



AVIC-5201NEX

MULTIMEDIA NAVIGATION RECEIVER



Operation Manual

Notice to all users:

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

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

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

Contents

Thank you for buying this Pioneer product. Please read through these instructions so you will know how to operate your model properly. After you have finished reading the instructions, keep this document in a safe place for future reference.

Important

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

■ Precaution4

Notes on internal memory4
About this manual4

■ Basic operation.....5

Checking part names and functions5
Remote control5
Protecting your product against theft.....5
Inserting/ejecting/connecting media.....5
On first-time startup6
How to use the screens.....7
Supported AV source8
Displaying the AV operation screen.....8
Selecting a source8
Changing the display order of sources8
Using the touch panel8

■ How to use the Navigation menu screen9

Operating the Navigation menu screen10

■ How to use the map11

How to read the map screen11
Operating the map screen.....11
Understanding the route guidance12
Browsing the data field13

■ Searching for a destination13

How to plan your route13
Searching for a location by address13

Searching for Points of Interest (POI)14
Selecting a destination from stored locations15
Selecting a destination from stored routes15
Selecting a location you searched for recently15
Searching for a location using "Combined Search"15
Searching for a location by the coordinates.....16
Searching for a location by scrolling the map16
Using the "Map Location" screen.....16

■ Checking and modifying the current route17

Modifying the route17

■ Registering and editing locations and routes19

Storing a location in "Saved Location"19
Storing a route in "Saved Routes"19
Editing the stored route19
Deleting stored routes19
Saving a location as an alert point20

■ Receiving real-time traffic information20

Displaying the "Traffic Summary" screen.....20
Viewing the traffic list20
Checking the traffic incidents on the map21
When traffic incidents occur on your route21
Turning the traffic information on or off21

■ Checking useful information about your trip21

Displaying the "Useful Information" menu.....21
Recording your travel history.....22
Using the Trip Computer mode22
Calculating the fuel consumption22

■ Customizing preferences of the navigation23

Customizing the navigation settings.....23
Information on each option of "Settings"24
Setting the alert point warnings.....27
Getting the map update.....28

Expanding the use of the navigation functions28
Compatibility and connectivity29

■ Bluetooth® connection30

Displaying the "Bluetooth" screen.....30
Registering your Bluetooth devices.....30
Connecting a registered Bluetooth device manually30
Switching visibility31
Entering the PIN code for Bluetooth wireless connection31
Displaying the device information.....31
Clearing the Bluetooth memory.....31
Updating Bluetooth software31
Displaying the Bluetooth software version.....31

■ Hands-free phoning.....31

Displaying the phone menu screen32
Making a phone call32
Receiving a phone call32
Minimizing the dial confirmation screen32
Changing the phone settings32
Using the voice recognition function.....33
Notes for hands-free phoning.....33

■ Setup for iPod® / iPhone® or smartphone33

The basic flow of iPod / iPhone or smartphone setup33
Setting the device connection method.....33
iPod / iPhone compatibility34
Android™ device compatibility.....34
Information on the connections and functions for each device.....35

■ Radio37

Starting procedure37
Storing the strongest broadcast frequencies37
Displaying the "Radio settings" screen37

■ Disc.....38

Starting procedure39
Selecting files from the track name list39
Switching the media file type.....39
Searching for the part you want to play40
Operating the DVD menu40
Switching the subtitle/audio language.....40

Operating the DVD menu using touch panel keys40

■ Compressed files.....40

Starting procedure (for Disc)42
Starting procedure (for USB).....42
Operations common to all file types43
Audio file operations.....43
Video file operations43
Still image file operations43

■ iPod43

Connecting your iPod44
Starting procedure45
Selecting song or video sources from the playlist screen45
Using this product's iPod function from your iPod45
Selecting a song from the list related to the song currently playing (link search).....45
Using Apple Music Radio45

■ AppRadio Mode46

AppRadio Mode Compatibility46
Using AppRadio Mode46
Starting procedure46
Using the keyboard (for iPhone users)46
Using the audio mix function47

■ Apple CarPlays™47

Using Apple CarPlay47
Starting procedure47
Setting the driving position48
Adjusting the volume48

■ Pandora®48

Using Pandora49
Starting procedure49
Selecting a Pandora station from the list49
Adding a station50

■ Bluetooth audio player....50

Starting procedure50
Selecting files from the file name list51

■ SiriusXM® Satellite Radio51

SiriusXM tuner operations.....52
Starting procedure52

Contents

Subscribing to the SiriusXM Satellite Radio service.....	52
Selecting a channel from the category list.....	52
Using TuneScan™.....	52
Using TuneMix™.....	52
Displaying the “SiriusXM Settings” screen.....	53
Setting TuneStart™.....	53
Setting parental lock.....	53
Checking the update traffic and weather information.....	53
Using SportsFlash™.....	53
Using the content alerts function.....	54
Selecting teams for Game Alert.....	54
Using Featured Favorites Band.....	54
Restoring the “SiriusXM Settings” to the default.....	54

■ AUX source55

Starting procedure.....	55
Setting the video signal.....	55

■ AV input.....55

Starting procedure (for AV source).....	55
Starting procedure (for camera).....	56
Setting the video signal.....	56

■ MIXTRAX56

Using MIXTRAX.....	57
Starting procedure.....	57
Selecting an item from the list.....	57
Selecting songs not to be played.....	57
Displaying the “MIXTRAX Settings” screen.....	57

■ iDatalink58

Using iDatalink.....	58
Starting procedure.....	58
Using functions in Car Sources.....	58
Using functions in Car Features.....	58
Displaying obstacle detection information.....	59
Displaying the setting screen for iDatalink.....	59

■ System settings59

Displaying the “System” setting screen.....	59
Setting the navigation information bar.....	59
Setting navigation screen interruption.....	59
Setting Bluetooth audio source activation.....	59
Setting the ever scroll.....	60
Setting the beep tone.....	60
Setting the rear view camera.....	60
Setting the second camera.....	61

Setting the camera for Camera View mode.....	61
Setting the demo mode.....	61
Selecting the system language.....	61
Setting the keyboard language with the application for iPhone.....	61
Adjusting the response positions of the touch panel (touch panel calibration).....	61
Setting the dimmer.....	62
Adjusting the picture.....	62
Displaying the firmware version.....	62
Displaying the open source licenses.....	63
Updating firmware.....	63
Checking sensor learning status and driving status.....	63
Checking the connections of leads.....	63

■ Audio adjustments64

Displaying the “Audio” setting screen.....	64
Using fader/balance adjustment.....	64
Switching sound muting/attenuation.....	64
Adjusting source levels.....	64
Setting the rear speaker output.....	64
Setting the subwoofer output.....	64
Adjusting the cutoff frequency value.....	64
Selecting the listening position.....	64
Adjusting the speaker output levels finely.....	65
Adjusting the time alignment.....	65
Using the equalizer.....	65
Adjusting the equalizer curve automatically (Auto EQ).....	65

■ Theme menu67

Displaying the “Theme” setting screen.....	67
Selecting the wallpaper.....	67
Setting the illumination color.....	67
Selecting the theme color.....	67
Selecting the style of the clock.....	67
Changing the preinstalled splash screen.....	67
Replicating the settings.....	68

■ Video settings68

Setting up the video player.....	68
Setting the video signal for the rear view camera.....	69

■ Favorite menu70

Creating a shortcut.....	70
Selecting a shortcut.....	70
Removing a shortcut.....	70

■ Other functions.....70

Setting the time and date.....	70
Setting the “Sound Retriever” function.....	70
Changing the wide screen mode.....	70
Storing song information to an iPod (iTunes® Tagging).....	70
Selecting the video for the rear display.....	71
Setting the anti-theft function.....	71
Restoring this product to the default settings.....	72

■ Appendix72

Troubleshooting.....	72
Error messages.....	73
Positioning technology.....	76
Handling large errors.....	77
Route setting information.....	79
Handling and care of discs.....	80
Playable discs.....	80
Detailed information for playable media.....	80
Bluetooth.....	83
SiriusXM® satellite radio.....	83
WMA/WMV.....	83
FLAC.....	83
DivX.....	83
AAC.....	84
Google, Google Play, Android™.....	84
MIXTRAX.....	84
Detailed information regarding connected iPod devices.....	84
Using app-based connected content.....	84
Pandora®.....	85
MHL.....	85
IVONA Text-to-Speech.....	85
Notice regarding video viewing.....	85
Notice regarding DVD-Video viewing.....	85
Notice regarding MP3 file usage.....	85
Notice regarding open source licenses.....	85
Map coverage.....	85
Using the LCD screen correctly.....	85
Specifications.....	85

Precaution

Notes on internal memory

Before removing the vehicle battery

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

- Some of the settings and recorded contents will not be reset.

Data subject to erasure

The information is erased by disconnecting the yellow lead from the battery (or removing the battery itself).

- Some of the settings and recorded contents will not be reset.

Resetting the microprocessor

⚠ CAUTION

Pressing the **RESET** button resets settings and recorded contents to the factory settings.

- Do not perform this operation when a device is connected to this product.
- Some of the settings and recorded contents will not be reset.

The microprocessor must be reset under the following conditions:

- Prior to using this product for the first time after installation.
- If this product fails to operate properly.
- If there appears to be problems with the operation of the system.
- If your vehicle position is shown on the map with a significant positioning error.

1 Turn the ignition switch OFF.

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




📖 Refer to *Checking part names and functions* on page 5

Settings and recorded contents are reset to the factory settings.

About this manual

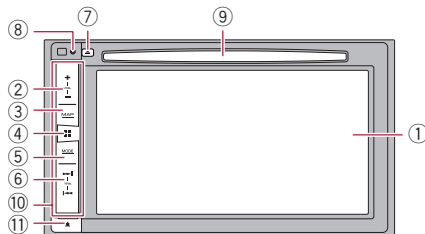
This manual uses diagrams of actual screens to describe operations. However, the screens on some products may not match those shown in this manual depending on the model used.

Meanings of Symbols Used in This Manual

	This indicates to touch an appropriate soft key on the touch screen.
	This indicates to touch and hold an appropriate soft key on the touch screen.
	This indicates that there is a reference or supplementary for the key or screen.

Basic operation

Checking part names and functions



1	LCD screen
2	VOL (+/-) button
3	MAP button Press to display the map screen. Press and hold to switch to the camera view mode. <input type="checkbox"/> This function is available only when "Back Camera Input" or "2nd Camera Input" is set to "On".
4	Menu button Press to display the top menu screen. Press and hold to activate the voice recognition function. ➡ Refer to <i>Using the voice recognition function</i> on page 33
5	MODE button Press to switch between the Application screen and the AV operation screen. Press to turn the display off. <input type="checkbox"/> Press and hold to turn the display off when the Application screen is available. <input type="checkbox"/> When the display is turned off, touch the screen to revert to the original screen.
6	TRK (◀▶) button Press to return to the previous track (chapter) or go to the next track (chapter). Press and hold to perform fast reverse or fast forward. Press to answer or end a call.
7	▲ button
8	RESET button ➡ Refer to <i>Resetting the microprocessor</i> on page 4

9	Disc-loading slot	➡ Refer to <i>Inserting and ejecting a disc</i> on page 5
10	Detachable faceplate	
11	▲ button	Press to remove the detachable faceplate from this product.

Remote control

The remote control CD-R33 (sold separately) is available.
➡ For details, refer to the remote control manual.

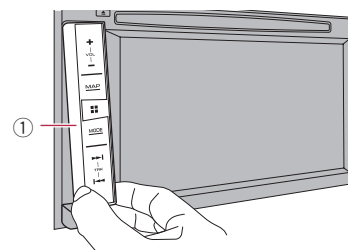
Protecting your product against theft

⚠CAUTION

- Do not expose the detachable faceplate to excessive shock or disassemble it.
- Never grip the buttons tightly or use force when removing or attaching the detachable faceplate.
- Keep the detachable faceplate out of reach of small children to prevent them from placing it in their mouths.
- After removing the detachable faceplate, keep it in a safe place so it is not scratched or damaged.
- Do not expose the detachable faceplate to direct sunlight and high temperatures.
- When removing or attaching the detachable faceplate, do so after turning off the ignition switch (ACC OFF).

Removing the detachable faceplate

- 1 Press the **▲** button.
- 2 Gently grip the bottom of the detachable faceplate and slowly pull it outward.



① Detachable faceplate

Attaching the detachable faceplate

- 1 Slide the detachable faceplate all the way into this product.
- 2 Push the lower part of the detachable faceplate until you hear a click.

Inserting/ejecting/connecting media

⚠CAUTION

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

Inserting and ejecting a disc

Inserting a disc

- 1 Insert a disc into the disc-loading slot.

Ejecting a disc

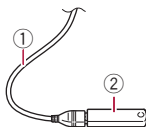
- 1 Press the **▲** button.

Plugging and unplugging a USB storage device

- ☐ This product may not achieve optimum performance with some USB storage devices.
- ☐ Connection via a USB hub is not possible.
- ☐ A USB cable is required for connection.

Basic operation

- 1 Pull out the plug from the USB port of the USB cable.
- 2 Plug a USB storage device into the USB cable.



- ① USB cable
- ② USB storage device
- ☐ Check that no data is being accessed before pulling out the USB storage device.

On first-time startup

- 1 Start the engine to boot up the system.

The "Select Program Language" screen appears.


- ☐ From the second time on, the screen shown will differ depending on the previous conditions.
- ☐ From the second time on, enter the password for the anti-theft function if the password entry screen appears.

- 2 Touch the language.

- 3 Touch .

The "Smartphone Setup" screen appears.

- 4 Touch the item.

-  Refer to *Information on the connections and functions for each device* on page 35

- 5 Touch .

The warning message screen appears.

- 6 Touch [OK].

The top menu screen appears.

On first-time startup of the navigation system

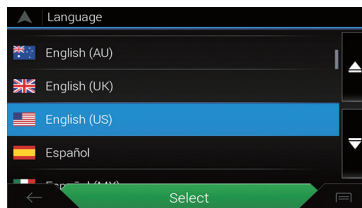
When you use the navigation function for the first time, an initial setup process starts automatically. Follow the steps below.

- ☐ You can change the language later using [Regional] in the "Settings" screen. Other settings can be restarted later using [Start Configuration Wizard] in the "Settings" screen.

- 1 Press the  button.

- 2 Touch  or .

- 3 Touch the language that you want to use on the navigation screen, then touch [Select].



- 4 Read the terms carefully, checking the details, and then touch [Accept] if you agree to the conditions.

- 5 Touch [Next].


- 6 Touch the language that you want to use for voice guidance messages, then touch [Next].

- 7 If needed, modify the unit settings, then touch [Next].

- 8 If needed, modify the default route planning options, then touch [Next].

- 9 Touch [Activate], then [Next].

A message saying that the connected online features are activated appears if you activate these services right away.

-  Refer to "Connected Services" settings on page 27

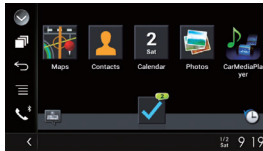
- 10 Touch the connected services you want to use, then touch [Next].

The initial setup is now complete. The map screen appears and you can start using the navigation system.

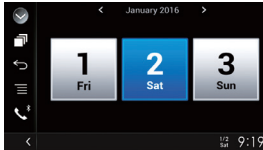
Basic operation

How to use the screens

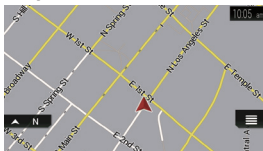
Application menu screen



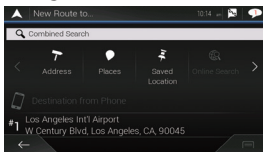
Application operation screen



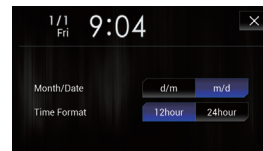
Map screen



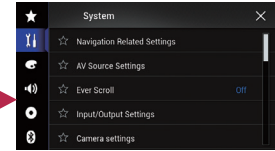
Navigation menu screen



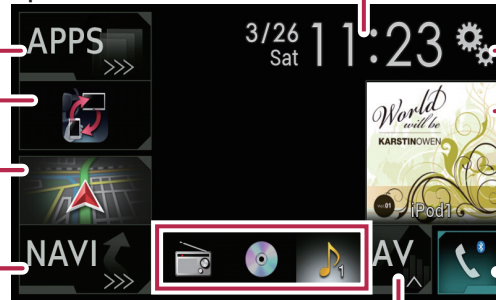
Time and date setting screen



Setting menu screen

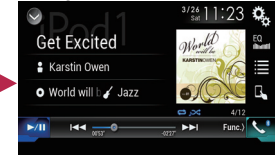


Top menu screen

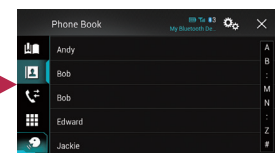


Favorite source icons

AV operation screen



Phone menu screen



AV source selection screen



Basic operation

- ❑ By pressing the **⌘** button on any screen you can display the top menu screen.
- ❑ The character string "APPS" is replaced with "Apple CarPlay" when Apple CarPlay is running.
- ❑ If you select "Power OFF" on the AV source selection screen, you can turn off almost all functions. The "Power OFF" mode is released in the following cases:
 - An incoming call is received.
 - The rear view camera image is input when the vehicle reverses.
 - A button on this product is pressed.
 - The ignition switch is turned off (ACC OFF), then turned on (ACC ON).
- ❑ To protect this product from damage, the cooling fan may operate in "Power OFF" mode.

Supported AV source

You can play or use the following sources with this product.

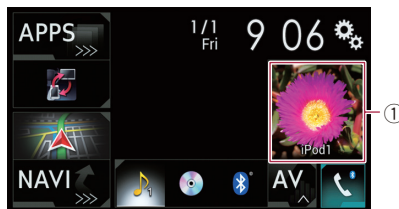
- Radio (FM, AM)
- CD
- ROM (compressed audio or video files on discs)
- DVD-Video
- Video-CD

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

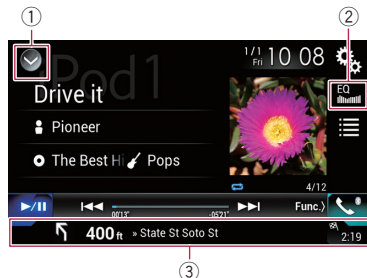
- USB
- iPod
- Pandora®
- Bluetooth® audio
- SiriusXM® Satellite Radio
- AV input (AV)
- AUX
- Car Sources (iDataLink)

Displaying the AV operation screen

- 1 Press the **⌘** button.
- 2 Touch the AV operation key.



