ Touching and holding **DISP** scrolls displayed information.

② **SAT**

Switching the SIRIUS channel select mode.

➡ For details, refer to *Switching the SIRIUS channel select mode* on the next page.

③ **P1** to **P6**

Recalls channels from the preset.

➡ For details, refer to *Storing and recalling broadcast stations* on this page. 

Operating by hardware buttons

Pressing the BAND/ESC button

Band can be selected from among **SR1**, **SR2**, or **SR3**. This is useful for switching the preset item.

Pressing MULTI-CONTROL up or down

During **Channel** mode:

You can recall radio stations assigned to pre-set tuning keys **P1** to **P6**.

During **Category** mode:

The categories move up or down one at a time.

Pressing MULTI-CONTROL left or right

During **Channel** mode:

The channels move up or down one at a time.

During **Category** mode:

The channels move up or down one at a time within a selected category.

Pressing and holding MULTI-CONTROL left or right

You can skip the broadcasting channels.

Pressing the center of MULTI-CONTROL

The function select screen appears. 

Storing and recalling broadcast stations

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

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

2 Keep touching a preset tuning key **P1 to **P6** until the SIRIUS preset number (e.g., P.CH1) stops flashing.**

The selected station has been stored in memory.

☐ Up to 18 stations, six for each of three SIRIUS bands can be stored in memory.

Using the SIRIUS tuner

3 Touch the same preset tuning key **P1** to **P6**.

The station is recalled from memory.

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

Switching the SIRIUS channel select mode

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

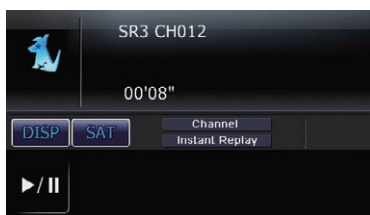
● Touch **SAT** repeatedly to set the desired channel select mode.

The setting is changed as follows:

- **Channel** : **Channel mode**
You can select a channel from all channels when you operate this function.
- **Category** : **Category mode**
You can select a channel within a selected category that you operate this function. 

Using the “Instant Replay” function

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



1 Touch and hold **SAT** on the SIRIUS screen to activate the “Instant Replay” mode.

- ❑ It begins replaying the stored broadcast on the SIRIUS tuner.
- ❑ To cancel the “**Instant Replay**” mode, press **BAND/ESC** button.

2 Use **MULTI-CONTROL** or touch panel keys on the screen for “Instant Replay”.

- Pressing **MULTI-CONTROL** right
Forwards play to the next song or program.
- Pressing and holding **MULTI-CONTROL** right
Performs fast forward.
- Pressing **MULTI-CONTROL** left
Returns to the start of the current song or program. Pressing again will skip back to the previous song or program.
- Pressing and holding **MULTI-CONTROL** left
Performs fast reverse.
- Touching **DISP** 
Switches between playback and pause.

- ❑ During “**Instant Replay**” mode, each touch of **DISP** changes the display information as follows;

Time position — Channel number — Channel name — Channel category — Artist name/feature — Song/program title — Composer

- ❑ You cannot replay the broadcast prior to the beginning of stored data. 

Using the function menu

1 Display the “Function Menu” screen.

- For details of the operation, refer to *Displaying the “Function Menu” screen* on page 81.

2 Turn MULTI-CONTROL to select a function.

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

Game Alert (game alert setting) —

Team Setting (team setting) — **Game Info** (game information) 

Using the Game Alert function

Selecting teams for Game Alert

This navigation system can alert you when games involving your favorite sports teams are about to start. To use this function you need to store the teams you want to follow in advance.

1 Display the “Function Menu” screen.

- For details of the operation, refer to *Displaying the “Function Menu” screen* on page 81.

2 Turn MULTI-CONTROL to display “Team Setting”.

3 Press MULTI-CONTROL left or right to select a desired league.

League names are switched in the display.

4 Press the center of MULTI-CONTROL to store the selected league in memory.

The game alert function will start on that league.

- ❑ To turn the Game Alert off of the selected league, press the center of **MULTI-CONTROL** again.

5 Press MULTI-CONTROL up or down to select a desired team.

Teams in the selected category are switched in the display.

6 Press the center of MULTI-CONTROL to store the selected team in memory.

The game alert function will start on that team.

- ❑ To turn the Game Alert off of the selected team, press the center of **MULTI-CONTROL** again.

7 Repeat these steps for selecting other teams.

Switching the Game Alert on or off

Once you made team selections, you need to turn the Game Alert function on.

1 Display the “Function Menu” screen.

- For details of the operation, refer to *Displaying the “Function Menu” screen* on page 81.

2 Turn MULTI-CONTROL to display “Game Alert”.

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

When a game involving one of your favorite teams is broadcast

When a game of the selected team is about to start (or is currently playing) on a different station or when the power of this navigation system turns on, an alert is displayed. Press and hold the center of **MULTI-CONTROL** to switch to that station, and you can listen to that game.

Using the SIRIUS tuner

- ❑ If you do not operate the function within about 10 seconds, the display is automatically returned.
- ❑ To cancel the alert, press **BAND/ESC** button.
- ❑ Alerts may not be available depending on the status of the navigation system. ■

Displaying Game Information

If games of your selected teams are currently playing, you can display information of the games and tune to the broadcast channel.

- ❑ The game information function is available when teams and leagues are registered while the **"Game Alert"** setting is **"On"**.

1 Display the "Function Menu" screen.

- ➡ For details of the operation, refer to *Displaying the "Function Menu" screen* on page 81.

2 Turn MULTI-CONTROL to display "Game Info".

The game information of your selected team is displayed.

3 Press MULTI-CONTROL up or down to select a game.

- ❑ The game score will be updated automatically.

4 Press the center of MULTI-CONTROL to switch to that station to listen to the game.

- ❑ If you have not made any team selections, a message appears.
- ❑ When no games involving your favorite teams are currently being played, a message appears. ■

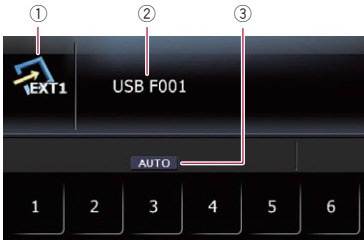
The term “external unit” refers to future Pioneer devices that are not currently planned for, or to devices that allow control of basic functions although they are not fully controlled by the navigation system. Two external units can be controlled by this navigation system. When two external units are connected, the navigation system allocates them as external unit 1 or external unit 2.

For details of the connection method, refer to Installation Manual.

For details of the operation, refer to the external unit's operation manual. This section provides information on external unit operations with the navigation system that differ from those described in the external unit's operation manual.

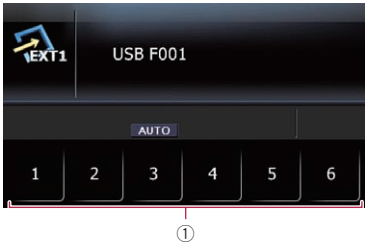
- ❑ Operation varies depending on the external unit connected. (In some cases, the external unit may not respond.)

Reading the screen



- ① **Source icon**
Shows which source has been selected.
- ② **External unit indicator**
Displays the information that is sent by connected external units.
- ③ **Auto/Manual mode indicator**
Shows the current mode. ■

Using the touch panel keys



- ① The external unit can be operated by transmitting the operating commands set to “1” key through “6” key.
 - ❑ Operation varies depending on the external unit connected. (In some cases, some functions may not be used until you touch and hold the key.) ■

Operating by hardware buttons

Pressing the BAND/ESC button

You can send a band command to the external unit.

- ❑ Operation varies depending on the external unit connected. (In some cases, the external unit may not respond.)

Pressing MULTI-CONTROL up, down, left or right

You can operate the external unit.

- ❑ Operation varies depending on the external unit connected. (In some cases, some functions may not be used until you touch and hold the key.)

Pressing the center of MULTI-CONTROL

The function select screen appears. ■

Using the external unit (EXT1, EXT2)

Using the function menu

1 Display the "Function Menu" screen.

- For details of the operation, refer to *Displaying the "Function Menu" screen* on page 81.

2 Turn MULTI-CONTROL to select a function.

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

Function1 (function 1) — **Function2** (function 2) — **Function3** (function 3) — **Function4** (function 4) — **Auto/Manual** (auto/manual) 

Operate the external unit by using "Function1" — "Function4"

The external unit can be operated by transmitting the operating commands set to "Function1" through "Function4".

1 Display the "Function Menu" screen.

- For details of the operation, refer to *Displaying the "Function Menu" screen* on page 81.

2 Turn MULTI-CONTROL until the desired setting appears in the display.

3 Press the center of MULTI-CONTROL to set.

- ☐ The operating commands set to "Function1" through "Function4" vary depending on the external unit.
- ☐ Some functions may not be used until you touch and hold the key. 

Switches between automatic and manual function

1 Display the "Function Menu" screen.

- For details of the operation, refer to *Displaying the "Function Menu" screen* on page 81.

2 Turn MULTI-CONTROL until "Auto/Manual" appears in the display.

3 Pressing the center of MULTI-CONTROL switches between "Auto" and "Manual".

- ☐ Operating commands set for "Auto" and "Manual" operations vary depending on the external unit connected. 

A stereo mini plug cable lets you connect your navigation system to auxiliary equipment. For more details, refer to the stereo mini plug cable owner's manual.

Reading the screen



① Source icon

Shows which source has been selected. 

Selecting “AUX” as the source

1 Turn on the “AUX” source.

- ➔ For details, refer to *Switching the auxiliary setting* on page 125.

2 Press the SRC/OFF button to display the “AUX” screen.

- ➔ For details, refer to *Switching the audio source* on page 79. 

Customizing preferences

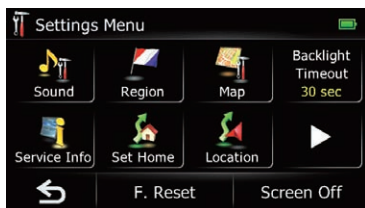
Displaying the “Settings Menu” screen

1 Touch [Home] on the map screen.

The “Top Menu” screen appears.

2 Touch [Settings].

The “Settings Menu” screen appears.



3 Touch the desired option.

- Touching ► or ◀ on the right of screen allows you to see the next or previous page. □

Setting the volume for navigation system

The sound volume for the navigation can be set.

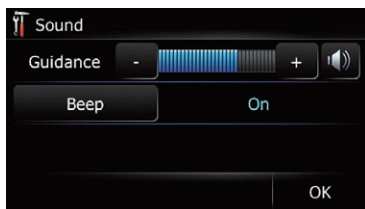
1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on this page.

2 Touch [Sound].

The “Sound” screen appears.

3 Touch [+] or [-] next to “Guidance”.



Controls the master volume of both the navigation guidance and beep.

When set to , guidance is output. When set to , no guidance is output.

▪ Touch [Beep].

Each time you touch the key changes the setting.

- **On** (default):
A beep sounds.

• **Off:**

The beep sound is muted. .

Customizing the regional settings

Selecting the language

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

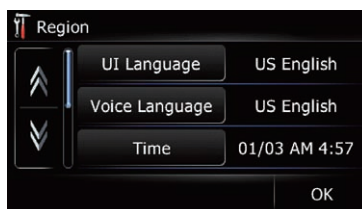
1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on this page.

2 Touch [Region].

The “Region” screen appears.

3 Touch [UI Language].



The “Select UI Language” screen appears.

4 Touch the desired language.

After the language is selected, the previous screen returns.

5 Touch [Voice Language].

The “Voice Language Selection” screen appears.

6 Touch the desired language.

After the language is selected, the previous screen returns.

7 Touch [OK] on the “Region” screen.

The navigation system restarts.

Setting the time difference

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

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on the previous page.

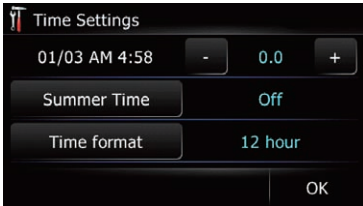
2 Touch [Region].

The “Region” screen appears.

3 Touch [Time].

The “Time Settings” screen appears.

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



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

5 Touch [Summer Time].

If necessary, set to summer time.

Summer time setting is off by default. Touch [Summer Time] to change the setting if you are in the summer time period.

6 Touch [Time format].

Each time you touch the key changes the setting.

- **12 hour** (default):
Changes the display to 12-hour format with am/pm.
- **24 hours:**
Changes the display to 24-hour format.

Changing the unit between km and miles

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

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on the previous page.

2 Touch [Region].

The “Region” screen appears.

3 Touch [km / mile].

Each time you touch the key changes the setting.

- **mile** (default):
Shows distance in miles.
- **Mile&Yard:**
Shows distance in miles and yards.
- **km:**
Shows distance in kilometers.

Changing the virtual speed of the vehicle

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

- ❑ Changing “km / mile” settings clears and resets input values to the default setting.

Customizing preferences

- For details, refer to *Changing the unit between km and miles* on the previous page.

1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

2 Touch [Region].

The “Region” screen appears.

3 Touch [Speed].

The “Average Speed Settings” screen appears.

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



- ☐ The estimated time of arrival may not be taken into account other parameters than this speed value.

5 Touch [OK].

The settings are complete.

Setting the keyboard layout

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

1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

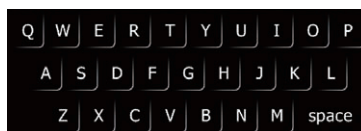
2 Touch [Region].

The “Region” screen appears.

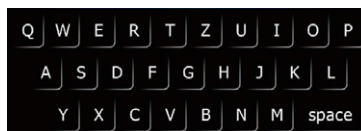
3 Touch [Keyboard].

Each time you touch the key changes the setting.