- ① **AV operation key**
The AV operation screen appears.



- ① **Displays the source list.**
② **Recalls equalizer curves.**
 ➔ Refer to *Using the equalizer* on page 65
③ **Shows the navigation information.**
❑ This is not displayed for some sources.
❑ This is not displayed when "Navigation info window" is set to "Off".
 ➔ Refer to *Setting the navigation information bar* on page 59

Selecting a source

Source on the AV source selection screen

- 1 Display the AV source selection screen.



- 2 **Touch the source icon.**
❑ When you select "Source OFF", the AV source is turned off.

Source on the source list

- 1 **Display the source list.**
 ➔ Refer to *Displaying the AV operation screen* on page 8
- 2 **Touch the source key.**
❑ When you select "Source OFF", the AV source is turned off.

Changing the display order of sources


Changing the display order of source icons

- 1 Display the AV source selection screen.



- 2 **Touch and hold a source icon, and drag the icon to the desired position.**

Changing the display order of source keys

- 1 **Display the source list.**
 ➔ Refer to *Displaying the AV operation screen* on page 8
- 2 **Touch .**
- 3 **Drag the source key to the desired position.**

Using the touch panel

You can operate this product by touching the keys on the screen directly with your fingers.

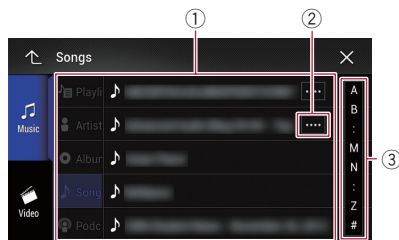
- ❑ To protect the LCD screen from damage, be sure to touch the screen only with your finger gently.

Basic operation

Common touch panel keys

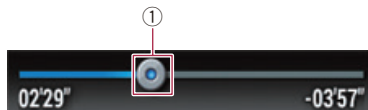
- ① : Returns to the previous screen.
- ② : Closes the screen.

Operating list screens



- ① Touching an item on the list allows you to narrow down the options and proceed to the next operation.
- ② Appears when all characters are not displayed on the display area.
If you touch the key, the rest are scrolled for display.
- ③ Appears when items cannot be displayed on a single page.
Drag the slider bar or the list to view any hidden items.

Operating the time bar



- ① You can change the playback point by dragging the key.
 - ☐ Playback time corresponding to the position of the key is displayed while dragging the key.
 - ☐ This function is not available for some media or sources.

Switching the operation panel

1 Touch **[Func.]** or **[1/2 >]**.

The hidden function keys appears.

- ☐ This key does not appear for some AV sources.

Operating the on-screen keyboard



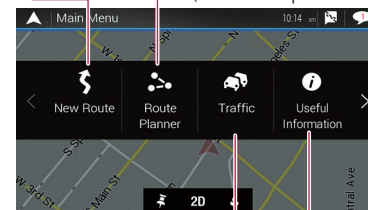
- ① Displays the characters that are entered.
- ② Moves the cursor to the right or left for a number of characters equivalent to the number of touches.
- ③ Enters the characters in the text box.
- ④ Deletes the input text to the left of the cursor one letter at a time. Touching and holding the key deletes the letters to the left of the cursor in rapid succession.
- ⑤ Confirms the entry and proceeds to the next step.
- ⑥ Enters a space.
- ⑦ Switches between alphabet and numbers/symbols.
- ⑧ Switches between capital and lower case letters.

How to use the Navigation menu screen

Searches for your destination by the address or coordinates, or searches for the selected place of interest, etc.

Builds your route or edits the route currently set.

Main Menu 1
(without a planned route)



Displays the traffic screen.

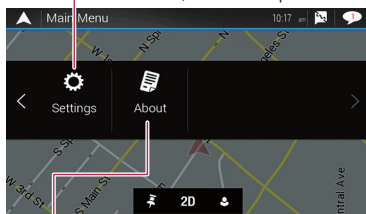
Displays useful information to support your driving.

How to use the Navigation menu screen

Configures the navigation-related settings.

You can also access the "SyncTool" screen from this menu.

Main Menu 2
(without a planned route)



Displays information about your navigation system.

The version information, or licenses can be displayed, for example.

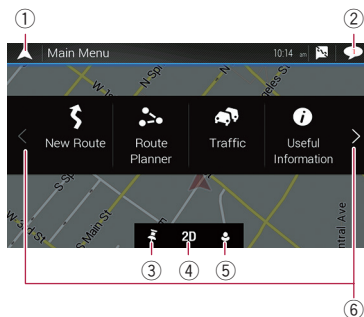
- ☐ The traffic features of [Traffic] can be used when the online traffic feature is available.


Operating the Navigation menu screen

- 1 Press the MAP button.
- 2 Touch .

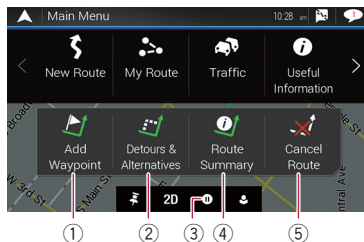
Other items

You will also see the following keys when you are navigating without a planned route.



- ① Returns to the map screen.
 - ② Displays notifications that contain important information.
 - ③ Displays the location that you saved as a favorite.
 - ④ Switches among 2D, 3D, and 2D North up view modes.
 - ⑤ Displays the "User Profiles" screen where you can create new profiles or edit the existing profiles.
If multiple drivers are using this product, they can create their own profiles with their own settings. If you select a new profile, this product restarts so that the new settings can take effect.
 - ⑥ Displays the previous or next page of the navigation menu.
If there is no next or previous page, this item is grayed out.
- ☐  on the upper right corner of the screen is used for **AVICSYNC App** connection.
- ➔ Be sure read *Expanding the use of the navigation functions* (page 28) before using the **AVICSYNC** function.

When you are navigating a planned route, the following route-related keys are available.



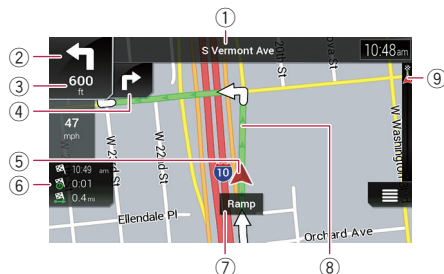
- ① Adds a waypoint.

- ② Displays route alternatives, parts of the route to avoid, or specific roads in your planned route to avoid.
- ③ Suspends and resumes the route guidance.
- ④ Displays the route in its full length on the map, and displays route parameters and route alternatives.
- ⑤ Deletes your route or removes a waypoint.

How to use the map

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

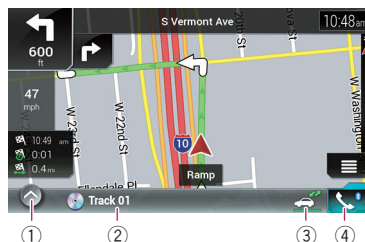
How to read the map screen



- ❑ The following information marked with an asterisk (*) appears only when a route is set.
- ❑ Depending on the conditions and settings, some items may not be displayed.
- ① Shows the number and name of the street to be used (or next guidance point).*
- ② Shows the next guidance point (maneuver).*
The type of the event (turn, traffic circle, exiting freeway, etc.) is displayed.
- ➡ Refer to *Frequently shown route events* on page 12
- ③ Shows the distance to the next guidance point (maneuver).*
- ④ Shows the maneuver after the next maneuver.*
- ⑤ Indicates the current location of your vehicle. The apex of the triangular mark indicates your orientation and the display moves automatically as you drive.
- ❑ When there is no GPS position, the triangular mark is transparent. It shows your last known position.
- ⑥ Displays the data field.
- ⑦ Shows the name of the street (or city) that your vehicle is traveling on (or in).
- ⑧ Indicates the current route.*
The route currently set is highlighted in color on the map.
- ⑨ Indicates the progress to the final destination.*

AV information bar

AV information is displayed at the bottom of the map screen.



- ① Touch to display the AV source list.
- ② Shows the current status of AV source briefly.
- ③ You can turn on or off the communication between the **AVICSYNC App** and the navigation system by touching the key.
- ❑ This setting is always turned on when you use the **AVICSYNC App** on an iPod / iPhone (the setting cannot be changed).
- ④ Touch to display the phone menu screen.
- ➡ Refer to *Displaying the phone menu screen* on page 32

Operating the map screen

Changing the scale of the map manually

By default, even if the map scale is changed on the scrolled map, it will return to the preset scale (according to the setting in "Viewpoint" of the "Navigation Map" settings) when the current position map is displayed. If you change the scale of the current position map, perform the following procedure.

- 1 Press the MAP button and touch [Map].
- 2 Touch [Map], and then touch [Settings].
- 3 Touch [Navigation Map], and then [Map Display].
- 4 Touch [Viewpoint].
- 5 Drag the pop-up window and touch [Manual].
- 6 Press the MAP button.
- 7 Touch [Map] or [Map].

Smart Zoom

Your navigation system features "Smart Zoom" that works in two ways:

- When the route is set:
When approaching a turn, "Smart Zoom" will zoom in and raise the view angle to enable you to easily recognize your maneuver at the next junction. If the next turn is at a distance, it will zoom out and lower the view angle to be flat so you can see the road in front of you.
- When the route is not set:
"Smart Zoom" will zoom in if you drive slowly and zoom out when you drive at high speed.

Switching between 2D, 3D, and 2D North up views

You can switch how the map is displayed. For 2D map view mode, you can select 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 "Heading up" when the 3D map screen is displayed.

1 Press the MAP button.

2 Touch [Map].

3 Touch the following key.

Each time you touch the key the setting changes.

	Indicates 2D Heading up view mode is currently selected.
	Indicates 3D Heading up view mode is currently selected.
	Indicates 2D North up view mode is currently selected.

- ❑ There is a limit to map scaling in 3D map view mode. If the map scale is zoomed out further, the map is zoomed out in 2D map.

How to use the map

Scrolling the map to the position you want to see

1 Press the **MAP** button.

2 Touch anywhere on the map or touch and drag the map in the desired direction to scroll.

If you place the cursor on the desired location, a brief overview about the location will appear at the top of the screen, showing the street name and other information for the location.

3 Touch .

The map returns to the current position.

☐ If you press the **MAP** button, the map returns to the current position.

Control keys on the scrolled map



Changes the map view mode.

The current map mode is shown on the control key.



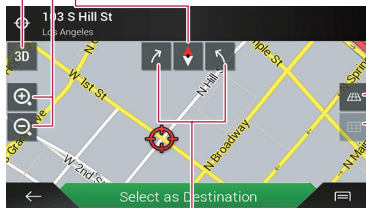
Zooms in or out on the map.

You can also zoom out or in by pinching or expanding the map.



Cancels map rotation.

Map screen (scrolled map)



Rotates the map clockwise or counterclockwise.









Tilts the map angle up or down.

You can change the vertical view angle of the map in 3D mode only.

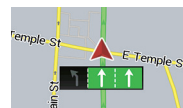
Frequently shown route events

The following are some examples of the maneuvers that are displayed.

Icon	Meaning
	Turn left, turn right, turn back.
	Go left on the traffic circle, 3rd exit (next maneuver).
	Enter traffic circle (maneuver after the next maneuver).
	Freeway entrance or freeway exit.
	Board ferry or leave ferry.
	Approaching the destination or a waypoint.

Lane information

When navigating on multilane roads, you will need to make sure to take the proper lane for the recommended route.



Signposts

Signs are displayed at the top of the map.



Junction view

If you are approaching a complex intersection, the map is replaced with a 3D view of the junction.


Understanding the route guidance

Once the route guidance begins, the system provides various guides by voice, text indications and signs.

How to use the map



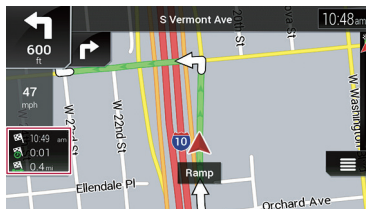
- ❑ If the data for these items is not contained in the map data, the information is not available even if there are signs on the actual road.

When you set "Offer Freeway Services" to "on", the  icon appears while you are driving on freeways. Touch the icon to open the details of the next few exits or service stations. In addition, touch an item to show its location on the map. You can set it as a waypoint easily.

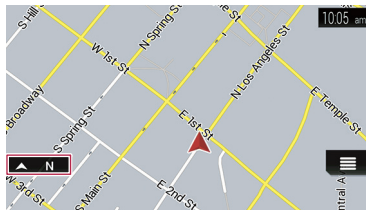
Browsing the data field

The data fields are different when you are navigating a route and when you have no specified destination. For example, the data field provides the following information.

- When the route is set:
 - Distance to final destination, time needed to reach the final destination and estimated arrival time are shown.



- When the route is not set:
 - Direction or altitude is shown.



- ❑ Touching and holding the field allows you to display the setting screen for the field.
 - ➔ Refer to **Data Fields** on page 26
- ❑ The estimated time of arrival is an ideal value calculated based on the speed limit value set in "Max. Speed" of vehicle type setting and the actual driving speed. The estimated time of arrival is only a reference value, and does not guarantee arrival at that time.
 - ➔ Refer to "Route Preferences" settings on page 24

Searching for a destination

⚠ CAUTION

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

- ❑ 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 applies for a passenger vehicle, and not for a truck or other delivery vehicles. Always follow the actual traffic regulations when driving.
- ❑ [Destination from Phone] and [Online Search] on the "New Route to..." screen can be used when the **AVICSYNC App** connection is established.
 - ➔ Be sure read *Expanding the use of the navigation functions* (page 28) before using the **AVICSYNC** function.

How to plan your route

The following is a summary of the route setting procedure.

1 Search for a destination using various methods on the [New Route] menu.

The location you searched for appears on the "Map Location" screen.

2 Touch [Select as Destination].

➔ Refer to *Using the "Map Location" screen* on page 16
The "Route Summary" screen appears and countdown begins. When the countdown ends, the guidance automatically starts. If you touch the screen anywhere during the countdown, the countdown stops and the screen will stay as it is.

- ➔ Refer to *Checking route information and preferences* on page 18

3 Touch [Start Navigation].

Your navigation system starts the route guidance.

- ➔ Refer to *Understanding the route guidance* on page 12

Searching for a location by address

The most frequently used function is the address search in which the address is specified and the location is searched.

Searching for a destination

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

1 Press the MAP button and touch .

2 Touch [New Route].

3 Touch [Address].

4 Touch the following text box and set the destination you are looking for.

● **Country:**

By default, your navigation system proposes the country where you are.

If you want to change the area to search set another country.

● **City or ZIP code:**

By default, your navigation system proposes the city/town where you are. You can select the city/town using its postal code instead of its name.

● **Street:**

If the street name is not available, touch [Go to City] and select the city/town. This way the center of the selected city/town becomes the destination of the route.

● **Select House Number or Intersection:**

This item will be displayed after you have set a street. If the house number is not available, touch [Go to Street] and select the street. This way the center of the selected street becomes the destination of the route.

After you touch the selected address to finish the address search, the searched location appears on the map screen.

5 Touch [Select as Destination], and then touch [Start Navigation].

Your navigation system starts the route guidance.

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 POIs using preset categories

The preset search allows you to quickly find the most frequently selected types of POIs.

1 Press the MAP button and touch .

2 Touch [New Route].

3 Touch [Places].

The preset search categories are as follows.

- Gas Station
- Accommodation
- Restaurant
- Parking

□ When a route is not set, POIs are searched for around the current position.


□ When the current position is not available either (no GPS signal), POIs are searched for around the last known position.

□ When a route is set, "Gas Station" and "Restaurant" are searched for along the route, and "Accommodation" and "Parking" are searched for around the destination.

4 Touch the category.

5 Touch the POI.

The searched location appears on the map screen.

- If you touch , you can sort the results or show the locations of all facilities on the map.

6 Touch [Select as Destination], and then touch [Start Navigation].

Your navigation system starts the route guidance.

Searching for POIs by categories or directly from the name of the facilities

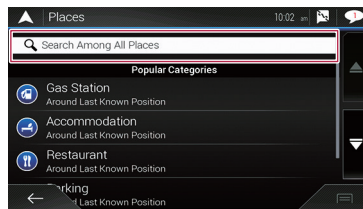
You can search for POIs by their categories and subcategories. You can also search for POIs by their names in each of their categories.

1 Press the MAP button and touch .

2 Touch [New Route].

3 Touch [Places].

4 Touch [Search Among All Places].



5 Touch [Around Here] and then select the area in which the POIs should be searched for.

● **Category View:**

You can select whether or not POI categories are displayed.

● **Around Here:**

Searches around the current position. Or, around the last known position if the current position is not available. (The results will be listed in order of the distance from this position.)

● **In a City:**

Searches for a place within a selected city/town. (The results will be listed in order of the distance from the center of the selected city/town.)

● **Around Destination:**

Searches for a place around the destination of the current route. (The results will be listed in order of the distance from the destination.)

□ This key is active only when the route is set.

● **Along Route:**

Searches along the current route, and not around a point already set. This is useful when searching for a stopover that results in a minimal detour, such as searching for gas stations or restaurants. (The results will be listed in order of the length of the necessary detour.)


□ This key is active only when the route is set.

6 Select one of the categories, subcategories or brands to narrow down the places.

- If you touch [Search by Name], you can search for POIs by their names.

7 Touch the POI.

The searched location appears on the map screen.

- If you touch , you can change the sort method of the results.

8 Touch [Select as Destination], and then touch [Start Navigation].

Your navigation system starts the route guidance.

Searching for a destination

Searching for providers nearby that offer emergency or roadside assistance services

Important

Never use this product to route to hospitals, police stations or similar facilities in an emergency. Stop using any functions relating to the hands-free phoning and please call the appropriate emergency number.

You can search for locations that provide emergency or roadside assistance in the surrounding areas.

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

1 Press the MAP button and touch .

2 Touch [Useful Information].

3 Touch [Help Nearby].


The preset search categories are as follows.