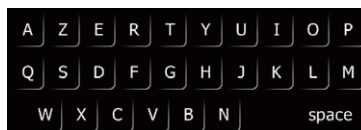
- [QWERTY] (default):



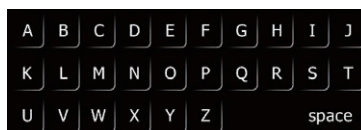
- [QWERTZ]:



- [AZERTY]:



- [ABC]:



Customizing the map screen settings

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

Displaying POI on the map

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

- ☐ POI icons are not displayed when the map scale is 1 mile (2 kilometers) or more.
- ☐ You can select up to 10 items from the sub-categories or detailed categories.

- ❑ Creating a customized POI is possible by using the utility program “AVIC FEEDS” which is available separately, on your PC. (“AVIC FEEDS” will be available on our web-site.) Store the customized POI into the SD memory card properly, and then insert it to the SD card slot. By selecting the POI icon, the system displays it on the map screen.

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

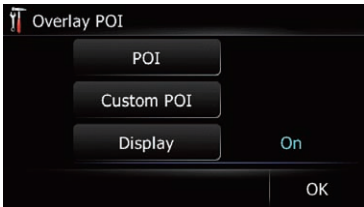
2 Touch [Map].

The map setting screen appears.

3 Touch [Overlay POI].

The “Overlay POI” screen appears.

4 Touch [Display] to change the setting to “On”.



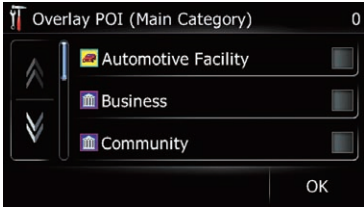
- ❑ If you do not want to display the POI icon on the map, touch [Display] to turn it “Off”. (Even if “Display” is turned “Off”, the POI selection setting is retained.)

5 Touch [POI].

The “Overlay POI (Main Category)” screen appears.

- ❑ Categories that are already set will have a blue check mark.

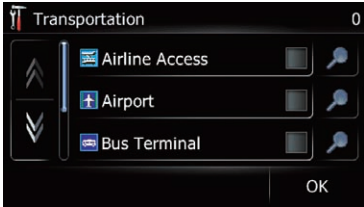
6 Touch the main category you want.



A list of subcategories under the selected main category appears.

- ❑ Categories that are already selected will have a blue check mark.

7 Touch the subcategory to display.



A red check mark appears next to the selected category. To cancel the selection, touch the entry again.

If there are more detailed categories within the subcategory,  is active. If you select the subcategory that has more detailed categories, all detailed categories within the subcategory is selected and  becomes inactive.

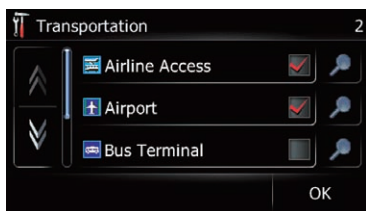
■ Touch .

The detailed category list is displayed. Touch the item and touch [OK] to complete selecting the detailed categories you want to display.

- ❑ When only a few detailed categories are selected, a blue check mark will appear next to the selected subcategory.

Customizing preferences

8 Touch [OK].



The “**Overlay POI (Main Category)**” screen returns.

If you want to select or deselect other items, repeat these steps as many as necessary.

9 To finish the selection, touch [OK] in the “Overlay POI (Main Category)” screen.

Switching the map between 2D and 3D

- ☐ You can touch or on the map screen to switch between 2D and 3D.
 - ➔ For details of the operations, refer to *Switching the map between 2D and 3D* on page 35.

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

2 Touch [Map].

The map setting screen appears.

3 Touch [View Mode].

Each time you touch the key changes the setting.

- **2D** (default):
Displays the 2D map screen.
- **3D**:
Displays the 3D map screen.

Displaying maneuvers

Selects whether to display or hide maneuvers on the map.

- ➔ For details, refer to *How to read the map screen* on page 32.

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

2 Touch [Map].

The map setting screen appears.

3 Touch [Show Maneuver].

Each time you touch the key changes the setting.

- **View** (default):
Displays maneuvers on the map.
- **Hide**:
Hides maneuvers on the map.

Changing the setting of navigation interruption screen

You can set whether to automatically switch to the navigation screen from the AV screen when your vehicle approaches a guidance point such as an intersection.

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

2 Touch [Map].

The map setting screen appears.

3 Touch [AV Guide Mode].

Each time you touch the key changes the setting.

- **On** (default):
Switches from the AV operation screen to the navigation screen.
 - **Off**:
Does not switch the screen.
- ☐ This setting is effective only when “**Close Up View**” is set to “**On**”.

Setting the map color change between day and night

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

1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

2 Touch [Map].

The map setting screen appears.

3 Touch [Day/Night Display].

Each time you touch the key changes the setting.

- **Automatic** (default):
You can change the colors of a map between daytime and nighttime according to whether the vehicle lights are on or off.
- **Day:**
The map is always displayed with daytime colors.
- ☐ To use this function with “**Automatic**”, the orange/white lead of the navigation system must be connected correctly.

Changing the road color

You can set the road color to bluish or reddish.

1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

2 Touch [Map].

The map setting screen appears.

3 Touch [Road Color].

Each time you touch the key changes the setting.

- **Blue** (default):
Changes to blue based road colors.
- **Red:**
Changes to red based road colors.

Setting the auto-zoom display

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

1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

2 Touch [Map].

The map setting screen appears.

3 Touch [Close Up View].

Each time you touch the key changes the setting.

- **On** (default):
Switches to an enlarged map.
Displays the close up view with the 2D map.
- **Off:**
Does not switch to an enlarged map.

Setting the “Favorites” icon display

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

- ☐ “**Favorites**” icons are displayed when the map scale is 10 miles (20 kilometers) or less.
- For details, refer to *Editing the favorite location in the list* on page 53.

1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

2 Touch [Map].

The map setting screen appears.

3 Touch [Favorites Icon].

Each time you touch the key changes the setting.

- **On** (default):
Displays the “**Favorites**” icon on the map.
- **Off:**
Hides the “**Favorites**” icon on the map.

Customizing preferences

Setting the current street name display

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

1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

2 Touch [Map].

The map setting screen appears.

3 Touch [Current Street].

Each time you touch the key changes the setting.

- **View** (default):
Displays the street name (or city name) on the map.
- **Hide**:
Hides the street name (or city name) on the map.

Displaying the fuel consumption information

Selects whether to display Eco-Meter, indicating the fuel consumption information, on the map.

1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

2 Touch [Map].

The map setting screen appears.

3 Touch [Eco Meter].

Each time you touch the key changes the setting.

- **On** (default):
Displays Eco-Meter on the map.
- **Off**:
Hides Eco-Meter on the map. ☐

Setting the power-saving function

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

- ☐ This setting can only be changed when the detachable device is removed from the head unit.

1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

2 Touch [Backlight Timeout].

Each time you touch the key changes the setting.

- **Never**:
Deactivates the power-saving feature of the screen backlight.
- **30 sec** (default):
Dims the backlight automatically if you do nothing for 30 seconds. ☐

Checking the version information

1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

2 Touch [Service Info].

The “Service Information Screen” screen appears.

3 Check the version information. ☐

Registering and editing your home

When registering your home location, touch [Set Home].

- For details, refer to *Registering and editing your home* on page 55. ☐

Correcting the current location

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

1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

2 Touch [Location].

3 Scroll to the position where you want to set, then touch [OK].

Checking the connections of leads

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

1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

2 Touch [Connection].

The “Connection” screen appears.



① GPS Status

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

Color	Signal communication	Used in positioning
Orange	Yes	Yes
Yellow	Yes	No

② Hand Brake

When the parking brake is applied, “On” is displayed. When the parking brake is released, “Off” is displayed.

③ Illumination

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

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

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

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

Stylus (supplied with the navigation system)



1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

2 Touch [Calibrate].

A message confirming whether to start the calibration appears.

3 Touch and hold the target that point to the center and corners of the LCD screen.

The target indicates the order.

4 Touch anywhere on the screen.

The adjusted position data will be saved.

- ❑ Do not turn off the engine while saving the adjusted position data.

Customizing preferences

Adjusting the screen brightness

You can set the screen brightness for each of the following situations.

- When the detachable device is attached to the head unit and the vehicle lights are off.
- When the detachable device is attached to the head unit and the vehicle lights are on.
- When the detachable device is not attached to the head unit.

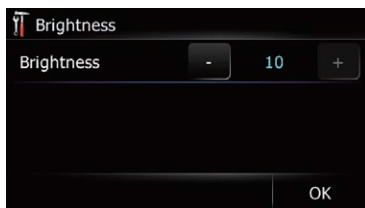
1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

2 Touch [Brightness].

The “**Brightness**” screen appears.

3 Touch [+] or [-] to adjust the brightness.



Each time you touch [+] or [-] increases or decreases the level. “10” to “0” is displayed as the level is increased or decreased.

4 Touch [OK].

The adjustment is completed. ■

Recording your travel history

Activating the track logger enables you to record your driving history (called “track log” below). You can review the travel history later.

- ☐ If an SD memory card is inserted into the SD card slot, the track logs will be stored in the SD memory card.
- ☐ When the detachable device is removed from the head unit, this function is not available.

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

2 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

3 Touch [Drive Log].

The “**Drive Log**” screen appears.

4 Touch [Drive Log].

Each time you touch the key changes the setting.

- **On:**
You can store your track log to the SD memory card.
- **Off (default):**
You cannot export your track log to the SD memory card.

5 Touch [Type].

Each time you touch the key changes the setting.

- **Private (default):**
Changes the track log attribute to “**Private**”.
- **Business:**
Changes the track log attribute to “**Business**”.
- **Other:**
Changes the track log attribute to “**Other**”.
- ☐ While the setting is “**On**”, the navigation system continues to store the track logs in the inserted SD memory card. ■

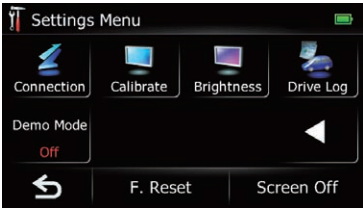
Using the demonstration guidance

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

1 Display the “Settings Menu” screen.

- For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

2 Touch [Demo Mode].



Each time you touch the key changes the setting.

- **On:**
Repeats the demonstration guidance.
- **Off (default):**
The demonstration guidance is set off. ☐

Restoring the default setting

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

- ☐ Some data remains. Be sure to read *Setting items to be deleted* first.
 - ➔ For detailed information about the items which would be erased, refer to *Setting items to be deleted* on page 133.

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

2 Touch [F. Reset].

The message confirming whether to restore the settings appears.

3 Touch [Yes]. ☐

Turning off the screen

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

1 Display the “Settings Menu” screen.

- ➔ For details of the operations, refer to *Displaying the “Settings Menu” screen* on page 115.

2 Touch [Screen Off].

The screen is turned off.

- ☐ Touch anywhere on the screen to turn it back on. ☐

Displaying the “Initial Setting” screen

To customize the initial settings, display the “Initial Setting” screen.

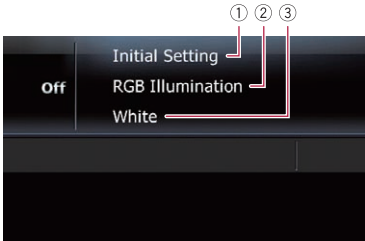
1 Press the MODE button when the map of the current location is displayed.

The audio operation screen appears.

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

- ➔ For details, refer to *Switching the audio source* on page 79.

3 Press the center of MULTI-CONTROL and hold until the initial setting screen appears.



- ① Screen title
- ② Function currently selected
- ③ Setting value

4 Turn MULTI-CONTROL to select one of the initial settings.

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

RGB Illumination (illumination setting) — **AUX** (auxiliary input) — **S/W Control** (subwoofer controller) — **Preout** (rear output controller) — **Guidance** (sound muting/attenuation) ☐

Customizing preferences

Setting the illumination color

The illumination color can be selected from 10 different colors. Furthermore, the illumination color can be switched between these 10 colors in order.

1 Display the "Initial Setting" screen.

- ➔ For details, refer to *Displaying the "Initial Setting" screen* on the previous page.

2 Turn MULTI-CONTROL to select "RGB Illumination".

3 Press MULTI-CONTROL left or right to select the desired color.

White (white) — **Light Green** (light green) — **Green** (green) — **Light Blue** (light blue) — **Blue** (blue) — **Yellow** (yellow) — **Amber** (amber) — **Red** (red) — **Scan** (scan) — **Custom** (custom)

- **Scan:**
Shifts between the eight default colors in sequence gradually.
- **Custom:**
Sets your created color which is installed from SD as the illumination color. 

Switching the auxiliary setting

It is possible to use auxiliary equipment with the navigation system as the one of sources. Activate the auxiliary setting when using auxiliary equipment connected to the navigation system.

1 Display the "Initial Setting" screen.

- ➔ For details, refer to *Displaying the "Initial Setting" screen* on the previous page.

2 Turn MULTI-CONTROL to select "AUX".

3 Press the center of MULTI-CONTROL to switch between "On" and "Off".

Setting the rear output and subwoofer controller

The navigation system's rear output can be used for a full-range speaker or subwoofer connection. If you switch "**S/W Control**" to "**Rear SP:S/W**", you can connect a rear speaker lead directly to a subwoofer without using an auxiliary amp.

Initially, the navigation system is set for a rear full-range speaker connection ("**Rear SP:F.Range**").

-  Both rear speaker leads output and RCA rear output are switched simultaneously in this setting. (When you use the product without RCA rear output, this setting only applies to the rear speaker leads.)

1 Display the "Initial Setting" screen.

- ➔ For details, refer to *Displaying the "Initial Setting" screen* on the previous page.