- Car Repair
- Health
- Police
- Gas Station

4 Touch the category.

5 Touch the POI.

The searched location appears on the map screen.

- If you touch , you can change the sort method of the results.

6 Touch [Select as Destination], and then touch [Start Navigation].

Your navigation system starts the route guidance.

Selecting a destination from stored locations

Storing locations you visit frequently saves time and effort. Selecting an item from the list provides an easy way to specify the position.

The list of saved locations contains two preset categories: **Home** and **Work**.


- ❑ This function is available if locations have been registered in "Saved Location".

- ➔ Refer to *Storing a location in "Saved Location"* on page 19

1 Press the MAP button and touch .

2 Touch [New Route].

3 Touch [Saved Location].

- If you touch  and then [Edit], you can edit the details of saved locations.

4 Touch the entry.

The searched location appears on the map screen.

5 Touch [Select as Destination], and then touch [Start Navigation].

Your navigation system starts the route guidance.

Selecting a destination from stored routes

Storing routes you use frequently saves time and effort.

- ❑ This function is not available if no routes have been registered in "Saved Routes".
 - ➔ Refer to *Storing a route in "Saved Routes"* on page 19

1 Press the MAP button and touch .

2 Touch [New Route].

3 Touch  to show the next page.

4 Touch [Saved Routes].

5 Touch the entry.

- ❑ You can add waypoints or change the final destination on the "Route Planner" screen.
 - ➔ Refer to *Building a route using "Route Planner"* on page 17

6 Touch [Show Route], and then touch [Start Navigation].

Your navigation system starts the route guidance.

Selecting a location you searched for recently

The places that were previously set as destinations or waypoints have been automatically stored in "History".

History

1 Press the MAP button and touch .

2 Touch [New Route].

3 Touch  to show the next page.

4 Touch [History].

5 Touch the entry.

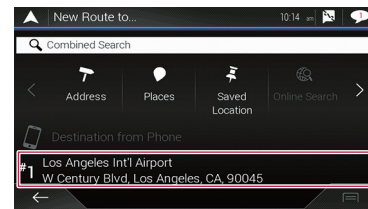
The searched location appears on the map screen.

6 Touch [Select as Destination], and then touch [Start Navigation].

Your navigation system starts the route guidance.

Smart History

Smart History suggests these previously used locations as destinations based on your navigation habits, using parameters like the current time of day, the day of week, and the current location. Smart History items are shown in the "New Route to..." screen for easy access.



Searching for a location using "Combined Search"

The "Combined Search" feature lets you quickly find a place by its name and search area.

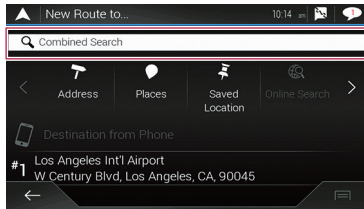
- ❑ The "Combined Search" function also searches your stored data.

1 Press the MAP button and touch .

2 Touch [New Route].

3 Touch [Combined Search].

Searching for a destination



- 4 Touch the right text box to enter the country and city/town.
- 5 Enter the name, address, or category of the destination to the left text box, then touch [Q].
- 6 Touch the entry.
The searched location appears on the map screen.
- 7 Touch the right of the list to narrow down the search results.
 - If you touch a map data provider logo, you can narrow down the list of results by showing the results from the provider.
- 8 Touch [Select as Destination], and then touch [Start Navigation].

Your navigation system starts the route guidance.

Searching for a location by the coordinates

Entering a latitude and longitude pinpoints the location.

- 1 Press the MAP button and touch [≡].
- 2 Touch [New Route].
- 3 Touch [X] to show the next page.
- 4 Touch [Coordinates].
- 5 Enter the latitude value and touch [OK].
 - When a value is already entered in the text field, delete the value first.
 - You can change the display format of the latitude and longitude to any of the following formats: decimal degrees; degrees and decimal minutes; or degrees, minutes and decimal seconds.

- When entering the coordinates in UTM format, touch [≡], then [UTM Coordinates].
- 6 Enter the longitude value and touch [Go!].
 - When a value is already entered in the text field, delete the value first.
- The searched location appears on the map screen.
- 7 Touch [Select as Destination], and then touch [Start Navigation].
- Your navigation system starts the route guidance.

Searching for a location by scrolling the map

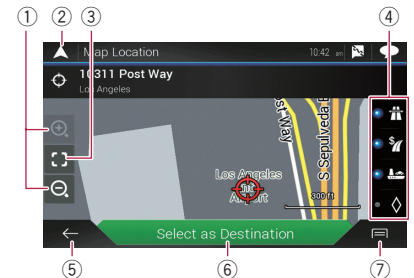
Specifying a location after scrolling the map enables you to set the position as a destination or waypoint.

- 1 Press the MAP button.
- 2 Touch and drag the screen to scroll the map.
- 3 Touch the location that you want to select as your destination.
The cursor appears.
- 4 Touch [Select as Destination], and then touch [Start Navigation].

Your navigation system starts the route guidance.

Using the "Map Location" screen

Once a location is searched, the "Map Location" screen appears. You can select some options for the route or displayed map location before route calculation.



- If you touch the map, the cursor is placed at that position. Also, you can scroll the map by dragging the map.
- ① Zoom in/zoom out
 - You can also pinch or expand the map to zoom in or out.
 - ② Cancels the "Map Location" screen and displays the map of the current position.
 - ③ Returns the cursor to the initial position and the map scale to the initial scale.
 - ④ Shows the route setting preferences for route calculation. Touch the keys to activate or deactivate the preference.

	Calculates the route prioritizing the use of freeways when the key is activated.
	Calculates the route prioritizing the use of per-use charged toll roads when the key is activated.
	Calculates the route prioritizing the use of ferries when the key is activated.
	Calculates the route prioritizing the use of car-pool and HOV lanes when the key is activated.

- ⑤ Returns to the previous screen.
- ⑥ Sets the cursor position to your destination (or waypoint).
- ⑦ Displays the shortcuts.
 - **Detailed Information:**
Shows the detailed information of the point.
 - **Save Location:**
Saves the displayed location as your favorite location. The saved location can be easily recalled later.
 - **Places Around Cursor:**
Searches for POIs around the displayed location. Touch the POI to show the "Map Location" screen, and also set the POI as the destination (or waypoint).

Checking and modifying the current route

Modifying the route


When navigation is already started, there are several ways to modify the current route. The following sections describe some of those options.

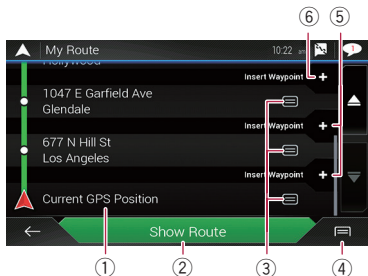
Building a route using "Route Planner"

The "Route Planner" (or "My Route") feature lets you build your route using the list of destinations.

Editing the list allows you to plan your route easily.

- Once you set the route, you can edit your route using the menu displayed as "My Route".

- 1 Press the MAP button and touch .
- 2 Touch [Route Planner] or [My Route].
- 3 Touch one of the options.




- ① Starting position (The current vehicle position is set as default and [Current GPS Position] is displayed.)
 - ➡ Refer to *Changing the starting position* on page 17
- ② Calculates the route and shows the "Route Summary" screen.
- ③ Displays the options for the location.
 - **Move Up/Move Down:**
Edits the order you want to visit the locations.
 - **Delete:**
Deletes the destination or waypoint.
 - **Save Location:**
Stores the location in "Saved Location".
- ➡ Refer to *Storing a location in "Saved Location"* on page 19
 - **Change:**
Changes the destination or waypoint to another location.
 - **Show on Map:**

- ④ Shows the selected location on the map.
 - ④ Displays the shortcuts.
 - **Delete All:**
Deletes all waypoints and the destination. Touch [Continue Without Route] to cancel the planned route.
 - **Optimize Waypoints:**
Changes the order of waypoints automatically so that the route can be easily traveled. (If the resulting order is the same as the current order, this option is invalid.)
 - **Optimize Route:**
Changes the order of all waypoints and the destination automatically so that the route can be easily traveled. (If the resulting order is the same as the current order, this option is invalid.)
 - ⑤ Inserts a new waypoint.
 - ⑥ Adds a new destination and changes the current destination to the last waypoint.

Changing the starting position


The starting position for route can be changed from the current position.

- 1 Press the MAP button and touch .
- 2 Touch [Route Planner] or [My Route].
- 3 Touch [Current GPS Position].
- 4 Touch [Set Start Point] or [Change Start Point] and then touch [OK].
- 5 Search for a location.
- 6 Touch [Set Start Point] or [Change Start Point].
- 7 Touch [Show Route] or [Continue Without Route].

The system starts route recalculation after [Show Route] is touched, and then the "Route Summary" screen appears. After [Start Navigation] is touched, your navigation system starts the route guidance.

After [Continue Without Route] is touched, the current position map appears.


Restoring the current position as the starting position

- 1 Press the MAP button and touch .
- 2 Touch [Route Planner] or [My Route].
- 3 Touch [Current GPS Position].

- 4 Touch [Back to GPS Position] and then touch [Delete Start Point].

The starting position for route calculation returns to the current position.

Adding waypoints

- 1 Press the MAP button and touch .
- 2 Touch [Add Waypoint].
- 3 Search for a location.
- 4 Touch [Select as Waypoint].


The route is recalculated, and the "Route Summary" screen appears. (When the waypoint is already set, the "My Route" screen appears. Touch [Show Route] and proceed to the next step.)

- 5 Touch [Start Navigation].

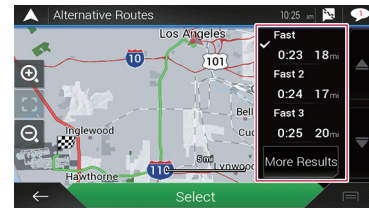
Your navigation system starts the route guidance.

Checking route alternatives

You can select another route and compare different route alternatives.

- 1 Press the MAP button and touch .
- 2 Touch [Detours & Alternatives].
- 3 Touch [Alternative Routes].
- 4 Touch any of the route calculate conditions.

You can see the approximate time required and total distance of selected route alternatives. Touch any of the route alternatives to see it on the map.



- If more than three route alternatives have been found, [More Results] appears. Touch [More Results] to show the other routes.

Checking and modifying the current route

- For information about route calculation conditions, refer to **Route Planning Method** on page 24

5 Touch [Select].

The selected route is applied as your current route.

Checking detour routes

You can check for detour routes that avoid the selected sections or streets, or that avoid the road ahead. You can also check for alternative routes.

1 Press the MAP button and touch .

2 Touch [Detours & Alternatives].

3 Touch one of the options.

● **Alternative Routes:**

Shows the alternative routes.

➤ Refer to *Checking route alternatives* on page 17

● **Avoid Special Sections:**

Shows the route avoiding certain sections. Touch the list item to select the section you want to avoid. The distance and time difference, suggested route, current route, and the section avoided are shown. Touch **[Accept]** to apply the suggested route.

● **Avoid Specific Road:**

Shows the route avoiding certain road. Touch the list item to select the road you want to avoid. Distance and time difference, suggested route, current route, section avoided are shown. Touch **[Accept]** to apply the suggested route.

● **Avoid Road Ahead:**

Shows the route avoiding the road ahead. Touch **[+]** or **[-]** to set the distance you want to avoid. Touch **[Avoid]** to apply the suggested route.

● **Restore Original Route:**

Cancels the route with avoidances and restores the previous route.

- ☐ The route set by **[Alternative Routes]** cannot be canceled.

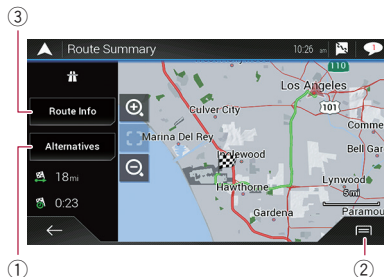
Checking route information and preferences

Once you set the route, you can check a summary of the current route.

1 Press the MAP button and touch .

2 Touch [Route Summary].

3 Touch one of the options.



The conditions of the displayed route is shown in the upper left by icon. The total length of the route and approximate required time for the route in the lower left.

- ☐ You can scroll the map by dragging the map.

① Shows alternative routes.

➤ Refer to *Checking route alternatives* on page 17

② Displays the shortcuts.

● **Route Preferences:**

Shows the route setting preferences. If you change the preferences, the route is recalculated.

● **Itinerary:**

Shows all transit points in detail. Touch a transit point to show its position on the map. If you touch **[Avoid]** on the map screen, the route is recalculated avoiding the transit point (as much as possible).

● **Save Route:**

Saves the displayed route. The saved route can be recalled later.

● **Places Along Route:**

Searches for POIs along the displayed route. Touch the POI to show the "Map Location" screen, and also set the POI as a waypoint.

● **Simulation:**

You can run a simulation of the navigation for the current route, as a demonstration.

➤ Refer to *Watching the simulation of the route* on page 18

③ Shows the information for a transit point on the route.

Touching the items allows you to see the location on the map. Touch **[Avoid]** and **[Accept]** to set the location as a location to avoid.

Canceling the current route guidance

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

1 Press the MAP button and touch .

2 Touch [Cancel Route] or [Delete Waypoint].

3 Touch one of the options.

If there are no waypoints on the route, touch **[Cancel Route]** to cancel the route.

If there are waypoints on the route, touch **[Cancel Route]** to cancel the route. Touch **[Delete Waypoint]** to delete only the nearest waypoint. In such case, the route is recalculated.

Watching the simulation of the route

You can run a simulation of the navigation for the current route, as a demonstration.

1 Set a route to your destination.

➤ Refer to *Searching for a destination* on page 13

2 Press the MAP button and touch .

3 Touch [Route Summary], and then touch .

4 Touch [Simulation].

The simulation starts from the starting point of the route, and using a realistic speed, it leads you through the whole recommended route.

- Touch **[Close]** to stop the simulation.

Registering and editing locations and routes


Storing a location in “Saved Location”

Storing your favorite locations in “**Saved Location**” allows you to save the time and effort used on re-entering this information. “**Saved Location**” can include your home location, workplace, and places you have already registered.

Storing your home and your workplace location

You can store one home location and one workplace location.

1 Press the MAP button and touch .

2 Touch [New Route], and then [Saved Location]. You can also display the “**Saved Location**” screen by touching  on the bottom of the screen when the navigation menu is displayed.

3 Touch [Home] or [Work] and then touch [OK].

❑ When you have already stored your home or workplace, touch [Home] or [Work] to show the location on the “**Map Location**” screen.

4 Search for a location.

➡ Refer to *Searching for a destination* on page 13


5 Touch [Add to Saved Locations].

The cursor position has been stored.

Storing your favorite locations

You can store a frequently visited location (such as a relative's home) to allow easy routing.

1 Press the MAP button and touch .


2 Touch [New Route], and then [Saved Location]. You can also display the “**Saved Location**” screen by touching  on the bottom of the screen when the navigation menu is displayed.

3 Touch [Add Location].



4 Search for a location.

➡ Refer to *Searching for a destination* on page 13

5 Touch [Add to Saved Locations].

6 Enter the name if needed and then touch .

The cursor position has been stored.

❑ In the on-screen keyboard, touching  or  enables you to store the location as your home or workplace location.

Editing stored locations

Stored locations can be edited.

Switching to the edit mode

1 Press the MAP button and touch .

2 Touch [New Route], and then [Saved Location].

3 Touch , and then touch [Edit].

The “**Select Location to Edit**” screen appears.

Renaming stored locations

1 Switch to the edit mode.

➡ Refer to *Switching to the edit mode* on page 19

2 Touch the item you want to rename and touch [Rename].

❑ “**Home**” and “**Work**” cannot be renamed. The location can be set again.

3 Enter the name and then touch .

4 Touch [Done].


Deleting stored locations

1 Switch to the edit mode.

➡ Refer to *Switching to the edit mode* on page 19

2 Touch the item you want to delete and touch [Delete].

❑ “**Home**” and “**Work**” cannot be deleted. The location can be set again.

❑ If you touch  and then touch [Delete All], all entries (including the home and workplace locations) can be deleted.

A message will appear asking you to confirm the deletion.

3 Touch [OK].

4 Touch [Done].

Storing a route in “Saved Routes”

Storing your favorite routes in “**Saved Routes**” allows you to save the time and effort used on re-entering this information.


1 Set a route to your destination.

➡ Refer to *Searching for a destination* on page 13

2 Press the MAP button and touch .

3 Touch [Route Summary], and then touch .

4 Touch [Save Route].

5 Enter the name if needed and then touch .

Editing the stored route

Stored routes can be edited.

Renaming stored routes

1 Press the MAP button and touch .

2 Touch [New Route], and then .

3 Touch [Saved Routes].

4 Touch , and then touch [Edit].

5 Touch the item you want to rename and touch [Rename].

6 Enter the name and then touch .

7 Touch [Done].

Deleting stored routes

1 Press the MAP button and touch .

2 Touch [New Route], and then .

3 Touch [Saved Routes].

4 Touch , and then touch [Edit].

5 Touch the item you want to delete and touch [Delete].

❑ If you touch  and then touch [Delete All], all entries can be deleted.

6 Touch [Delete].

Registering and editing locations and routes

Saving a location as an alert point

Important

The warning for road safety cameras (like speed cameras) is disabled when you are in certain countries where warnings for road safety cameras are prohibited. However, you are fully responsible for ensuring that this feature is legal in the country where you intend to use it.

You can save any map location (such as a school zone or railroad crossing) as an alert point.

- ❑ To use this function, activate the warnings beforehand and set the alert types.
 - ➔ Refer to "Warnings" settings on page 25

- 1 Press the MAP button.
- 2 Scroll the map and select a location.

The cursor appears at the selected point.

- 3 Touch [Map Icon].
- 4 Touch [Add Alert Points].
- 5 Set the necessary parameters.

- **Alert Type:**
Sets the type of the alert point.
- **Speed Limit:**
Sets the speed limit for this alert point (if applicable).
- **Direction:**
Sets the direction from which you expect the alert to come from.

- 6 Touch [Save].

Editing the stored alert points

Stored alert points can be edited.

- 1 Press the MAP button.
- 2 Scroll the map and move the cursor over the stored alert point, and then touch [Map Icon].
- 3 Touch [Edit Alert Points].
- 4 Set the necessary parameters.
 - If you touch [Map Icon] and then touch [Delete], the selected alert point will be deleted.
- 5 Touch [Edit].