2 Turn MULTI-CONTROL to select "S/W Control".

3 Press the center of MULTI-CONTROL to switch between "Rear SP:F.Range" and "Rear SP:S/W".

When no subwoofer is connected to the rear speaker leads directly, select "**Rear SP:F.Range**" and proceed to the next operation.

When a subwoofer is connected to the rear speaker leads directly, select "**Rear SP:S/W**" and finish the setting.

4 Turn MULTI-CONTROL to select "Pre-out".

5 Press the center of MULTI-CONTROL to switch between "Subwoofer" and "Rear".

When no subwoofer is connected or you want to control the subwoofer sound with the external amplifier, select "**Rear**".

When a subwoofer is connected to the RCA output, select "**Subwoofer**". 

Switching the sound muting/attenuation

You can select the muting method when the voice guidance is output.

- When you use a cellular phone connected with Bluetooth technology (dialing, talking, incoming call), the audio source volume is always muted independently of this setting.

1 Display the “Initial Setting” screen.

- ➔ For details, refer to *Displaying the “Initial Setting” screen* on page 124.

2 Turn MULTI-CONTROL to select “Guidance”.

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

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

- **ATT:**
The audio source is attenuated automatically when the voice guidance is output.
- **Mute:**
The audio source is muted automatically when the voice guidance is output.
- **Normal:**
The audio source volume does not change.
- AV source volume returns to normal when the corresponding action ends. ▣

Displaying the “Audio Menu” screen

To customize the audio settings, display the “**Audio Menu**” screen.

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

The audio operation screen appears.

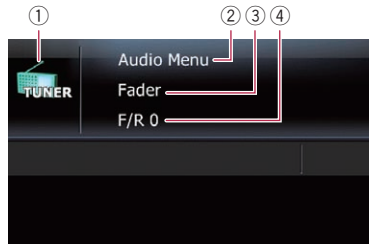
2 Press the center of **MULTI-CONTROL** to display the function select screen.

- ➔ For details, refer to *Audio screen switching overview* on page 80.

3 Turn **MULTI-CONTROL** to select “Audio Menu”.

4 Press the center of **MULTI-CONTROL**.

The “**Audio Menu**” screen appears.



① Source icon

Shows which source has been selected.

② Screen title

③ Function currently selected

④ Setting value

5 Turn **MULTI-CONTROL** to select one of the initial settings.

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

Fader (balance adjustment) — **Preset Equalizer** (equalizer adjustment) — **PEQ Setting1** (equalizer band and the level of equalizer band) — **PEQ Setting2** (frequency and Q factor) — **Loudness** (loudness) — **Sub-Woofer1** (phase of subwoofer output) — **Sub-Woofer2** (subwoofer setting) — **Bass Booster** (bass booster) — **HPF** (high pass filter) — **SLA** (source level adjustment)

- When “**Rear SP:F.Range**” is selected in “**S/W Control**” and “**Rear**” is selected in “**Preout**”, “**SubWoofer1**” cannot be adjusted.
- When “**SubWoofer1**” is turned off, “**Sub-Woofer2**” cannot be adjusted.
- You cannot select [**SLA**] when the FM tuner is selected as the AV source. ▣

Using balance adjustment

You can select a fader/balance setting that provides an ideal listening environment in all occupied seats.

- When “**Rear SP:S/W**” is selected in “**S/W Control**”, front/rear speaker balance cannot be adjusted.

Customizing preferences

- ➔ For details, refer to *Setting the rear output and subwoofer controller* on page 125.

1 Display the “Audio Menu” screen.

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

2 Turn MULTI-CONTROL to select “Fader”.

- ❑ If the balance setting has been previously adjusted, “**Balance**” will be displayed.

3 Press MULTI-CONTROL up or down to adjust front/rear speaker balance.

Each time **MULTI-CONTROL** is pressed up or down, the front/rear speaker balance moves towards the front or rear. “**Front 15**” to “**Rear 15**” is displayed as the front/rear speaker balance moves from front to rear. Setting “**F/R 0**” is correct when using a two speaker system.

4 Press MULTI-CONTROL left or right to adjust left/right speaker balance.

Each time **MULTI-CONTROL** is pressed left or right, the left/right speaker balance moves towards the left or right. “**Left 15**” to “**Right 15**” is displayed as the left/right speaker balance moves from left to right. ❑

Using the equalizer

The equalizer lets you adjust equalization to match vehicle interior acoustic characteristics as desired.

Recalling equalizer curves

There are six stored equalizer curves that you can easily recall at any time. Here is a list of the equalizer curves:

Equalizer curve

SuperBass is a curve in which only low-pitched sound is boosted.

Powerful is a curve in which low-pitched and high-pitched sounds are boosted.

Equalizer curve

Natural is a curve in which low-pitched and high-pitched sounds are slightly boosted.

Vocal is a curve in which the midrange, which is the human vocal range, is boosted.

Custom is an adjusted equalizer curve that you create.

Flat is a flat curve in which nothing is boosted.

1 Display the “Audio Menu” screen.

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

2 Turn MULTI-CONTROL to select “Preset Equalizer”.

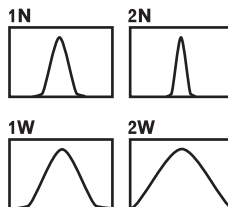
3 Press MULTI-CONTROL left or right to select an equalizer curve.

Customizing the equalizer curves

You can adjust the currently selected equalizer curve setting as desired. Adjustments can be made with a 3-band parametric equalizer.

- ❑ If you make adjustments, **Custom** curve is updated.

- **Band:**
You can select the equalizer band.
- **Level:**
You can select the decibel (dB) level of the selected EQ.
- **Frequency:**
You can select which frequency to set as the center frequency.
- **Q:**
You can select the details of the curve characteristics. (The following figure shows the characteristic image.)



Customizing preferences

1 Display the "Audio Menu" screen.

- ➔ For details, refer to *Displaying the "Audio Menu" screen* on page 126.

2 Turn MULTI-CONTROL to select "PEQ Setting1".

3 Press MULTI-CONTROL left or right to select the equalizer band to adjust.

Each time **MULTI-CONTROL** is pressed left or right, the equalization band is selected in the following order:

Low — Mid — High

4 Press MULTI-CONTROL up or down to adjust the level of the equalizer band.

Each time **MULTI-CONTROL** is pressed up or down, the level of the equalization band increases or decreases. "+6" to "-6" is displayed as the level is increased or decreased.

5 Turn MULTI-CONTROL to select "PEQ Setting2".

6 Press MULTI-CONTROL left or right to select the desired frequency.

Press **MULTI-CONTROL** left or right until the desired frequency appears in the display.

Low: 40 Hz — 80 Hz — 100 Hz — 160 Hz

Mid: 200 Hz — 500 Hz — 1 kHz — 2 kHz

High: 3 kHz — 8 kHz — 10 kHz — 12 kHz

7 Press MULTI-CONTROL up or down to select the desired Q factor.

Press **MULTI-CONTROL** up or down until the desired Q factor appears in the display.

2W — 1W — 1N — 2N

8 Repeat above adjustments.

If necessary, you can adjust other equalization bands successively. 

3 Press the center of MULTI-CONTROL to turn loudness on.

Loudness level (e.g., **Mid**) appears in the display.

- ☐ To turn loudness off, press **MULTI-CONTROL** again.

4 Press MULTI-CONTROL left or right to select a desired level.

Each time **MULTI-CONTROL** is pressed left or right, level is selected in the following order:

Low — Mid — High 

Using subwoofer output

The navigation system is equipped with a subwoofer output mechanism, which can be turned on or off.

1 Display the "Audio Menu" screen.

- ➔ For details, refer to *Displaying the "Audio Menu" screen* on page 126.

2 Turn MULTI-CONTROL to select "Sub-Woofer1".

3 Press the center of MULTI-CONTROL to turn subwoofer output on.

- ☐ To turn subwoofer output off, press **MULTI-CONTROL** again.

4 Press MULTI-CONTROL left or right to set the phase of subwoofer output.

Each time **MULTI-CONTROL** is pressed left or right, the phase of subwoofer output is selected in the following order:

Reverse (Reverse phase) — **Normal** (Normal phase)

5 Turn MULTI-CONTROL to select "Sub-Woofer2".

6 Press MULTI-CONTROL left or right to select cut-off frequency.

Each time **MULTI-CONTROL** is pressed left or right, frequencies are selected in the following order:

50 Hz — 63 Hz — 80 Hz — 100 Hz — 125 Hz

Adjusting loudness

Loudness compensates for deficiencies in the low- and high-sound ranges at low volume.

1 Display the "Audio Menu" screen.

- ➔ For details, refer to *Displaying the "Audio Menu" screen* on page 126.

2 Turn MULTI-CONTROL to select "Loudness".

Customizing preferences

7 Press MULTI-CONTROL up or down to adjust the output level of the subwoofer. Each time **MULTI-CONTROL** is pressed up or down, subwoofer level increases or decreases. “+ 6” to “- 24” is displayed as the level is increased or decreased. 

Enhancing bass (Bass Booster)

You can enhance bass sounds that are often muted by driving noise.

1 Display the “Audio Menu” screen.

➤ For details, refer to *Displaying the “Audio Menu” screen* on page 126.

2 Turn MULTI-CONTROL to select “Bass Booster”.

3 Press MULTI-CONTROL up or down to select a desired level.

“0” to “+6” is displayed as the level is increased or decreased. 

Using the high pass filter

When you cut lower sounds from the subwoofer output frequency, activate **HPF** (high pass filter). Only frequencies higher than those in the selected range are output from the front or rear speakers.

1 Display the “Audio Menu” screen.

➤ For details, refer to *Displaying the “Audio Menu” screen* on page 126.

2 Turn MULTI-CONTROL to select “HPF”.

3 Press the center of MULTI-CONTROL to turn high pass filter on.

 To turn high pass filter off, press **MULTI-CONTROL** again.

4 Press MULTI-CONTROL left or right to select cut-off frequency.

Each time **MULTI-CONTROL** is pressed left or right, frequencies are selected in the following order:

50 Hz — 63 Hz — 80 Hz — 100 Hz — 125 Hz 

Adjusting source levels

SLA (source level adjustment) lets you adjust the volume level of each source to prevent radical changes in volume when switching between sources.

 Settings are based on the FM tuner volume level, which remains unchanged.

1 Compare the FM tuner volume level with the level of the source you wish to adjust.

2 Display the “Audio Menu” screen.

➤ For details, refer to *Displaying the “Audio Menu” screen* on page 126.

3 Turn MULTI-CONTROL to select “SLA”.

4 Press **MULTI-CONTROL** up or down to adjust the source volume.

Each time **MULTI-CONTROL** is pressed up or down, source volume increases or decreases. “+4” to “-4” is displayed as the source volume is increased or decreased.

The following AV sources are set to the same source level adjustment volume automatically.

- **USB** and **iPod**
- **XM** and **SIRIUS**
- **EXT1** and **EXT2**

- ☐ The source volume level for AM can be set separately from FM: ☐

Other functions

Monitoring the battery status

You can check the battery status of the detachable device.

1 Attach the detachable device to the head unit.

- ➔ For detailed operations, refer to Operation Manual for AVIC-U310BT.

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

3 Touch [Home] on the map screen.

The "Top Menu" screen appears.

4 Touch [Settings].

The "Settings Menu" screen appears.

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

Battery status indicator



Fully charged



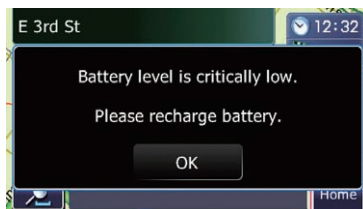
Sufficient power



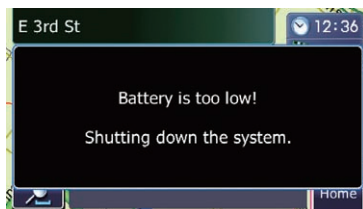
Charging



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



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



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

Automatic shutdown of the navigation system

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

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

Replicating the settings

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

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

1 Use AVIC FEEDS to replicate the settings and store them on an SD memory card.

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

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

- ➔ For details of the operations, refer to *Screen switching overview* on page 28.

4 Touch [Cpy Setting].

A message confirming whether to update the settings appears.

5 Touch [Yes].

Update starts.

After the settings are updated, a message confirming whether to restart the navigation system appears.

6 Touch [OK].

The navigation system restarts. 

Returning the navigation system to the default or factory settings

You can return settings or recorded contents to the default or factory settings. There are four methods to clear user data, and the situations and the cleared contents are different for each method. For the contents that are cleared in each method, see the list presented later.

- For detailed information about the items which would be erased, refer to *Setting items to be deleted* on the next page.
- **Method 1: Press the RESET button.**
Pressing the **RESET** button clears almost all settings of the audio function.
- **Method 2: Touch [F. Reset].**
➤ For details, refer to *Restoring the default setting* on page 124.
- **Method 3: Touch [Reset] on the “Clear Data/Setting” screen.**
➤ For details, refer to *Displaying the “Clear Data/Setting” screen* on page 134.
- **Method 4: Touch [Clear user information] on the “Clear Data/Setting” screen.**
➤ For details, refer to *Displaying the “Clear Data/Setting” screen* on page 134.

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. Any items not listed below will be retained.

However, if you carry out [Clear user information], all the settings related to the navigation function including the items not listed below are deleted.

—: The setting will be retained.

✓: The setting will be cleared and returned to the default or factory settings.