Receiving real-time traffic information

- ❑ The online function in "Traffic" can be used if you connect an iPhone or a smartphone that has the **AVICSYNC App** installed.
 - ➔ Be sure read *Expanding the use of the navigation functions* (page 28) before using the **AVICSYNC** function.
- ❑ The traffic information feature can be used when the online traffic feature is available.

Displaying the "Traffic Summary" screen

- 1 Press the MAP button and touch [Map Icon].

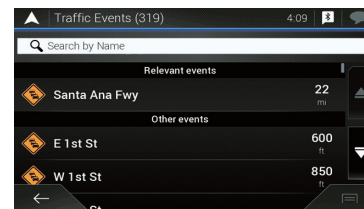
- 2 Touch [Traffic].

The "Traffic Summary" screen appears.

Viewing the traffic list

Traffic information is displayed onscreen in a list. This allows you to check how many traffic incidents have occurred, the locations, and the distance from your current position.

- 1 Display the "Traffic Summary" screen.
 - ➔ Refer to *Displaying the "Traffic Summary" screen* on page 20
- 2 Touch [Traffic Events].



A list with traffic information that has been received is shown. The list is sorted by distance from your current position. Places (street names) where incidents have occurred are displayed on the list.

- ❑ If a route is set, relevant events for your current route are shown in the upper section of the list.

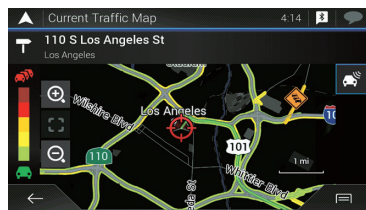
Receiving real-time traffic information

- Touching the desired item allows you to check its position on the map. Touch or to show the previous or next event.

Checking the traffic incidents on the map

Traffic event information can be displayed on the map.

- 1 **Display the "Traffic Summary" screen.**
- ➔ Refer to *Displaying the "Traffic Summary" screen* on page 20
- 2 **Touch [Traffic Map].**

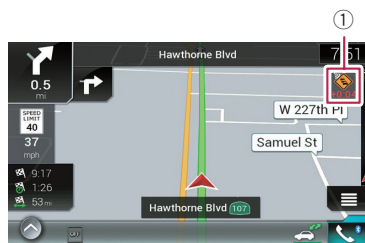


Road segments affected by traffic incidents are displayed in an alternate color on the map, and small symbols above the road show the nature of the incident. The traffic congestion lines indicate the degree of the congestion by color.

When traffic incidents occur on your route

The notification icon shows the status of traffic information reception.

- 1 **Touch the relevant traffic event icon on the map.**



① Traffic notification icon

	Indicates that there are no traffic incidents in your coverage area.
	Indicates that information on traffic incidents are being received.
	Indicates that there are no significant traffic incidents on your route.
	Indicates that there are significant traffic incidents on your route. The icon shows the type of the next traffic incident.

You can check the details of the traffic incidents. Touch the relevant event to display the location on the map.

Turning the traffic information on or off

The traffic information feature is turned on by default. To enable or disable the TMC feature, perform the following procedure.

- If you turn the traffic information feature off, [Traffic] on the navigation menu disappears.

- 1 **Press the MAP button and touch .**
- 2 **Touch , and then touch [Settings].**
- 3 **Touch , and then touch [Traffic].**
- 4 **Touch [Traffic] to turn the switch on or off.**

Checking useful information about your trip

Displaying the "Useful Information" menu

The "Useful Information" menu contains various information to support your driving.

- To use the online functions ("Parking", "Weather" and "Fuel Prices"), the appropriate content installation must be installed in the navigation system and a connection with an iPhone or a smartphone that has the **AVICSYNC App** installed must be established.
- ➔ Be sure read *Expanding the use of the navigation functions* (page 28) before using the **AVICSYNC** function.

- 1 **Press the MAP button and touch .**

- 2 **Touch [Useful Information].**

The "Useful Information" screen appears.

Information on each option in the "Useful Information" menu

- **Parking:**
Checks for parking lots near your current location.
➔ Refer to the manual for **AVICSYNC** on our website
- **Fuel Prices:**
Displays recent gas prices of gas stations near the current location, along the current route, or in the town.
➔ Refer to the manual for **AVICSYNC** on our website
- **Weather:**
Checks the weather forecast for your current location, along your route, around your destination, as well as for your saved locations.
➔ Refer to the manual for **AVICSYNC** on our website
- **Where Am I?:**
Displays a special screen with information about the current position and a key to search for nearby emergency or roadside assistance services.
□ To save the current position as a "Saved Location" destination, touch .
- ➔ Refer to *Storing a location in "Saved Location"* on page 19
- **Help Nearby:**
Checks for POIs in your surroundings.
The preset search categories are as follows.
 - Car Repair:
 - Health:
 - Police:
 - Gas Station:

Checking useful information about your trip

- **Trip Monitor:**
Checks the statistical data of your trips (for example, start time, end time, average speed, etc.).
 - ➔ Refer to *Recording your travel history* on page 22
- **GPS Information:**
Displays the GPS information screen with satellite position and signal strength information.
- **Fuel Consumption:**
You can estimate the fuel cost to your destination by entering the fuel consumption information in the navigation system.
 - ➔ Refer to *Calculating the fuel consumption* on page 22

Recording your travel history

Activating the trip logger enables you to record your driving history (hereinafter called “trip log”). You can review your trip log later.

- ☐ The trip logger is set so that it can be started manually by default. You can change the settings of this function in order to save the log automatically.
- ➔ Refer to *“Trip Monitor” settings* on page 27

Activating trip logger temporarily

One-time activation is useful if you want to create a log only for a particular trip.

- 1 **Display the “Useful Information” menu.**
 - ➔ Refer to *Displaying the “Useful Information” menu* on page 21
 - 2 **Touch [Trip Monitor].**
A list of trip logs already recorded appears. A blank list appears if you have not recorded any trip logs yet.
 - 3 **Touch [Start New Recording].**
The trip logger is activated. The touch key changes to [Stop Recording]. Touching [Stop Recording] allows you to deactivate the trip logger.
 - ☐ If there is not enough space in the built-in memory, the oldest trip log will be overwritten by the new one.
 - ☐ If you want the system to always activate the trip logger whenever the GPS signal is available, turn on **“Enable Auto-Saving”**.
- ➔ Refer to *Setting the trip logger* on page 22

Browsing the trip log

- 1 **Record the trip log.**
- 2 **Display the “Useful Information” menu.**

- ➔ Refer to *Displaying the “Useful Information” menu* on page 21

- 3 **Touch [Trip Monitor].**
 - ☐ To export all trip logs, touch [Export All].
- 4 **Touch any of the items to see the details.**
 - ☐ To display the trip log on the map, touch [Visible on Map] to tick the check box.

Touching [] allows you to view the shortcuts and enables you to use the following functions.

- **View on Map**
Shows the trip log on the map screen.
- **Export Track Log:**
Exports the track log currently selected to a USB storage device.

Setting the trip logger

- 1 **Record the trip log.**
- 2 **Display the “Useful Information” menu.**
 - ➔ Refer to *Displaying the “Useful Information” menu* on page 21
- 3 **Touch [Trip Monitor].**
- 4 **Touch [] and then touch [Trip Monitor Settings].**
- 5 **Touch any of the items to change the settings.**
 - **Enable Auto-Saving:**
Sets whether automatic trip logging is activated or not.
 - **Save Track Log:**
Track logs, the sequence of the positions given by the GPS receiver, can be saved together with trip logs. You can activate the track logger whenever the trip logger is activated.
 - ☐ **“Trip Database Size”** indicates the current data size of the trip log (track log included).

Editing a trip log

- 1 **Display the “Useful Information” menu.**
 - ➔ Refer to *Displaying the “Useful Information” menu* on page 21
- 2 **Touch [Trip Monitor].**
- 3 **Touch [] and then touch [Edit].**
- 4 **Touch any of the items to edit.**
 - **Delete:**
Deletes the trip log.
 - **Rename:**

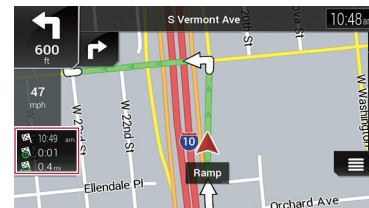
Renames the trip log.

- **Change Color:**
Changes the color by selecting another color from the color table.
 - ☐ If you touch [] and then touch [Delete All], all entries can be deleted.
- 5 **Touch [Done].**

Using the Trip Computer mode

In the trip computer screen, the information received from the GPS receiver and your vehicle is displayed like a meter for a vehicle.

- 1 **Press the MAP button.**
- 2 **Touch the data field key.**



- ☐ If you touch [Trip Summary], the details of the current trip are displayed. Touch [Save Trip] to store the current trip log.
- ☐ If you press the MAP button, you can return to the map screen.

Calculating the fuel consumption

The fuel consumption monitor helps you keep track of the fuel consumption of your car even if you do not use the navigation system for all your journeys. Set the initial odometer value and then record the distance driven and the amount of fuel whenever you fill up your car. You can also set reminders for regular car maintenance.

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 that the fuel mileage displayed can be obtained.

Checking useful information about your trip

Setting the initial odometer value

Before you use the fuel consumption feature, enter the initial odometer value from which you want to start measuring the mileage.

1 Display the “Useful Information” menu.

➤ Refer to *Displaying the “Useful Information” menu* on page 21

2 Touch [Fuel Consumption].

3 Touch [Initial Odometer Value].

4 Enter the initial odometer value and then touch .

The initial odometer value has been set.

Entering the fuel consumption information

To calculate the fuel consumption for the distance you have traveled, enter the distance driven and the amount of fuel whenever you fill up your car.

1 Display the “Useful Information” menu.

➤ Refer to *Displaying the “Useful Information” menu* on page 21

2 Touch [Fuel Consumption].

3 Touch [Add].

4 Touch [Current Odometer Value] and then enter the current odometer value.

5 Touch [Gas Amount] to enter the amount of fuel pumped this time.

6 Touch [Gas Price / Unit] to enter the fuel unit price this time.

7 Touch [Add].

8 Touch [Done].

❑ To delete an entry, touch  to display the shortcut for deletion.

Setting the car maintenance schedule

1 Display the “Useful Information” menu.

➤ Refer to *Displaying the “Useful Information” menu* on page 21

2 Touch [Fuel Consumption].

3 Touch .

4 Touch [Maintenance Schedule].

5 Touch [Add] or the one of entries.

6 Enter the name, date, and mileage for the reminder.

7 Touch [Done].

❑ To delete an entry, touch  to display the shortcut for deletion.

Customizing preferences of the navigation

Customizing the navigation settings

You can configure the navigation settings, and modify the behavior of this system.

1 Press the MAP button and touch .

2 Touch , and then touch [Settings].

The “Settings” screen appears.

● Route Preferences:

Sets the type of vehicle you are driving, the road types used in route planning, and the route planning method.

➤ Refer to “Route Preferences” settings on page 24

● Sound:

Adjusts the different sound volumes and changes the voice guidance profile.

➤ Refer to “Sound” settings on page 25

● Warnings:

Enables or disables warnings and sets up the warning function.

➤ Refer to “Warnings” settings on page 25

● Navigation Map:

Fine-tunes the appearance of the map screen and adjusts how the software helps you navigate with different kinds of route-related information on the map screen.

➤ Refer to “Navigation Map” settings on page 26

● Regional:

Changes the voice guidance language, the application language, and measurement units.

➤ Refer to “Regional” settings on page 26

● Display:

Sets separate themes for daytime and nighttime use, adjusts the display backlight, and enables or disables menu animations.

➤ Refer to “Display” settings on page 27

● Traffic:

Enables or disables the traffic information feature.

➤ Refer to “Traffic” settings on page 27

● Weather:

Enables or disables the online weather forecast option and the automatic download of weather information.

➤ Refer to the manual for **AVICSYNC** on our website

● Fuel:




Enables or disables the online gas price option and sets up the gas type.

Customizing preferences of the navigation

- ➔ Refer to the manual for **AVICSYNC** on our website
- **Trip Monitor:**
Turns automatic trip log saving on or off and checks the current size of the trip database.
- ➔ Refer to **"Trip Monitor" settings** on page 27
- **AVICSYNC**
Displays the connection method for **AVICSYNC**.
☐ The setting value is fixed. Use this product as it is.
- **Connected Services:**
Enables or disables the connected services.
- ➔ Refer to **"Connected Services" settings** on page 27
- **Start Configuration Wizard:**
Modifies the basic software parameters used during the initial setup process.
- **SynTool:**
Starts the synchronization tool, which makes it possible to update your maps.
- ➔ Refer to *Getting the map update* on page 28

Restoring the default settings

You can restore settings or recorded content to the default settings.

- 1 Press the **MAP** button and touch .
- 2 Touch , and then touch **[Settings]**.
- 3 Touch .
- 4 Touch **[Reset All Settings]**.
- 5 Touch **[OK]**.

The recorded contents are cleared.

- ☐ If you touch **[Factory Reset]** on the shortcut, all data relevant to navigation (including the items in saved locations and histories) are deleted and all settings are reset to their factory defaults.

Information on each option of "Settings"


"Route Preferences" settings

Vehicle

You can set the type of vehicle you will be using on the route.

- ☐ The route is planned based on the selected vehicle type. Route planning can also be configured to incorporate dimension, weight, and freight hazard restrictions for maps that contain such data.

To enhance the route accuracy, correctly select a vehicle type that is similar to the condition of your vehicle.

- **Car:**
 - Maneuver restrictions and directional constraints are taken into account when planning a route.
 - Roads are used only if access for cars is allowed.
 - Private roads and resident-only roads are used only if they are inevitable to reach the destination.
 - Walkways are excluded from routes.
- **Emergency:**
 - All maneuvers available at intersections are taken into account.
 - Directional constraints are taken into account in the same way as travel in the opposite direction is allowed at some speeds.
 - Only private roads that need to be used to access the destination are included.
 - Walkways are excluded from routes.
- **Bus:**
 - Maneuver restrictions and directional constraints are taken into account when planning a route.
 - Roads are used only if access for buses is allowed.
 - Private roads, resident-only roads and walkways are excluded from routes.
- **Taxi:**
 - Maneuver restrictions and directional constraints are taken into account when planning a route.
 - Roads are used only if access for taxis is allowed.
 - Private roads, resident-only roads and walkways are excluded from routes.
- **Truck:**
 - Maneuver restrictions and directional constraints are taken into account when planning a route.
 - Only roads that allow truck access are included.
 - Private roads, resident-only roads and walkways are excluded from routes.
 - U-turns are not used in routes (turning around on a divided road is not considered a U-turn for the purpose of this system).
- ☐ To edit the name and estimated maximum speed of the selected vehicle profile, touch .
- ☐ To add a new vehicle profile, touch **[Add Profile]**. Then select one of the vehicle types and set the name and estimated maximum speed.

Route Planning Method

You can change the route planning method. Route calculation can be optimized for different situations and vehicle types by changing the planning method. The route planning method types are as follows.

- **Fast**

Calculates a route with the shortest travel time to your destination as a priority. Usually the best selection for fast and standard cars.

- **Easy**
Results in a route with fewer turns and no difficult maneuvers. With this option, you can make this system to take, for example, the freeway instead of a series of smaller roads or streets.
- **Short**
Calculates a route with the shortest distance to your destination as a priority. Usually practical for slower vehicles. Rarely practical to use to search for shorter routes for normal vehicles regardless of the speed.
- **Economical**
Calculates a route that is quick and saves fuel.

Navigation Mode

You can enable or disable off-road navigation.

- **On-road**
The route is planned towards the destination along the roads on the map.
- **Off-road**
The route is planned towards the destination in a straight line, not along the roads on the map.

Highways

When this function is turned off, the route is calculated prioritizing the avoidance of freeways.

This function is useful when you want to avoid freeways when you are driving a slow car or you are towing another vehicle.

Period Charge

When this function is turned off, the route is calculated prioritizing the avoidance of toll roads.

This function is useful when you want to avoid toll roads with restricted time access that require you to purchase a separate pass or vignette to extend the length of time allotted for use.

- ☐ This option can be enabled or disabled separately from the pre-use toll road usage option.

Per-use Toll

When this function is turned off, the route is calculated prioritizing the avoidance of per-use charged toll roads.

This function is useful when you want to avoid toll roads where there is a per-use charge.

Ferries

When this function is turned off, the route is calculated prioritizing the avoidance of ferries.

Customizing preferences of the navigation

Car Shuttle Trains

When this function is turned off, the route is calculated prioritizing the avoidance of car shuttle trains.

Car shuttle trains are used to transport vehicles for relatively short distances and they usually connect places that are not easily accessible by road.

Carpool Lanes

When this function is turned off, the route is calculated prioritizing the avoidance of carpool and HOV lanes.

- ☐ The navigation system avoids carpool and HOV lanes by default.

Unpaved Roads

When this function is turned off, the route is calculated prioritizing the avoidance of unpaved roads.

- ☐ The navigation system avoids unpaved roads by default.

“Sound” settings

- ☐ The following settings marked with an asterisk (*) are enabled only when a TTS-voice is selected for the voice language.

Voice

You can adjust the volume of the guidance sounds (verbal instructions).

Alert Beeps

You can adjust the volume of the non-verbal alert sounds (beeps).

Ding

You can turn off the attention tone that precedes the verbal instructions or adjust its volume.

Voice Guidance

You can enable or disable voice guidance.

- ☐ This function is enabled by default.

Announce Streets and Roads in Native Language Area*

You can select whether to have the navigation system announce the street names in the native language of the area, only the road numbers, or only the maneuvers.

Announce Streets and Roads in Foreign Language Area*

You can select whether to have the navigation system read the street names in a foreign country, only the road numbers, or only the maneuvers.

Early Indication of Maneuvers

You can select whether you want an immediate announcement for the next maneuver or to receive the information when the maneuver is near.

Verbosity Level

You can set the verbosity of the voice instructions: how much information is given and how often the prompts occur.