Navigation functions		Method 1	Method 2	Method 3	Method 4
Map function	View mode and scale setting on the map	—	—	✓	✓
	Direction of the map	—	—	✓	✓
	Last cursor position on the map screen	—	✓	✓	✓
Route setting	Current route	—	—	—	✓
	Guidance state of the current route	—	—	✓	✓
	Vehicle position information	✓	—	✓	✓
	Route info	—	✓	✓	✓
Navigation Menu	Point registered in Favorites	—	—	—	✓
	Sorting order selected in Favorites	—	—	✓	✓
	History	—	—	—	✓
	Gas Mileage	—	✓	✓	✓
	Driving data of Eco Graph	—	✓	✓	✓
	Eco Settings	—	✓	✓	✓
Settings Menu	UI Language, Voice Language	—	—	✓	✓
	Time	—	—	✓	✓
	Set Home	—	—	—	✓
	Demo Mode	✓	✓	✓	✓
	Other settings	—	✓	✓	✓
Phone Menu (*1)	Contacts	—	✓	✓	✓
	Volume	—	✓	✓	✓
	Setting	—	✓	✓	✓
	Call histories	—	✓	✓	✓

(*1) All stored data of 3 users is deleted.

Audio functions		Method 1	Method 2	Method 3	Method 4
Volume		✓ (*2)	—	—	—
Initial Settings	All settings	✓ (*2)	—	—	—
Audio Menu	All settings	✓ (*2)	—	—	—
TUNER, iPod, EXT, SIRIUS, "HD"	All settings (*3)	✓ (*2)	—	—	—
CD, USB, XM	All settings	✓ (*2)	—	—	—

(*2) Only when the detachable device is attached to the head unit, settings are cleared by the pressing the **RESET** button.

(*3) All settings including the setting on "**Function Menu**" are cleared.

Displaying the "Clear Data/Setting" screen

- ❑ Be sure to read *Setting items to be deleted* before you perform this operation.
 - ➡ For details, refer to *Setting items to be deleted* on the previous page.

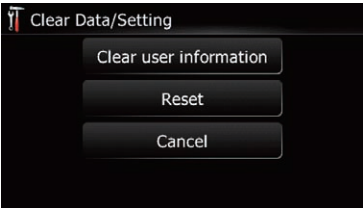
1 Display the "Settings Menu" screen.

- ➡ For details of the operations, refer to *Displaying the "Settings Menu" screen* on page 115.

2 Touch and hold [F. Reset].

The "Clear Data/Setting" screen appears.

3 Touch [Clear user information] or [Reset].



The message confirming whether to erase the data appears.

4 Touch [Yes].

The recorded contents are cleared.

- ❑ You can also display the "Clear Data/Setting" screen by pressing and holding the

MODE button while splash screen appears. ■

Appendix

Troubleshooting

If you have problems operating your navigation system, refer to this section. The most common problems are listed below, along with likely causes and solutions. If a solution to your problem cannot be found here, contact your dealer or the nearest authorized Pioneer service facility.

Problems in the procedures for updating

Symptom	Cause	Action
The upgrade process doesn't start and the navigation system boots up as usual.	An incorrect SD memory card has been inserted.	Eject the inserted SD memory card and insert the correct upgrade SD memory card.
	Upgrade has been already done.	Check whether the upgrade was done properly. If the upgrade has not been done yet, consult the nearest authorized service station.
The navigation system does not work properly after upgrade.	The engine of your vehicle was stopped or the power supply to the navigation system was turned off during upgrade process.	Consult the nearest authorized service station.
	Upgrade SD memory card was pulled out during upgrade process.	Consult the nearest authorized service station.
	The screen that cannot begin the upgrade process is displayed.	Eject the upgrade SD memory card, and display the map of your current position, and then reinsert the card.

Problems with the navigation screen

Symptom	Cause	Action (Reference)
The power doesn't turn on. The navigation system doesn't operate.	Leads and connectors are incorrectly connected.	Confirm once more that all connections are correct.
	The fuse is blown.	Rectify the reason for the fuse blowing, then replace the fuse. Be very sure to install a correct fuse with the same rating.
	Noise and other factors are causing the built-in microprocessor to operate incorrectly.	Press the RESET button.
The detachable device does not turn on.	The battery of the detachable device is run down.	Charge the battery.
When you use the detachable device removed from the head unit, the battery runs out more rapidly than before.	There's a possibility a new battery is needed.	Contact the nearest authorized Pioneer Service Station.

Appendix

Symptom	Cause	Action (Reference)
You cannot position your vehicle on the map without a significant positioning error.	The GPS antenna is in an unsuitable location.	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Check the GPS signal reception and the position of the GPS antenna if necessary.
	Obstacles are blocking signals from the satellites.	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Check the GPS signal reception and the position of the GPS antenna if necessary, or continue driving until reception improves. Keep the antenna clean.
	The position of satellites relative to your vehicle is inadequate.	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Continue driving until reception improves.
	Signals from the GPS satellites have been modified to reduce accuracy. (GPS satellites are operated by the US Department of Defense, and the US government reserves the right to distort positioning data for military reasons. This may lead to greater positioning errors.)	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Wait until reception improves.
You cannot position your vehicle on the map without a significant positioning error.	If a vehicle phone or cellular phone is used near the GPS antenna, GPS reception may be lost temporarily.	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. When using a cellular phone, keep the antenna of the cellular phone away from the GPS antenna.
	Something covers the GPS antenna.	Do not cover the GPS antenna with spray paint or vehicle wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals.
"Eco Graph" is not available.	The navigation system is unable to obtain past average fuel mileage data, so "Eco Graph" cannot be displayed.	Drive about 10 km on a road without obstructions. Then park your vehicle in a safe place, turn off the navigation system and turn the power to the navigation system back on.
The map color does not switch automatically between daytime and nighttime.	"Day/Night Display" is set to "Day".	Check "Day/Night Display" setting and make sure "Automatic" is selected. (Page 120)
	The orange/white lead is not connected.	Check the connection.
The screen is too bright.	An improper value has been set on "Brightness".	Check the settings. (Page 123)
The display is very dim.	An improper value has been set on "Brightness".	Check the settings. (Page 123)
No sounds of audio source are produced. The volume level will not rise.	The volume level is low.	Adjust the volume level.
	A speaker lead is disconnected.	Check the connection.
The volume of navigation guidance and beeps cannot be adjusted.	MULTI-CONTROL is used to adjust the volume.	Turn the volume up or down using [Sound] on the "Settings Menu" screen. (Page 115)

Appendix

Symptom	Cause	Action (Reference)
The person on the other end of the phone call cannot hear the conversation due to an echo.	The voice from the person on the other end of the phone call is output from the speakers and then picked up by the microphone again, creating an echo.	Use the following methods to reduce the echo: —Lower the volume on the receiver —Have both parties pause slightly before speaking
There's no picture.	The backlight of the LCD panel is turned off.	Turn on the backlight. (Page 124)
There is no response when the touch panel keys are touched, or a different key responds.	The touch panel keys deviate from the actual positions that respond to your touch for some reason.	Perform touch panel calibration. (Page 122)
The USB storage device cannot be used.	The USB storage device has been removed immediately after plugging it.	Park your vehicle in a safe place, and turn off the engine. Turn the ignition key back to Acc off. Then start the engine again, and turn the power to the navigation system back on.

Problems in the audio screen

Symptom	Cause	Action (Reference)
CD playback is not possible.	The disc is inserted upside down.	Insert the disc with the label upward.
	The disc is dirty.	Clean the disc.
	The disc is cracked or otherwise damaged.	Insert a normal, round disc.
	The files on the disc are an irregular file format.	Check the file format.
	The disc format cannot be played back.	Replace the disc.
	The loaded disc is a type this system cannot play.	Check what type of disc it is.
The audio skips.	The navigation system is not firmly secured.	Secure the navigation system firmly.
No sounds are produced. The volume level will not rise.	Cables are not connected correctly.	Connect the cables correctly.
	The system is paused or performing, fast reverse or forward during the audio playback.	There is no sound on fast reverse or forward.
iPod cannot be operated.	The iPod is frozen.	- Reconnect the iPod with the USB interface cable for iPod. - Update the iPod software version.
	An error has occurred.	- Reconnect the iPod with the USB interface cable for iPod. - Park your vehicle in a safe place, and apply the parking brake. Turn the power off and then turn the power on. If this does not solve the problem, press RESET button on the navigation system. - Update the iPod software version.

Appendix

Problems with the phone screen

Symptom	Cause	Action (Reference)
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. Press **RESET** button on the navigation system.



Appendix

Messages and how to react to them

The following messages may be displayed by your navigation system. Refer to the table below to identify the problem, then take the suggested corrective action.

There are occasions when you may see error messages other than those shown here. In such a case, follow the instructions given on the display.

Messages in the procedures for updating

Message	When	What to do
An error occurred and the update failed.	Unexpected error occurred in the update process.	Consult your local Pioneer dealer if this message persists.

Messages for navigation functions

Message	When	What to do (Reference)
Preparing to start up system... please wait.	When the navigation system starts, the message is displayed if the remaining battery power of the detachable device is low.	• Wait until the message "Ready to start up system." appears. After the message is displayed, the navigation system restarts. • Consult the nearest authorized Pioneer service station if this message persists.
Dataloading failed.	You may have transferred the data from your cellular phone in a format cannot be received by the navigation system.	• Select a suitable item and format, then retry. (Page 72) • Connect your cellular phone with another method again and retry. (Page 59)
Application startup failed. Check file on SD card. Press "OK" to exit Application Mode.	The application is not stored on the SD memory card.	Use the utility program AVIC FEEDS to confirm the proper solution.
	The application failed to download properly.	Use the utility program AVIC FEEDS to confirm the proper solution.
	A file required for application start-up is not stored on the SD memory card or is damaged.	Use the utility program AVIC FEEDS to confirm the proper solution.
	The SD memory card is damaged.	Make sure there are no problems with the SD memory card.



Messages for audio functions

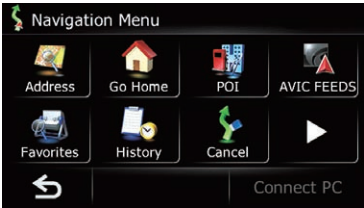
➞ For details, refer to Operation Manual for AVIC-U310BT.



Appendix

Display information

“Navigation Menu” screen



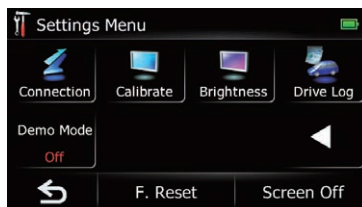
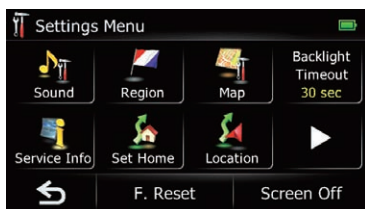
	Page
Address	41
Go Home	42
POI	43
Spell Name	43
Near Me	43
Near Dest.	44
Around City	44
AVIC FEEDS	45
Favorites	45, 53
History	45, 56
Cancel	52



	Page
Coordinate	46
Gas Mileage	73
Eco Graph	37
Route info	49
Cpy Setting	131
Data In/Out	57, 74
Connect PC	76

Appendix

“Settings Menu” screen

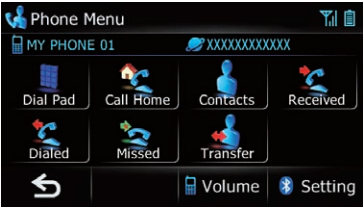


	Page
Sound	115
Region	115
UI Language, Voice Language	115
Time	116
km / mile	116
Speed	116
Keyboard	117
Map	117
Overlay POI	117
View Mode	119
Show Maneuver	119
AV Guide Mode	119
Day/Night Display	120
Road Color	120
Close Up View	120
Favorites Icon	120
Current Street	121
Eco Meter	121
Backlight Timeout	121
Service Info	121
Set Home	55
Location	122

	Page
Connection	122
Calibrate	122
Brightness	123
Drive Log	123
Demo Mode	123
F. Reset	124
Screen Off	124

Appendix

“Phone Menu” screen



	Page
Dial Pad	64
Call Home	64
Contacts	65
Received	65
Dialed	65
Missed	65
Transfer	67
Volume	
Phone Ringtone	69
Phone Voice	
Setting	69
Connections	63
Bluetooth On/Off	69
Auto Answer Preference	69
Refuse All Calls	70
Echo Cancel	70
Auto Connect	70
Edit Name	71
Clear Memory	68
Bluetooth Software Update	71





Register your product at

<http://www.pioneerelectronics.com>

in Canada **<http://www.pioneerelectronics.ca>**

See "Visit our website" page

PIONEER CORPORATION

1-1, Shin-ogura, Saiwai-ku, Kawasaki-shi,
Kanagawa 212-0031, JAPAN

PIONEER ELECTRONICS (USA) INC.

P.O. Box 1540, Long Beach, California 90801-1540, U.S.A.
TEL: (800) 421-1404

PIONEER EUROPE NV

Haven 1087, Keetberglaan 1, B-9120 Melsele, Belgium/Belgique
TEL: (0) 3/570.05.11

PIONEER ELECTRONICS ASIACENTRE PTE. LTD.

253 Alexandra Road, #04-01, Singapore 159936
TEL: 65-6472-7555

PIONEER ELECTRONICS AUSTRALIA PTY. LTD.

5 Arco Lane, Heatherton, Victoria, 3202, Australia
TEL: (03) 9586-6300

PIONEER ELECTRONICS OF CANADA, INC.

340 Ferrier Street, Unit 2, Markham, Ontario L3R 2Z5, Canada
TEL: 1-877-283-5901
TEL: 905-479-4411

PIONEER ELECTRONICS DE MEXICO, S.A. de C.V.

Bldv.Manuel Avila Camacho 138 10 piso
Col.Lomas de Chapultepec, Mexico, D.F. 11000
TEL: 55-9178-4270

先鋒股份有限公司

總公司：台北市中山北路二段44號13樓
電話：(02) 2521-3588

先鋒電子（香港）有限公司

香港九龍尖沙咀海港城世界商業中心9樓901-6室
電話：(0852) 2848-6488

© 2011 PIONEER CORPORATION.
All rights reserved.