- **Minimal:** Voice instructions are given once right before the next maneuver.
- **Medium:** Voice instructions are given once as the vehicle approaches the next maneuver and it is repeated right before the maneuver.
- **Verbose:** Voice instructions are given once relatively far from the next maneuver, it is repeated as the vehicle approaches the next maneuver, and it is repeated again right before the actual maneuver.

Announce Route Summary*

You can select whether to have the navigation system announce by voice a quick summary of the route whenever a route is calculated.

Announce Country Info*

When you cross country borders, this navigation system can read out information about the country you have just entered.

- ☐ This function is not effective if the map coverage of your navigation system is only one country (technically, there is no country border data).

Announce Traffic Info*

You can select whether to have the navigation system announce by voice the traffic information whenever a traffic incident on your route is received.

Announce System Messages*

When a system message appears, this navigation system can read out the message.

“Warnings” settings

Important

- This system is able to warn you if you exceed the current speed limit. This information may not be available for your region (ask your local dealer), or may not be fully correct for all roads on the map.
- You are liable for ensuring that using this feature is legal in the country where you intend to use it.

Speed Warning

Warn When Speeding

You can select whether you want to receive visible and/or audible warnings.

The following alert types are available:

- **Audio and Visual:** When selected, audible and visible warnings will go off when you exceed the speed limit.
- **Visual:** When selected, visible warnings will go off when you exceed the speed limit.
- **Disabled:** When selected, no warnings will go off.

Speed Limit Always Visible

You can select whether you want to see the speed limit sign on the map all the time. When you set the speed limit to always be visible, the color of the speed limit sign changes when you exceed the speed limit.

Outside Cities: ***% of the Speed Limit

You can receive a warning when you reach the set percentage of the speed limit in rural areas.

Within Cities: ***% of the Speed Limit

You can receive a warning when you reach the set percentage of the speed limit in urban areas.

Alert Points

This setting allows you to receive a warning when approaching alert points like school zones or railroad crossings.

- 🔗 Refer to *Setting the alert point warnings* on page 27

Warning Road Signs

Maps may contain driver alert information. Touch this key to turn on or off these warnings and to set the distance from the hazard to receive the warning at. These can be set individually for the different warning types.

Customizing preferences of the navigation

“Navigation Map” settings

Map Display

You can see the effect when you change a setting.

● Viewpoint

You can adjust the basic zoom and tilt levels to your needs. Some preset levels are available. If you select “**Manual**”, you can store adjusted map scales and view angles.

● Color Mode

You can switch between daytime and nighttime color modes or let the software switch between the two modes automatically a few minutes before sunrise and a few minutes after sunset.

● Day Map Color

You can select the color scheme used in the daytime map.

● Night Map Color

You can select the color scheme used in nighttime map.

● Landmarks

This setting shows or hides 3D landmarks which are 3D artistic or block representations of prominent or well-known objects.

- ☐ This function becomes effective only when the additional map data is installed.

● Buildings

This setting shows or hides 3D city models which are 3D artistic or block representations of complete city building data containing actual building sizes and actual positions on the map.

- ☐ This function becomes effective only when the additional map data is installed.

● 3D Terrain

This setting shows or hides the 3D elevation of the surrounding terrain.

● Track Logs

You can turn on or off track log saving which saves the sequence of the locations you go through on your journeys.

● Place Markers

You can select which POI icons to show on the map while navigating.

- ☐ When a large number of POI icons exist on a map display, maps and POI icons become hard to see. To maintain map and POI visibility, reduce the displayed categories as much as possible.

Data Fields

You can choose to have different values displayed for when navigating a route to a select destination and for when just cruising around without any particular destination.

- ➡ Refer to *Browsing the data field* on page 13

“**First**”, “**Second**” and “**Third**” selects items displayed in the data fields shown when the route exists. “**Without Route**” selects the items displayed in the data fields shown when a route does not exist.

Route Progress Bar

You can turn on the route progress bar to display the current route as a straight line located on the right side of the map. The arrow represents your current position and moves up the line as you travel along the route.

Offer Freeway Services

You may need to stop by a gas station or a restaurant during your journey.

- ➡ Refer to *Frequently shown route events* on page 12

Services Displayed

You can select the service types displayed for the freeway exits or service stations. Choose from the POI categories.

Automatic Overview

When selected, the map zooms out to show an overview of the surrounding area if the next route event (maneuver) is far. When you get close to the event, the map returns to the normal map view.

Signposts

Whenever adequate information is available, lane information similar to the real ones on road signs above the road is displayed at the top of the map. You can turn this feature on or off.

Junction View

If you are approaching a freeway exit or a complex intersection and the necessary information is available, the map is replaced with a 3D view of the junction.

Tunnel View

When entering tunnels, the surface roads and buildings can be distracting. This feature shows a generic picture of a tunnel instead of the map. A top-down overview of the tunnel and remaining distance are also displayed.

Offer Congestion Detour on Highways

When you slow down while driving on a freeway due to a traffic congestion, this navigation system offers you a detour using the next exit. The message shows you the distance to the exit and the difference in the distance and estimated time compared to the original route. You can choose from one of the following options:

- Touch [**Dismiss**] or just ignore the message if you want to keep the original route.
- Touch [**Preview**] to see an overview of the original route and the detour to make the decision. You can accept the detour as shown in the preview, or increase the freeway segment bypassed before accepting.
- Turn to the suggested new direction and the route will be automatically recalculated.

Offer Real Time Alternative Routes

Alternative routes can be suggested when driving on normal roads. This navigation system will select a different turn in the upcoming intersection and offer you a different route for the next section of the route. You cannot, however, modify the offered detour.

Offer Parking Around Destination

Parking at the destination may not be easy to find in city areas. As you approach the destination, this navigation system can offer parking category places near your destination. Touch ☐ to open a top-down map with the destination and the offered parking places. The route is calculated by selecting one of the parking places.

Offer Hints Upon Detour

If you leave the recommended route and suddenly exit the freeway, this navigation system offers different alternatives near the exit like gas stations or restaurants. Also, if there are available parts of the original route ahead (like a tunnel, a toll road or a ferry), you will find them in the list in case you want to bypass them with the help of this navigation system.

“Regional” settings

Language

This key displays the current language of the user interface. By touching the key, you can select a new language from the list of available languages. This system will restart if you change this setting.

Voice Language

This key displays the current voice guidance profile. By touching the key, you can select a new voice guidance language from the list of available languages and speakers. Touch any of these keys to hear a sample voice prompt.

Units and Formats

You can set the various units to be used by this system.

Customizing preferences of the navigation

- ❑ This system may not support all the listed units in some voice guidance languages.

- **Distance**
The unit of distance can be changed.
- **Fuel Economy**
The unit of fuel mileage can be changed.
- **Weight**
The unit of weight can be changed.
- **Temperature**
The unit of temperature can be changed.
- **Coordinate Display Format**
The format of the coordinates can be changed.
- **Currency**
The currency unit can be set.

Time Zone

By default, the time zone is taken from the map information and adjusted according to your current location.

- **Automatic Time Zone**
The time zone setting changes automatically.
 - **Manual Time Zone**
The present setting value for the time difference and daylight saving time that you set are used.
 - **Manual Time Zone if Auto Unavailable**
The time zone setting changes automatically if automatic change is available. Otherwise, the present setting value that you set is used.
 - **Manual Time Zone in Current Zone**
The present setting value that you set are used in the current time zone. If your vehicle moves to another time zone, the time zone setting changes automatically.
- ❑ If a setting other than **"Automatic Time Zone"** is selected, **"Time Zone"** (the option to set the time difference manually) and **"Daylight Saving Time"** (the option to turn on or off daylight saving time) can also be set.

"Display" settings

Menu Animations

When animation is turned on, the keys on the menus and key-board screens appear in an animated way. Screen transitions are also animated.

Day Skin Theme

You can select the style and colors of the navigation menu used in the daytime.

Night Skin Theme

You can select the style and colors of the navigation menu used in the nighttime.

"Traffic" settings

Traffic

You can set to enable or disable the TMC receiver that can receive real-time traffic information.

Data Source

You can select what data source you want to use for receiving real-time traffic information. **[Online]** is available only if the device is enabled.

Use Traffic Info

You can select whether to have traffic incidents be taken into consideration when the route is calculated.

Show Traffic Info

You can select whether to show icons relevant to traffic incidents and lines indicating the traffic flow on the map.

- **Off**
No traffic icons or lines indicating the traffic flow are shown.
- **Color**
Only the line relevant traffic incidents are shown on the map.
- **Color And Icon**
Icons for the relevant traffic incidents and lines indicating the traffic flow are shown on the map.

Show Free Traffic Flow As Well

You can select whether to receive information on smooth traffic flow.

Offer Detour if it Saves at Least

You can set the minimum time to be saved when having the system suggest a detour route. If the estimated time saved by the planned detour avoiding the traffic incidents is more than the set time, the system suggests the new detour route. Otherwise, the new route is not suggested.

Confirm Detours Manually

You can enable or disable the manual confirmation of every recalculation.

"Trip Monitor" settings

Enable Auto-Saving

☞ Refer to *Setting the trip logger* on page 22

Save Track Log

☞ Refer to *Setting the trip logger* on page 22

"Connected Services" settings

You can use the **"Connected Services"** settings to enable or disable connected online features.

☞ Refer to *Expanding the use of the navigation functions* on page 28

Online Traffic

You can enable or disable the online traffic service.

Online Weather

You can enable or disable the online weather forecast service.

Online Parking

You can enable or disable the online parking service.

Online Fuel Prices

You can enable or disable the online gas price service.

Online Search



You can enable or disable the online search service.

Setting the alert point warnings

Important

The warning for road safety cameras (like speed cameras) is disabled when you are in certain countries where warnings for road safety cameras are prohibited. However, you are fully responsible for ensuring that this feature is legal in the country where you intend to use it.

You can set an alert for the different alert point categories, individually.

- 1 Press the **MAP** button and touch .
- 2 Touch , and then touch **[Settings]**.

Customizing preferences of the navigation

- 3 Touch [Warnings].
- 4 Touch [Alert Points].
- 5 Touch [Alert Point Warnings] to turn it on.
- 6 Touch the item you want to set.
 - **Alert Types**
Sets the type of alert point.
 - **Speed Camera Types**
Sets the type of speed camera.
- 7 Touch any of the items to change the setting.
- 8 Touch [Warning Type] and then touch one of the options.

The following alert types are available:

- **Disabled:**
The system does not warn you of the alert points for this category.
 - **Audio and Visual:**
You will receive audible and visible warnings while you are approaching the points in this category.
 - **Visual:**
You will receive a visible warning while you are approaching the points in this category.
- ☐ If you select **"Audio and Visual"** in the warning type setting, you can change the reception timing of the audio alert. If you select **"Only When Speeding"**, the audio alert is only played when you exceed the given speed limit. If you select **"When Approaching"**, the audio alert is always played when approaching one of these alert points. In order to draw your attention, the alert is different when you exceed the speed limit.

Getting the map update

You can update existing content, purchase additional maps and activate extra services on your product. To update the content, download the update on your USB memory storage by using the computer to which the Naviextras Toolbox is installed. Then, transfer the data from connected USB memory storage to your navigation system by using **"SyncTool"** on this product.

- ☐ For details, access the following URL and refer to **"HOW TO UPDATE?" GUIDE**.
<http://pioneer.naviextras.com>

Downloading the latest maps for free

Once you have connected your device with USB stick to Naviextras Toolbox and logged in to your account, you can download map updates.

Naviextras offers a latest map guarantee meaning that you can download the latest maps once for free. Within 45 days after the first use of your Pioneer Navigation System and a newer map update is available, you are entitled to install it for free.

For details, access the following website and refer to **"HOW TO UPDATE?" GUIDE**.
<http://pioneer.naviextras.com>

Summarized procedures

- 1 Format the USB memory storage to prepare the update by using **"SyncTool"** on your navigation system.
- 2 Access our website for map update.
- 3 Download the Naviextras Toolbox and install it to your computer.
- 4 Download the map update on your USB memory storage by using the Naviextras Toolbox.
- 5 Connect the USB memory storage to the navigation system.
- 6 Transfer the map data with **"SyncTool"** to your navigation system.

Expanding the use of the navigation functions

You can expand the use of the navigation functions to iPhone or smartphones if you connect an iPhone or a smartphone (Android) that has the **AVICSYNC App** installed.

Be sure to read before you use AVICSYNC function

Important

- Premium services for AVICSYNC require a paid subscription in order to be used, and not all services are available in all countries. Please refer to our website for more details.
- Please be aware that you may be charged additional roaming charges by your cellular provider if you use connected services while abroad.
- If the Data Plan for your iPhone or smartphone (Android) does not provide for unlimited data usage, additional charges from your carrier may apply for accessing app-based connected content via networks other than Wi-Fi.
- The information which is sent by content provider, such as search results, regulations, prices, etc. may not necessarily correspond to the actual condition. Utilise the information for your reference.
- To ensure compatibility, always use the latest version of the **AVICSYNC App**.
- If the downloaded data is large, it may take some time for the data to be transferred to your in-car navigation system via the **AVICSYNC App**. In such cases, you can also synchronize the content using Naviextras Toolbox on your computer and the **"SyncTool"** menu of the in-car navigation instead.
- Depending on usage conditions, download of the map content package may not be possible because of your device's internal memory size or insufficient memory space. In this case, only "Connected Services" is available.

Limitations:

- Access to app-based connected content will depend on the availability of cellular and/or Wi-Fi network coverage for the purpose of allowing your smartphone to connect to the Internet.
- Service availability may be geographically limited to the region. Consult the connected content service provider for additional information.
- Ability of this product to access connected content is subject to change without notice and could be affected by any of the following: compatibility issues with future firmware versions of smartphone; compatibility issues with future versions of the connected content application(s)

Customizing preferences of the navigation

for the smartphone; changes to or discontinuation of the connected Content application(s) or service by its provider.

- Pioneer is not liable for any issues that may arise from incorrect or flawed app-based content.
- The content and functionality of the supported applications are the responsibility of the App providers.

What is the AVICSYNC App?

The **AVICSYNC App** is a dynamic companion app that you can use to connect your iPhone or smartphone to a compatible Pioneer navigation system.

Once linked, the navigation system communicates with your iPhone or smartphone to share information such as contacts, navigation history, planned routes, POI favorites, and even where you parked your vehicle.

With the **AVICSYNC App**, your navigation receiver can also access Premium connected services such as real-time local search and weather data lookup to ensure that you'll have all the information you need to reach your desired destination.

As new content data becomes available, you can use the **AVICSYNC App** to review, purchase, download, and transfer updated content directly to the compatible Pioneer navigation system.

In addition to augmenting your Pioneer in-dash navigation experience, **AVICSYNC App** also works as a standalone navigation app. This means that you'll always have access to Pioneer's accurate turn-by-turn navigation, even when you're not in your vehicle.

Access our website to check further details for the **AVICSYNC App**.

For U.S.A.

<http://www.pioneerelectronics.com/AVICSYNC>

For Canada

<http://www.pioneerelectronics.ca/AVICSYNC>

- To use the **AVICSYNC App** as a standalone navigation app, a periodical connection between your in-car navigation system and an iPhone or a smartphone (Android) that has the **AVICSYNC App** installed is required.

Compatibility and connectivity

You need to install the free **AVICSYNC App** to your iPhone or smartphone (Android). To use the **AVICSYNC App** function, both iPhone or smartphone (Android) compatibility with the **AVICSYNC App** and connectivity with the navigation system are required.

AVICSYNC compatibility

AVICSYNC is available for the following models.

- Depending on the software version of the iPhone and smartphone (Android), it may not be compatible with this product. For latest compatibility with this product and **AVICSYNC App**, refer to the information on our website.

iPhone models

- iPhone 7: iOS 10.0
- iPhone 7 Plus: iOS 10.0.1
- iPhone SE: iOS 9.3, 10.0
- iPhone 6s: iOS 9.0.x, 9.1, 9.2, 9.3, 10.0
- iPhone 6s Plus: iOS 9.0.x, 9.1, 9.2, 9.3, 10.0
- iPhone 6: iOS 8.0.x, 8.1, 9.0.x, 9.1, 9.2, 9.3, 10.0
- iPhone 6 Plus: iOS 8.0.x, 8.1, 9.0.x, 9.1, 9.2, 9.3, 10.0
- iPhone 5s: iOS 7.1.x, 7.0.x, 8.0.x, 8.1, 9.0.x, 9.1, 9.2, 9.3, 10.0
- iPhone 5c: iOS 7.1.x, 7.0.x, 8.0.x, 8.1, 9.0.x, 9.1, 9.2, 9.3, 10.0
- iPhone 5: iOS 7.1.x, 7.0.x, 8.0.x, 8.1, 9.0.x, 9.1, 9.2, 9.3, 10.0
- iPhone 4s: iOS 7.1.x, 7.0.x, 8.0.x, 8.1, 9.0.x, 9.1, 9.2, 9.3
- iPhone 4: iOS 6.x

Smartphone (Android) models

SAMSUNG

- Galaxy Grand Prime: Android 4.4.4
- Galaxy S2: Android 4.1.2
- Galaxy S3: Android 4.1.2, 4.3
- Galaxy S4: Android 4.2.2, 4.4.2, 5.0.1
- Galaxy S5: Android 4.0.3
- Galaxy S6: Android 5.0.2
- Galaxy Note II: Android 4.1.1
- Galaxy Note 3: Android 4.4.2, 5.0
- Galaxy Tab 2: Android 4.0.3
- Galaxy Tab 3: Android 4.2.2
- Galaxy Core Prime: Android 5.1.1
- Samsung Galaxy S7 Edge: Android 6.0.1
- Samsung Galaxy J2: Android 5.1.1 (*1)
- Samsung Galaxy J5: Android 5.1.1 (*1)
- Samsung Galaxy J7: Android 5.1.1

LG

- Nexus 5: Android 4.4.2, 4.4.4, 5.0

ASUS

- Nexus 7: Android 4.3
- Motorola
- Moto G: Android 4.4.4

Xiaomi

- Redmi Note 3: Android 5.0.2

(*1) Map content package might not be installed due to the small internal flash.

Preparations before using the AVICSYNC function

1 Download the AVICSYNC App from the App Store® or Google Play and install the app to your iPhone or smartphone (Android).

To find **AVICSYNC App**, access the App Store or Google Play and enter "**AVICSYNC**" in the search box.

2 Start the AVICSYNC App on your iPhone or smartphone (Android).

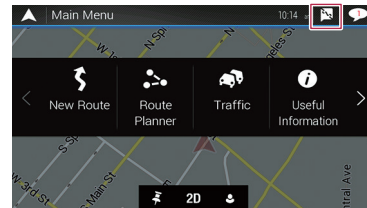
3 Connect your iPhone or smartphone (Android) to the navigation system via Bluetooth or USB cable connection.

➤ For details of the Bluetooth connection, refer to *Bluetooth® connection* on page 30.

➤ For details of the USB connections, refer to the Installation Manual.

4 Press the MAP button and touch .

5 Touch on the navigation menu.



6 Touch [Associate New Phone].

7 Touch the iPhone or smartphone (Android) that you want to associate with the navigation system and then touch [Associate].

8 Accept the association on your iPhone or smartphone (Android).

Once the association is established, your iPhone or smartphone (Android) is automatically associated when you connect your iPhone or smartphone (Android) to the navigation system.

9 Purchase connected services via the AVICSYNC App.

Customizing preferences of the navigation

10 Display the navigation menu and then touch [Settings].

11 Touch [Connected Services].

12 Touch the service that you want to activate.

The menus for the connected service are activated.

➤ For details on the operations and features of the **AVICSYNC**, refer to the manual on our website.

Bluetooth® connection

Displaying the “Bluetooth” screen

1 Press the  button.

2 Touch , and then .

Registering your Bluetooth devices

1 Activate the Bluetooth wireless technology on your devices.

2 Display the “Bluetooth” screen.

➤ Refer to *Displaying the “Bluetooth” screen* on page 30

3 Touch [Connection].

4 Touch .

The system searches for Bluetooth devices waiting for a connection and displays them in the list if a device is found.

5 Touch the Bluetooth device name.

After the device is successfully registered, a Bluetooth connection is established by the system. Once the connection is established, the device name is displayed on the list.

❑ If three devices are already paired, “**Memory Full**” is displayed. Delete a paired device first.

➤ Refer to *Deleting a registered device* on page 30

❑ If your device supports SSP (Secure Simple Pairing), a six-digit number appears on the display of this product. Touch **[Yes]** to pair the device.

❑ If a PIN code input is required, enter a PIN code. (The default PIN code is “0000”.)

➤ Refer to *Entering the PIN code for Bluetooth wireless connection* on page 31

❑ The Bluetooth connection can be also made by detecting this product from the Bluetooth device. Before registration, make sure that “**Visibility**” in the “**Bluetooth**” menu is set to “**On**”. For details on a Bluetooth device operations, refer to the operating instructions supplied with the Bluetooth device.

➤ Refer to *Switching visibility* on page 31

Setting Bluetooth device auto connection

This function connects the last connected Bluetooth device to this product with the Hands-Free Profile automatically as soon as the devices is less than a few meters apart.

The default setting is “**On**”.

1 Display the “Bluetooth” screen.

➤ Refer to *Displaying the “Bluetooth” screen* on page 30

2 Touch [Auto Connect] to switch “On” or “Off”.

Deleting a registered device

⚠CAUTION

Never turn this product off while the paired Bluetooth device is being deleted.

1 Display the “Bluetooth” screen.

➤ Refer to *Displaying the “Bluetooth” screen* on page 30

2 Touch [Connection].

3 Touch .

4 Touch [Yes].

Connecting a registered Bluetooth device manually

Connect the Bluetooth device manually in the following cases:

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

1 Activate the Bluetooth wireless technology on your devices.

2 Display the “Bluetooth” screen.

➤ Refer to *Displaying the “Bluetooth” screen* on page 30

3 Touch [Connection].

4 Touch the name of the device.

❑ To disconnect the device, touch the name of the connected device in the list.

Bluetooth® connection

Switching visibility

This function sets whether or not to make this product visible to the other device.

The default setting is "On".

1 Display the "Bluetooth" screen.

➤ Refer to *Displaying the "Bluetooth" screen* on page 30

2 Touch [Visibility] to switch "On" or "Off".

Entering the PIN code for Bluetooth wireless connection

To connect your Bluetooth device to this product, you need to enter a PIN code.

The default PIN code is "0000".

1 Display the "Bluetooth" screen.

➤ Refer to *Displaying the "Bluetooth" screen* on page 30

2 Touch [PIN Code Input].

3 Touch [0] to [9] to input the pin code (up to 8 digits).

4 Touch [OK].

Displaying the device information

1 Display the "Bluetooth" screen.

➤ Refer to *Displaying the "Bluetooth" screen* on page 30

2 Touch [Device Information].

The device name and address of the Bluetooth device on this product are displayed.

Clearing the Bluetooth memory

⚠ CAUTION

Never turn this product off while the Bluetooth memory is being cleared.

1 Display the "Bluetooth" screen.

➤ Refer to *Displaying the "Bluetooth" screen* on page 30

2 Touch [Bluetooth Memory Clear].

3 Touch [Clear].

4 Touch [OK].

Updating Bluetooth software

This function is used to update this product with the latest Bluetooth software. For details on Bluetooth software and updating, refer to our website.

- ☐ This setting is available only when you stop your vehicle in a safe place and apply the parking brake.
- ☐ The source is turned off and the Bluetooth connection is disconnected before the process starts.
- ☐ You need to store the version update file to the USB storage device in advance.

⚠ CAUTION

Never turn this product off and never disconnect the phone while the software is being updated.

1 Connect the USB storage device stored the version update file to this product.

➤ Refer to *Plugging and unplugging a USB storage device* on page 5

2 Display the "Bluetooth" screen.

➤ Refer to *Displaying the "Bluetooth" screen* on page 30

3 Touch [BT Software Update].

4 Touch [Start].

Follow the on-screen instructions to finish updating the Bluetooth software.

Displaying the Bluetooth software version

If this product fails to operate properly, you may need to consult your dealer for repair.

In such cases, perform the following procedure to check the software version on this product.

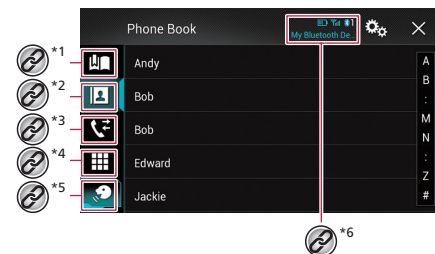
1 Display the "Bluetooth" screen.

➤ Refer to *Displaying the "Bluetooth" screen* on page 30

2 Touch [Bluetooth Version Information].

The version of this product's Bluetooth module appears.

Hands-free phoning



- *1 Switches to the preset dial screen.
➤ Refer to *Using the preset dial lists* on page 32
- *2 Switches to the phone book list.
➤ Refer to *Calling a number in the phone book* on page 32
- *3 Switches to the missed, received and dialed call lists.
➤ Refer to *Dialing from the history* on page 32
- *4 Switches the mode to enter the phone number directly.
➤ Refer to *Direct dialing* on page 32
- *5 Switches to the voice recognition function.
➤ Refer to *Using the voice recognition function* on page 33
- *6 The following items are displayed.
 - Name of the current cellular phone
 - List number of the current cellular phone
 - Indicates that a Bluetooth telephone is connected.
 - Reception status of the current cellular phone
 - Battery status of the current cellular phone

To use this function you need to connect your cellular phone to this product via Bluetooth in advance.



➤ Refer to *Bluetooth® connection* on page 30

⚠ CAUTION

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


Hands-free phoning

Displaying the phone menu screen



- 1 Press the  button.
- 2 Touch .

Making a phone call

You can make a phone call in many different ways.

- To end the call, touch .


Direct dialing

- 1 **Display the phone menu screen.**
➤ Refer to *Displaying the phone menu screen* on page 32
- 2 Touch .
- 3 Touch the number keys to enter the phone number.
- 4 Touch  to make a call.

The dial screen appears and dialing starts.





Calling a number in the phone book

- The contacts on your phone will be automatically transferred to this product when the phone is connected.

- 1 **Display the phone menu screen.**
➤ Refer to *Displaying the phone menu screen* on page 32
- 2 Touch .
- 3 Touch the desired name on the list.
- 4 Touch the phone number.

The dial screen appears and dialing starts.

Dialing from the history

- 1 **Display the phone menu screen.**
➤ Refer to *Displaying the phone menu screen* on page 32
- 2 Touch .
- 3 Touch the item to switch the history list.
The following items are available:
 -  Received call list
 -  Dialed call list
 -  Missed call list




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

The dial screen appears and dialing starts.


Using the preset dial lists

Registering a phone number

You can easily store up to six phone numbers per device as presets.



- 1 **Display the phone menu screen.**
➤ Refer to *Displaying the phone menu screen* on page 32
- 2 Touch  or .
- On the "Phone Book" screen, touch the desired name to display the contact's phone number.
- 3 Touch .

Dialing from the preset dial list





- 1 **Display the phone menu screen.**
➤ Refer to *Displaying the phone menu screen* on page 32
- 2 Touch .
- 3 Touch the desired entry on the list to make a call.

The dial screen appears and dialing starts.

Deleting a phone number



- 1 **Display the phone menu screen.**
➤ Refer to *Displaying the phone menu screen* on page 32
- 2 Touch .
- 3 Touch .
- 4 Touch [Yes].

Receiving a phone call

- To end the call, touch .
- 1 Touch  to answer the call.
 - If you touch  while getting a call waiting, you can switch to the talking person.
 - Touch  to reject the call.

Minimizing the dial confirmation screen

- The dial confirmation screen cannot be minimized on the AV operation screen.
- AV sources cannot be selected even if the dial confirmation screen is minimized while talking on the phone or receiving an incoming call.

- 1 Touch .
- Touch  to display the dial confirmation screen again.

Changing the phone settings

Setting auto answering

You can select whether or not to answer a call automatically. The default setting is "Off".

- 1 **Display the "Bluetooth" screen.**
➤ Refer to *Displaying the "Bluetooth" screen* on page 30
- 2 Touch [Auto Answer] to switch "On" or "Off".

Switching the ring tone

You can select whether or not to use this product's ring tone. The default setting is "On".

- 1 **Display the "Bluetooth" screen.**
➤ Refer to *Displaying the "Bluetooth" screen* on page 30
- 2 Touch [Ring Tone] to switch "On" or "Off".

Inverting names in the phone book

You can use this function to change the order of the first and last names in the phone book.

- 1 **Display the "Bluetooth" screen.**
➤ Refer to *Displaying the "Bluetooth" screen* on page 30
- 2 Touch [Invert Name].
- 3 Touch [Yes].

Setting the private mode

During a conversation, you can switch to private mode (talk directly on your cellular phone).


Hands-free phoning

- 1 Touch  or  to turn private mode on or off.

Adjusting the other party's listening volume

This product can be adjusted to the other party's listening volume.

- Settings can be stored for each device.

- 1 Touch  to switch between the three volume levels.

Using the voice recognition function

You can use the voice recognition function of iPhone or smartphone.


- When an iPhone running iOS 6.1 or higher is used, Siri Eyes Free Mode is available with this product.

- 1 Display the phone menu screen.

➔ Refer to *Displaying the phone menu screen* on page 32

- 2 Touch .

The voice recognition function launches and the voice control screen appears.

- You can also launch the voice recognition function by pressing and holding the  button.

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 product 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.

- When phone book transfer does not work, disconnect your phone and then perform pairing again from your phone to this product.

Making and receiving calls

- You may hear a noise in the following situations:
 - When you answer the phone using the button on the phone.
 - When the person on the other end of the line hangs up the phone.
- If the person on the other end of the line cannot hear the conversation due to an echo, decrease the volume level for hands-free phoning.
- With some cellular phones, even after you press the accept button on the cellular phone when a call comes in, hands-free phoning may not be performed.
- The registered name will appear if the phone number is already registered in the phone book. When the same phone number is registered under different names, only the phone number will be displayed.

The received call and the dialed number histories

- You cannot make a call to the entry of an unknown user (no phone number) in the received call history.
- If calls are made by operating your cellular phone, no history data will be recorded in this product.

Phone book transfers

- If there are more than 800 phone book entries on your cellular phone, not all entries may download completely.
- Depending on the phone, this product may not display the phone book correctly.
- If the phone book in the phone contains image data, the phone book may not be transferred correctly.
- Depending on the cellular phone, phone book transfer may not be available.

Setup for iPod® / iPhone® or smartphone

When using an iPod / iPhone or a smartphone with this product, configure the settings of this product according to the device to be connected.

This section describes the settings required for each device.

The basic flow of iPod / iPhone or smartphone setup

- ① Select the method for connecting your device.
➔ Refer to *Setting the device connection method* on page 33
- ② Connect your device to this product.
➔ Refer to the Installation Manual.
- ③ If necessary, connect your device to this product via Bluetooth connection.
➔ Refer to *Bluetooth® connection* on page 30

Setting the device connection method

To use the iPhone or smartphone on this product, select the method for connecting your device. Settings are required according to the connected device.

- 1 Display the "System" setting screen.



- 2 Touch [Input/Output Settings].

- 3 Touch [Smartphone Setup].

- 4 Configure the following settings.

- **Device:** Select the device to be connected.
- **Connection:** Select the connection method.
➔ Refer to *Information on the connections and functions for each device* on page 35
- The setting will change after the following processes are automatically executed.
 - The source is turned off.
 - **AppRadio Mode** is exited.

Setup for iPod® / iPhone® or smartphone

- The smartphone connection (USB and Bluetooth) is disconnected.
- ❑ The setting may not be operable right after it is changed.
- ⓘ For details about Android device compatibility with this product, refer to the information on our website.

iPod / iPhone compatibility

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

- iPhone 6, iPhone 6 Plus, iPhone 5s, iPhone 5c, iPhone 5, iPhone 4s, and iPhone 4: iOS 7.0 or later.
- iPhone 3GS: iOS 6.0.1
- iPod touch® (4th and 5th generation): iOS 6.0.1
- iPod touch (3rd generation): iOS 5.1.1
- iPod touch (2nd generation): iOS 4.2.1
- iPod classic® 160GB (2009): Ver. 2.0.4
- iPod classic 160GB (2008): Ver. 2.0.1
- iPod classic 80GB: Ver. 1.1.2
- iPod nano® (7th generation)
- iPod nano (6th generation): Ver. 1.2
- iPod nano (5th generation): Ver. 1.0.2
- iPod nano (4th generation): Ver. 1.0.4
- iPod nano (3rd generation): Ver. 1.1.3
- ❑ You can connect and control an iPod / iPhone compatible with this product by using separately sold connector cables.
- ❑ Operation methods may vary depending on the iPod / iPhone model and the software version.
- ❑ Depending on the software version of the iPod / iPhone, it may not be compatible with this product.
- ⓘ For details about iPod / iPhone compatibility with this product, refer to the information on our website.

This manual applies to the following iPod / iPhone models.

iPod / iPhone with a 30-pin connector

- iPhone 4s, iPhone 4, and iPhone 3GS
- iPod touch (2nd through 4th generation)
- iPod classic 80GB and iPod classic 160GB
- iPod nano (3rd through 6th generation)

iPod / iPhone with a Lightning connector

- iPhone 6 and iPhone 6 Plus
- iPhone 5s, iPhone 5c, and iPhone 5
- iPod touch (5th generation)
- iPod nano (7th generation)

Android™ device compatibility

- ❑ Operation methods may vary depending on the Android device and the software version of the Android OS.
- ❑ Depending on the version of the Android OS, it may not be compatible with this product.
- ❑ Compatibility with all Android devices is not guaranteed.

Setup for iPod® / iPhone® or smartphone

Information on the connections and functions for each device

The settings and cables required for connecting each device, and the available sources are as follows.

iPod / iPhone with a 30-pin connector

Device connection method		When connecting via Bluetooth	When connecting via CD-IU201V (sold separately)	When connecting via CD-IU201S (sold separately)
Smartphone Setup	Device	iPhone/iPod	iPhone/iPod	iPhone/iPod
	Connection	Bluetooth	USB1	USB1
Bluetooth connection		Bluetooth connection is required.	—	—
Connection requirement		—	Connect to USB port 1 for using Pandora or AVICSYNC App .	Connect to USB port 1 for using Pandora , AppRadio Mode , or AVICSYNC App .
Available sources	iPod (audio)	—	✓	✓
	iPod (video)	—	✓	✓
	Pandora	✓	✓	✓
	AppRadio Mode	—	—	✓
	AVICSYNC App	✓	✓	✓

iPod / iPhone with a Lightning connector

Device connection method		When connecting via Bluetooth	When connecting via CD-IU52 (sold separately)	When connecting via the following cables: CD-IV202AV (sold separately) CD-IU52 (sold separately) Lightning to VGA Adapter (sold separately)
Smartphone Setup	Device	iPhone/iPod	iPhone/iPod	iPhone/iPod
	Connection	Bluetooth	USB1	VGA Adapter
	Apple CarPlay	—	On (*2)/Off	—
Bluetooth connection		Bluetooth connection is required.	—	Bluetooth connection is required.
Connection requirement		—	Connect to USB port 1 for using Apple CarPlay , Pandora or AVICSYNC App .	—
Available sources	iPod (audio)	—	✓	— (*1)
	iPod (video)	—	—	— (*1)
	Pandora	✓	✓	✓
	AppRadio Mode	—	—	✓
	Apple CarPlay	—	✓ (*3)	—
	AVICSYNC App	✓	✓	✓

(*1) Use AppRadio Mode to play music or videos on an iPod / iPhone. For using **AppRadio Mode**, install the **CarMediaPlayer** app on your iPod / iPhone.

☞ For details about the **CarMediaPlayer**, refer to the information on our website.

☞ Refer to the **CarMediaPlayer** manual for more information.

(*2) Select "On" for "Apple CarPlay" for using Apple CarPlay.

(*3) Available only when an **Apple CarPlay**-compatible device is connected.

Setup for iPod® / iPhone® or smartphone

Android device

Device connection method		When connecting via Bluetooth
Smartphone Setup	Device	Others
	Connection	Bluetooth / —
Bluetooth connection		Bluetooth connection is required.
Connection requirement		—
Available sources	Pandora	✓ (*2)
	AppRadio Mode	—
	AVICSYNC App	✓ (*1)
(*1) Turn on the AVICSYNC App function for using AVICSYNC App .		
(*2) Not available when the AVICSYNC App function is turned on.		

Radio

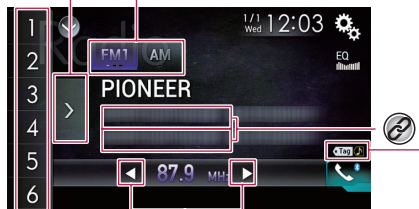


Displays the preset channel list.

Select an item on the list ("1" to "6") to switch to the preset channel.



Selects the FM1, FM2, FM3 or AM band.



Performs manual tuning.



Performs seek tuning or non stop seek tuning.

Releasing the key in a few seconds, skips to the nearest station from the current frequency.
Keeping holding the key for a long seconds, performs non stop seek tuning.



Recalls the preset channel stored to a key from memory.



Stores the current broadcast frequency to a key.

iTunes® tagging indicator and
iTunes® tagging song status indicator



Stores song information to an iPod.

➔ Refer to *Storing song information to an iPod (iTunes® Tagging)* on page 70

- ❑ By pressing the **◀◀** or **▶▶** button, you can also switch the preset channels.
- ❑ By pressing and holding the **◀◀** or **▶▶** button and release, you can also perform seek tuning.

Starting procedure

1 Display the AV source selection screen.



2 Touch [Radio].

Storing the strongest broadcast frequencies

The BSM (best stations memory) function automatically stores the six strongest broadcast frequencies under the preset tuning keys "1" to "6".

- ❑ Storing broadcast frequencies with BSM may replace those you have already saved.
- ❑ Previously stored broadcast frequencies may remain stored if the number of frequencies stored has not reached the limit.

1 Touch the preset channel list display key.

2 Touch **[]** to begin a search.

The six strongest broadcast frequencies will be stored under the preset tuning keys in the order of their signal strength.

- Touch **[Cancel]** to cancel the storage process.

Displaying the "Radio settings" screen

1 Display the "System" setting screen.



2 Touch [AV Source Settings].

3 Touch [Radio Settings].

Tuning into strong frequencies

Local seek tuning allows you to only tune into those radio stations with sufficiently strong signals.

The default setting is "Off".

- ❑ This setting is available only when "Radio" is selected as the source.

1 Display the "Radio Settings" screen.

➔ Refer to *Displaying the "Radio settings" screen* on page 37

2 Touch [Local].

3 Touch the item.

● Off:

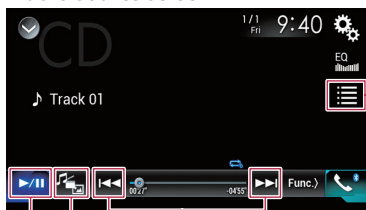
Turns the seek tuning setting off.

● Level1 to Level4:

Sets the level of sensitivity for FM to **Level1** to **Level4** (for AM **Level1** or **Level2**).

- ❑ The FM "Level4" (AM "Level2") setting allows you to receive the only stations with the strongest signals.

Audio source screen 1



Skips files forward or backward.

Switches between playback and pause.



Plays tracks in random order.

This function is available for music CD.

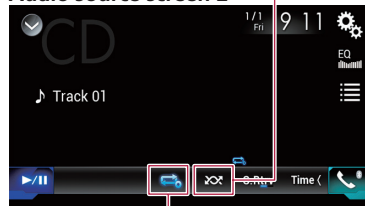


: Does not play tracks in random order.



: Plays all tracks in random order.

Audio source screen 2



Sets a repeat play range.



: Repeats the current disc.



: Repeats the current track.



Hides the touch panel keys.


To display again the keys, touch anywhere on the screen.



Performs frame-by-frame playback.



Performs slow-motion playback.

Each time you touch  it changes the speed in four steps in the following order: 1/16 → 1/8 → 1/4 → 1/2

Video source screen 1



Performs fast reverse or fast forward.

Touch again to change play back the speed.



Stops playback.

Video source screen 2



Sets a repeat play range.

 : Repeats all files.

 : Repeats the current chapter.

 : Repeats the current title.

Changes the viewing angle (Multi-angle).

This function is available for DVDs featuring multi-angle recordings.

Selects the audio output from [L+R], [Left], [Right], [Mix].

This function is available for Video-CDs and DVDs recorded with LPCM audio.

Video source screen 2







Resumes playback (Bookmark).



This function is available for DVD-Video. You can memorize one point as a Bookmark for a disc (up to five discs).





To clear the bookmark on the disc, touch and hold this key.

Returns and begins playback from the specified point.

This function is available for DVD-Video and Video-CDs featuring PBC (playback control).

-  *1 Selects a track from the list.
➔ Refer to *Selecting files from the track name list* on page 39
-  *2 Switches the media file type.
➔ Refer to *Switching the media file type* on page 39
-  *3 Searches for the part you want to play.
➔ Refer to *Searching for the part you want to play* on page 40
-  *4 Displays the DVD menu.
➔ Refer to *Operating the DVD menu* on page 40

-  *5 Switches the subtitle/audio language.
➔ Refer to *Switching the subtitle/audio language* on page 40
-  *6 Displays the DVD menu keypad.
➔ Refer to *Operating the DVD menu using touch panel keys* on page 40

- ☐ By pressing the  or  button, you can also skip files/chapters forward or backward.
- ☐ By pressing and holding the  or  button, you can also perform fast reverse or fast forward.
- ☐ If a Video-CD with PBC On is being played, **[PBCOn]** appears.
- ☐ You can set the screen size for the video image.
➔ Refer to *Changing the wide screen mode* on page 70

⚠ CAUTION

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

Starting procedure

You can play a normal music CD, Video-CD or DVD-Video using the built-in drive of this product.

1 Insert the disc.

- ➔ Refer to *Inserting and ejecting a disc* on page 5
- The source changes and then playback will start.
- ☐ If the disc is already set, select **[Disc]** as the playing source.

Selecting files from the track name list

1 Touch .

2 Touch a track on the list to play back.

Switching the media file type

When playing a digital media containing a mixture of various media file types you can switch between media file types to play.

1 Touch .

2 Touch the item.



- **Music:**
Switches the media file type to music (compressed audio).
- **Video:**
Switches the media file type to video.
- **CD-DA:**

Disc

Switches the media file type to CD (audio data (CD-DA)).

Searching for the part you want to play

- ❑ For DVD-Videos, you can select [Title], [Chapter] or [10Key].
- ❑ For Video-CDs, you can select [Track] or [10Key] (PBC only).

- 1 Touch .
- 2 Touch [Title], [Chapter], [10Key], or [Track].
- 3 Touch [0] to [9] to input the desired number.
- 4 Touch  to start playback from the number you registered.





Operating the DVD menu

You can operate the DVD menu by touching the menu item on the screen directly.

- ❑ This function may not work properly with some DVD disc content. In that case, use touch panel keys to operate the DVD menu.









- 1 Touch  or [MENU].
- 2 Touch the menu item.

Switching the subtitle/audio language

- 1 Touch  or .
- : Changes the subtitle language.
- : Changes the audio language.
- ❑ You can specify the desired language as the default subtitle/audio languages.
- 🕒 Refer to *Setting the top-priority languages* on page 68

Operating the DVD menu using touch panel keys

If items on the DVD menu appear, the touch panel keys may overlay them. If so, select an item using those touch panel keys.


- 1 Touch .
 - 2 Touch , ,  or  to select the menu item.
 - 3 Touch .
- ❑ The way to display the menu differs depending on the disc.
 - If you touch , the touch panel keys disappear and the  icon is displayed.

Compressed files


Audio source screen 1 (Example: USB)



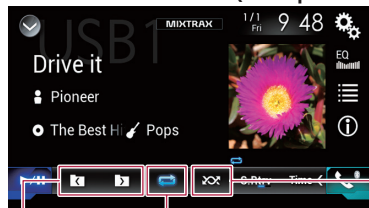
Compressed files

 **Plays files in random order.**



 : Does not play files in random order.

 : Plays all files within the repeat range in random order.

Audio source screen 2 (Example: USB)



 **Sets a repeat play range.**

 or  : Repeats all files.

 : Repeats the current folder.

 or  : Repeats the current file.

 **Selects the previous folder or the next folder.**


 **Hides the touch panel keys.**

To display again the keys, touch anywhere on the screen.


Video source screen (Example: Disc)



 **Sets a repeat play range.**


 or  : Repeats all files.

 : Repeats the current folder.

 : Repeats the current file.

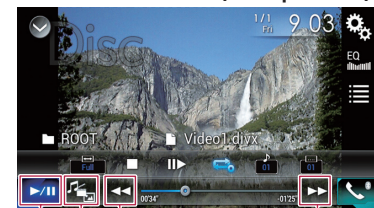
 **Performs frame-by-frame playback.**

This function is available only for compressed video files stored on a disc.

 **Performs slow-motion playback.**

 **Stops playback.**

Video source screen (Example: Disc)





 **Performs fast reverse or fast forward.**


Touch again to change the playback speed.

 **Switches between playback and pause.**

Compressed files

 **Hides the touch panel keys.**
To display again the keys, touch anywhere on the screen.

 **Rotates the displayed picture 90° clockwise.**


 **Selects the previous or next folder.**

Still image screen




 **Sets a repeat play range.**

 : Repeats all files.

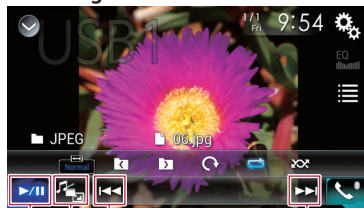
 : Repeats the current folder.

 **Plays files in random order.**

 : Does not play files in random order.


 : Plays all files in the current repeat play range in random order.


Still image screen





 **Performs fast reverse or fast forward.**
Touch again to change the playback speed.


 **Switches between playback and pause.**

 ***1** Displays the MIXTRAX screen.
➔ Refer to *MIXTRAX* on page 56

 ***2** Displays the link search screen.
☐ This function is available for the USB storage device only.
➔ Refer to *Selecting a song from the list related to the song currently playing (link search)* on page 43

 ***3** Selects a file from the list.
➔ Refer to *Selecting files from the file name list* on page 43
☐ When you play compressed audio files stored in a USB storage device, you can search for a file using Music Browse.
➔ Refer to *Selecting a file by Music Browse* on page 43



 ***4** Switches the media file type.
➔ Refer to *Switching the media file type* on page 43



 ***5** Switches the subtitle/audio language.
☐ This function is available only for compressed video files stored on a disc.
➔ Refer to *Switching the subtitle/audio language* on page 43

You can play compressed audio, compressed video or still image files stored in a disc or a USB storage device.

➔ Refer to *Media compatibility chart* on page 81

☐ By pressing the  or  button, you can also skip files forward or backward.

☐ By pressing and holding the  or  button on the audio or video file, you can perform fast reverse or fast forward.

☐ By pressing and holding the  or  button on the still image file, you can search through 10 JPEG files at a time. If the file currently being played is the first or last file in the folder, the search is not performed.

☐ JPEG images are not displayed in the rear display.

☐ You can set the screen size for the video and JPEG images.

➔ Refer to *Changing the wide screen mode* on page 70

⚠ CAUTION

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

Starting procedure (for Disc)

1 Insert the disc.

➔ Refer to *Inserting and ejecting a disc* on page 5

☐ If the disc is already set, select **[Disc]** as the playing source.

Starting procedure (for USB)

1 Plug the USB storage device.

➔ Refer to *Plugging and unplugging a USB storage device* on page 5

2 Display the AV source selection screen.



3 Touch [USB].


Compressed files

- Playback is performed in order of folder numbers. Folders are skipped if they contain no playable files.

Operations common to all file types


Selecting files from the file name list

You can find files or folders to playback using the file name or folder name list.

- 1 Touch .
 - 2 Touch a file on the list to playback.
- Touching a folder on the list shows its contents. You can play a file on the list by touching it.

Switching the media file type

When playing a digital media containing a mixture of various media file types you can switch between media file types to play.


- 1 Touch .
 - 2 Touch the item.
- **Music:**
Switches the media file type to music (compressed audio).
 - **Video:**
Switches the media file type to video.
 - **CD-DA:**
Switches the media file type to CD (audio data (CD-DA)).
 - **Photo:**
Switches the media file type to still image (JPEG data).

Audio file operations

Selecting a file by Music Browse

You can select files to playback using the category list if the files contain tag information.

- This function is available for the USB storage device only.

- 1 Touch .
 - 2 Touch the "Tag" tab.
 - 3 Touch the desired category to display the file list.
 - 4 Touch the item.
- Refine the item until the desired song title or file name is displayed on the list.

- 5 Touch the desired song title or file name to playback.





Selecting a song from the list related to the song currently playing (link search)

- This function is available for the USB storage device only.
- If you touch the artwork, the list of songs in the album is displayed.

- 1 Touch song information to open the list of songs.
- 2 Touch the song to playback.

Video file operations

Switching the subtitle/audio language

- 1 Touch  or .
- : Changes the subtitle language.
 - : Changes the audio language.
 - You can specify the desired language as the default subtitle/audio languages.
 - Refer to *Setting the top-priority languages* on page 68

Still image file operations

Setting the slideshow interval

JPEG files can be viewed as a slideshow on this product. In this setting, the interval between each image can be set.

The default setting is "10sec".

- This setting is available during playback of the JPEG files.

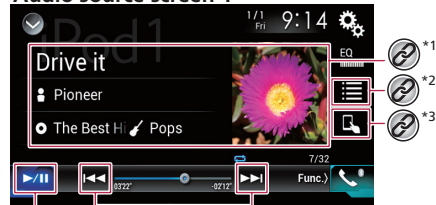
- 1 Display the "Video Setup" screen.



- 2 Touch [Time Per Photo Slide].
 - 3 Touch the item.
- The following items are available:
5sec, 10sec, 15sec, Manual.

iPod




Audio source screen 1





Skips files forward or backward.

Switches between playback and pause.

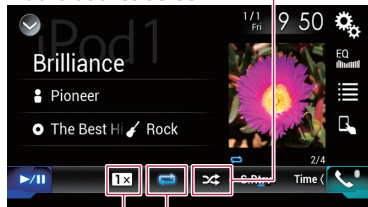
Changes the audiobook speed.

-  1 : Normal playback
-  2 : Fast playback
-  1/2 : Slow-motion playback



Sets the shuffle play.

-  : Plays randomly songs or videos within the selected list.
-  : Plays album randomly.

Audio source screen 2



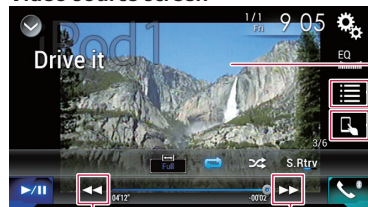
Sets a repeat play range.

-  : Repeats all in the selected list.
-  : Repeats the current song or video.

Hides the touch panel keys.

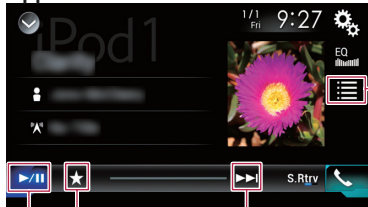
To display again the keys, touch anywhere on the screen.

Video source screen



Performs fast reverse or fast forward.

Apple Music Radio screen







Skips tracks forward.

Displays the pop-up menu for Apple Music Radio.

Switches between playback and pause.

- *1 Displays the link search screen.
➔ Refer to *Selecting a song from the list related to the song currently playing (link search)* on page 43
- *2 Selects a song or video from the list.
➔ Refer to *Selecting song or video sources from the playlist screen* on page 45
- *3 Switches the control mode to "App Mode".
➔ Refer to *Using this product's iPod function from your iPod* on page 45

- ❑ By pressing the  or  button, you can also skip files/chapters forward or backward.
— Skipping backward is not available while playing **Apple Music Radio**.
- ❑ By pressing and holding the  or  button, you can also perform fast reverse or fast forward.
— This function is not available while playing **Apple Music Radio**.
- ❑ You can set the screen size for the video image.
➔ Refer to *Changing the wide screen mode* on page 70
- ❑ The audiobook speed icon does not change when using this function with an iPhone 6, iPhone 6 Plus, iPhone 5s, iPhone 5c, iPhone 5, or iPod touch (5th generation).
The setting changes as follows when the icon is touched, even though the icon does not change.
Faster—Slower—Normal—Faster...

CAUTION

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

Connecting your iPod

When connecting an iPod to this product, select the method for connecting your device. Settings are required according to the connected device.

- ➔ Refer to *Setup for iPod / iPhone or smartphone* on page 33
- ❑ The available sources vary depending on the selected method for connecting your device.
➔ Refer to *Information on the connections and functions for each device* on page 35
- ❑ Depending on the generation or version of the iPod, some functions may not be available.
- ❑ The video image of the iPod may have noise if the rear display outputs the video image. When noise is produced in the video image of the iPod, turn off the output setting of the rear display.

- Refer to *Selecting the video for the rear display* on page 71

Starting procedure

- When connecting an iPhone or iPod touch, quit all applications before connecting the device.

1 Connect your iPod.

- Refer to *Connecting your iPod* on page 44

2 Display the AV source selection screen.



3 Touch [iPod].

Selecting song or video sources from the playlist screen

You can search for the song, video, or radio stations you want to play from the playlist screen.

1 Touch [Menu].

2 Touch [Music] or [Video] to switch the music or video category list.

- The video category list icon is not available when using iPod function with an iPhone 6, iPhone 6 Plus, iPhone 5s, iPhone 5c, iPhone 5, or iPod touch (5th generation).

3 Touch the category.

- If you use English as the system language, the alphabet search function is available. Touch the initial search bar to use this function.

4 Touch the title of the list.

5 Start playback of the selected list.

- You can play playlists created with the **MusicSphere** application. The application is available on our website.

Using this product's iPod function from your iPod

You can control this product's iPod function from the iPod on "App Mode". The application screen of the iPod can be displayed on this product, and the music files and video files are played back with this product.

- This function is not available when using iPod function with an iPhone 6, iPhone 6 Plus, iPhone 5s, iPhone 5c, iPhone 5, or iPod touch (5th generation).
- While this function is in use, the iPod will not turn off even if the ignition key is turned off. Operate the iPod to turn off the power.

1 Touch [iPod].

2 Operate the connected iPod to select a video or song and play.

- Some functions are still accessible from this product even if the control mode is set to "App Mode". However, the operation will depend on your applications.

- Touch [Control] to switch the control mode.

Selecting a song from the list related to the song currently playing (link search)

- If you touch the artwork, the list of songs in the album is displayed.
- This function is not available while playing **Apple Music Radio**.

1 Touch song information to open the list of songs.

2 Touch the song to play back.

Using Apple Music Radio

Important

Apple Music Radio may not be available in your country or region.

For details about Apple Music®, visit the following site:

<http://www.apple.com/music/>

- This function is only available when using iPod function with an iPhone 6, iPhone 6 Plus, iPhone 5s, iPhone 5c, iPhone 5, or iPod touch (5th generation).

1 Touch [Menu].

2 Touch [Music].

3 Touch [Radio].

Playing back songs similar to the current song

You can listen to songs similar to the song currently being played.

1 Touch [Star].

2 Touch [Play More Like This].

- When the menu item is not active, the function is not available for the current song.
- If you touch **[Play More Like This]** when the menu item is highlighted, the function will turn off.

Setting the current song not to be played back again

You can set the current song not to be played back again.

1 Touch [Star].

2 Touch [Never Play This Song].

- When the menu item is not active, the function is not available for the current song.
- If you touch **[Never Play This Song]** when the menu item is highlighted, the function will turn off.

Adding the current song to the wish list

You can add the current song to the wish list for easy access to the song later.

1 Touch [Star].

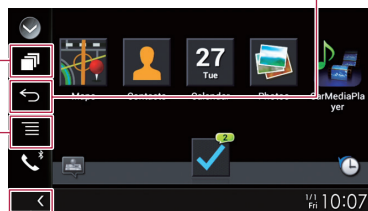
2 Touch [Add to iTunes Wish List].


- If the song is already in the wish list, **[Remove from iTunes Wish List]** is displayed. If you touch this key, the song will be removed from the wish list.

AppRadio Mode

 Displays the launcher application screen.

 Displays the previous screen.



 Displays the current source.

 Displays the menu screen.

- ❑ Press the **⌘** button twice to hide the App control side bar. Press the **⌘** button twice again to display it again.
- ❑ **⌘** and **⌘** are not available depending on the type of device.

⚠ WARNING

Certain uses of an iPhone or a smartphone may not be legal while driving in your jurisdiction, so you must be aware of and obey any such restrictions.

If in doubt as to a particular function, only perform it while the car is parked.

No feature should be used unless it is safe to do so under the driving conditions you are experiencing.

AppRadio Mode Compatibility

- ❑ **AppRadio Mode** is only available on an iPhone.

iPhone models

- iPhone 6, iPhone 6 Plus, iPhone 5s, iPhone 5c, iPhone 5, iPhone 4s, and iPhone 4
- iPod touch (4th and 5th generation)

Smartphone (Android) models

- ❑ For details about Android device compatibility with this product, refer to the information on our website.

Using AppRadio Mode

You can control applications for an iPhone or a smartphone directly from the screen (**AppRadio Mode**).

In **AppRadio Mode**, you can operate applications with finger gestures such as tapping, dragging, scrolling or flicking on the screen of this product.

Important

- To use **AppRadio Mode**, install the AppRadio app on the iPhone or smartphone in advance. For details about the AppRadio app, visit the following site:
For U.S.A.
<http://www.pioneerelectronics.com/AppRadioMode>
For Canada
<http://www.pioneerelectronics.ca/AppRadioMode>
- Be sure to read Using app-based connected content before you perform this operation.
- ❑ Refer to *Using app-based connected content* on page 84

- Content and functionality of compatible applications are the responsibility of the App providers.
- In **AppRadio Mode**, usage is limited while driving, with availability of functions and content determined by the App providers.
- **AppRadio Mode** allows access to applications other than those listed, subject to limitations while driving.
- PIONEER IS NOT RESPONSIBLE AND DISCLAIMS LIABILITY FOR THIRD PARTY (NON-PIONEER) APPS AND CONTENT, INCLUDING WITHOUT LIMITATION ANY INACCURACIES OR INCOMPLETE INFORMATION.

- ❑ In this chapter, iPhone and iPod touch will be referred to as "iPhone".
- ❑ The compatible finger gestures vary depending on the application for an iPhone or a smartphone.
- ❑ Even though an application is not compatible with **AppRadio Mode**, depending on the application an image may be displayed. But you can not operate the application.

Starting procedure

When connecting an iPhone or a smartphone to this product, select the method for connecting your device. Settings are required according to the connected device.

- ❑ Refer to *Setup for iPod / iPhone or smartphone* on page 33
- ❑ Touch the desired application icon after the AppRadio app is launched.
After the desired application is launched, the application operation screen appears.
- ❑ If you connect your device while an **AppRadio Mode**-compatible application is already running, the application operation screen will appear on this product.
- ❑ Press the **⌘** button to go back to the top menu screen.

For iPhone users

- ❑ When you use an iPhone with a Lightning connector, connect the iPhone to this product via Bluetooth wireless technology and unlock the iPhone in advance.
❑ Refer to *Registering your Bluetooth devices* on page 30

1 Connect your iPhone.

- ❑ Refer to the Installation Manual.

2 Press the **⌘** button.

3 Touch [APPS].

- ❑ When you use an iPhone with a 30-pin connector, messages appear on the screen of this product and your iPhone. Proceed to the next step.
- ❑ When you use an iPhone with a Lightning connector, the **AppRadio app** is launched, and the **AppRadio Mode** screen (Application menu screen) appears after this step. In such a case, the following steps are not required.

4 Use your iPhone to launch the application.

The **AppRadio app** is launched.

5 Touch [OK] on the screen of this product.

The **AppRadio Mode** screen (Application menu screen) appears.

Using the keyboard (for iPhone users)

When you tap the text input area of an application for iPhone, a keyboard will be displayed on the screen. You can input the desired text directly from this product.

- ❑ This function may not be available depending on your iPhone.
- ❑ This function is only available in **AppRadio Mode** on the iPhone.

⚠ CAUTION

For your safety, the keyboard functionality is only available when the vehicle is stopped and the parking brake is engaged.

AppRadio Mode

- 1 **Set the keyboard language.**
 - Refer to *Setting the keyboard language with the application for iPhone* on page 61
- 2 **Start up AppRadio Mode.**
 - Refer to *Starting procedure* on page 46
- 3 **Touch the text input area on the application operation screen.**

A keyboard for entering text appears.

Using the audio mix function

You can output audio mixing AV source and an application for iPhone or smartphone when **AppRadio Mode** is used.

- ❑ Depending on the application or the AV source, this function may not be available.
- ❑ When the audio mix function is set to on, the voice guidance of the navigation system is not output. To output the voice guidance of the navigation system, set the audio mix function to off.

- 1 **Start up AppRadio Mode.**
 - Refer to *Starting procedure* on page 46
- 2 **Press the VOL (+/-) button.**

The audio mix menu will be displayed on the screen.

- ❑ The audio mix menu is displayed for four seconds. If the screen disappears, press the **VOL (+/-)** button again. The screen reappears.
- ❑ The AV operation screen and the Application screen can be switched by pressing the **MODE** button.



- ① Touch to mute. Touch again to unmute.
- ② Sets whether to switch the sound mix function on or off.
 - Left tab:
The audio mix function is enabled (mix on) and the App volume is settling.
 - Right tab:

- ❑ The audio mix function is disabled (mix off).
- ❑ The right tab is not displayed on the AV operation screen.
- ③ Adjusts the application audio volume.
 - ❑ The App volume is not displayed when the right tab is selected.
 - ❑ You cannot adjust the volume of the main sound on the screen. Press the **VOL (+/-)** button to adjust the volume of the main sound.

Apple CarPlay™

You can control applications for an iPhone directly from the screen (**Apple CarPlay**).

In **Apple CarPlay**, you can operate applications with finger gestures such as tapping, dragging, scrolling or flicking on the screen of this product.

- ❑ This function is only available when using iPod function with an iPhone 6, iPhone 6 Plus, iPhone 5s, iPhone 5c, or iPhone 5.

⚠WARNING

Certain uses of an iPhone may not be legal while driving in your jurisdiction, so you must be aware of and obey any such restrictions.

If in doubt as to a particular function, only perform it while the car is parked.

No feature should be used unless it is safe to do so under the driving conditions you are experiencing.

Using Apple CarPlay

🔑Important

Apple CarPlay may not be available in your country or region. For details about **Apple CarPlay**, visit the following site:
<http://www.apple.com/ios/carplay>

- Content and functionality of compatible applications are the responsibility of the App providers.
- In **Apple CarPlay**, usage is limited while driving, with availability of functions and content determined by the App providers.
- **Apple CarPlay** allows access to applications other than those listed, subject to limitations while driving.
- PIONEER IS NOT RESPONSIBLE AND DISCLAIMS LIABILITY FOR THIRD PARTY (NON-PIONEER) APPS AND CONTENT, INCLUDING WITHOUT LIMITATION ANY INACCURACIES OR INCOMPLETE INFORMATION.

- ❑ The compatible finger gestures vary depending on the application for an iPhone.

Starting procedure

When connecting an **Apple CarPlay**-compatible device to this product, select the method for connecting your device. Settings are required according to the connected device.

- Refer to *Setup for iPod / iPhone or smartphone* on page 33
- ❑ To achieve optimum usability of **Apple CarPlay**, set the driving position setting correctly according to the vehicle.
 - Refer to *Setting the driving position* on page 48

Apple CarPlay

- ❑ You can adjust the guidance volume and alert sound volume separately from the main sound volume when **Apple CarPlay** is used.

➡ Refer to *Adjusting the volume* on page 48

1 Connect an Apple CarPlay-compatible device to this product via USB.

- ➡ Refer to the Installation Manual.
- The Application menu screen appears.

- ❑ If an **Apple CarPlay**-compatible device has been connected and another screen is displayed, touch **[Apple CarPlay]** on the top menu screen to display the Application menu screen.
- ❑ The Bluetooth connection with the **Apple CarPlay**-compatible device will be terminated automatically if **Apple CarPlay** is turned on. While **Apple CarPlay** is turned on, only a Bluetooth audio connection will be possible for devices other than the device connected via **Apple CarPlay**.
- ❑ Hands-free phoning via Bluetooth wireless technology is not available while **Apple CarPlay** is on. If **Apple CarPlay** is turned on during a call on a cellular phone other than the **Apple CarPlay**-compatible device, the Bluetooth connection will be terminated after the call ends.
- ❑ The route guidance by the internal navigation system will stop automatically if the route guidance function in **Apple CarPlay** is launched.

Setting the driving position

To achieve optimum usability of **Apple CarPlay**, set the driving position setting correctly according to the vehicle. The default setting is "Left".

1 Display the "System" setting screen.



2 Touch [Driving Position].

3 Touch the item.

- **Left:**
Select for a left-hand drive vehicle.
- **Right:**
Select for a right-hand drive vehicle.

The setting will be applied the next time an **Apple CarPlay**-compatible device is connected to this product.

Adjusting the volume

You can adjust the guidance volume and alert sound volume separately from the main sound volume when **Apple CarPlay** is used.

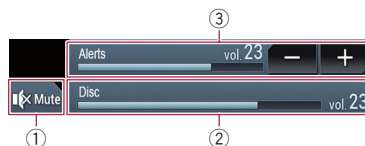
1 Start up Apple CarPlay.

- ➡ Refer to *Starting procedure* on page 47

2 Press the VOL (+/-) button.

The volume menu will be displayed on the screen.

- ❑ The volume menu is displayed for four seconds. If the menu disappears, press the **VOL (+/-)** button again. The menu reappears.



- ① Touch to mute. Touch again to unmute.
- ② Displays the main sound volume.
 - ❑ You cannot adjust the volume of the main sound on the screen. Press the **VOL (+/-)** button to adjust the volume of the main sound.
- ③ Adjusts the guidance volume and alert sound volume.
 - ❑ Each touch of **[+]** or **[-]** increases or decreases the volume level.

Pandora®

- 👉 Gives a "Thumbs Down" to the playing track and skips to the next track.

Playback screen 1



- 👉 Gives a "Thumbs Up" to the playing track.

- 👉 Skips tracks forward.

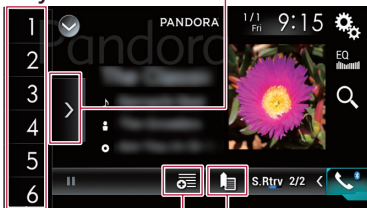
- 👉 Switches between playback and pause.



Displays the preset station list.

Select an item on the list ("1" to "6") to switch to the preset station.

Playback screen 2



Adds information for the track currently playing to bookmarks.



Recalls the preset station stored to a key from memory.



Stores the current station to a key.

Preset stations can be stored for each user (up to 10 users). If the preset stations for 10 users are already stored, the preset stations for the user who has not accessed their preset stations for the longest period of time will be automatically deleted for a new user.



*1

Selects a Pandora station from the list.

➔ Refer to *Selecting a Pandora station from the list* on page 49



*2

Creates a new station.

➔ Refer to *Adding a station* on page 50

- ❑ By pressing the ► button, you can skip songs forward.
- ❑ [👍] and [👎] are not available when using a shared station.

⚠ WARNING

Certain uses of an iPhone or a smartphone may not be legal while driving in your jurisdiction, so you must be aware of and obey any such restrictions.

If in doubt as to a particular function, only perform it while the car is parked.

No feature should be used unless it is safe to do so under the driving conditions you are experiencing.

Using Pandora

You can enjoy Pandora by connecting an iPhone or a smartphone that has the Pandora application installed.

🔔 Important

- Requirements to access Pandora using Pioneer car audio/video
 - ➔ Refer to *Setup for iPod / iPhone or smartphone* on page 33
- Please update the firmware of the Pandora application to the latest version before use. Download it from the iTunes App Store or Google Play.
- Create a free or a paid account online. You can create the account in the Pandora application from your iPhone or smartphone, or from the website (<http://www.pandora.com/account/register>).
- To use the Pandora service, you need to connect to the Internet via 3G, EDGE, LTE (4G) or Wi-Fi network. If the data plan for your iPhone or smartphone does not provide for unlimited data usage, additional charges from your carrier may apply.

Limitations:

- Depending on the availability of the Internet, you may not be able to receive the Pandora service.
- The Pandora service is subject to change without notice. The service could be affected by any of the following: firmware version of the iPhone or smartphone, firmware version of the Pandora application, changes to the Pandora music service.
- Certain functions of the Pandora service are not available when accessing the service through Pioneer car audio/video products. They include, but are not limited to the following: creating new stations, deleting stations, sending information about current stations, buying tracks from iTunes App Store or

Google Play, viewing additional text information, logging in to Pandora, adjusting Cell Network Audio Quality.

- Pandora internet radio is a music service not affiliated with Pioneer. More information is available at <http://www.pandora.com>
- The Pandora mobile application is available for most iPhone and smartphone, please visit <http://www.pandora.com/everywhere/mobile> for the latest compatibility information.

Starting procedure

When connecting an iPhone or a smartphone to this product, select the method for connecting your device. Settings are required according to the connected device.

- ➔ Refer to *Setup for iPod / iPhone or smartphone* on page 33
- ❑ You can use the Pandora service by connecting an iPhone via USB or Bluetooth.
 - ➔ Refer to the Installation Manual.
 - ➔ Refer to *Registering your Bluetooth devices* on page 30
- ❑ If you use a smartphone, connect via Bluetooth.
 - ➔ Refer to the Installation Manual.
 - ➔ Refer to *Registering your Bluetooth devices* on page 30

1 Unlock and connect your device.

2 Display the AV source selection screen.



3 Touch [Pandora].

Selecting a Pandora station from the list

1 Touch [📄].

- [📄]: Switches to the station list.
- [📁]: Switches to the genre list.
- [🎵]: Plays only one track based on particular musical characteristics from several shuffled stations.
- [🗑]: Deletes the station.
- **A-Z**: Sorts the items in the list alphabetically.
- **Date**: Sorts the items in the list in the order of the dates.
- ❑ Shared stations are indicated by [👤].

Adding a station

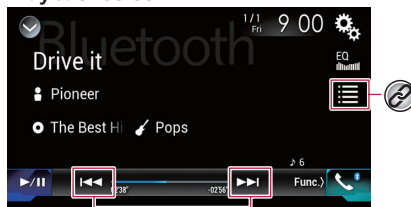
You can create up to 100 stations by a song or an artist.

1 Touch [Menu].

2 Touch [Track] or [Artist].

A new station is created.

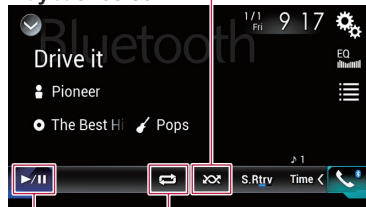
Playback screen 1



Skips files forward or backward.

Plays files in random order.

Playback screen 2



Switches between playback and pause.

Sets a repeat play range.



Selects a file from the list.

➔ Refer to *Selecting files from the file name list* on page 51

- ❑ Depending on the Bluetooth audio player connected to this product, the available operations with this product may be limited to the following two levels:

— A2DP (Advanced Audio Distribution Profile): Only playing back songs on your audio player is possible.

— A2DP and AVRCP (Audio/Video Remote Control Profile):

Playing back, pausing, selecting songs, etc., are possible.

- ❑ Depending on the Bluetooth audio player connected to this product, some functions may not be available.
- ❑ While you are listening to songs on your Bluetooth device, please refrain from operating the phone function as much as possible. If you try operating, the signal may cause noise for song playback.
- ❑ When you are talking on the Bluetooth device connected to this product via Bluetooth, it may pause playback.
- ❑ By pressing the or button, you can also skip files forward or backward.
- ❑ By pressing and holding the or button, you can also perform fast reverse or fast forward.

Starting procedure

- ❑ Before using the Bluetooth audio player, register and connect the device to this product.

➔ Refer to *Registering your Bluetooth devices* on page 30

1 Pull out the connecting cable for using AppRadio Mode.

- ❑ You cannot use Bluetooth audio player when the connecting cable for using **AppRadio Mode** is connected.

2 Display the “System” setting screen.



3 Touch [AV Source Settings].

4 Confirm that “Bluetooth Audio” is turned on.

5 Display the AV source selection screen.



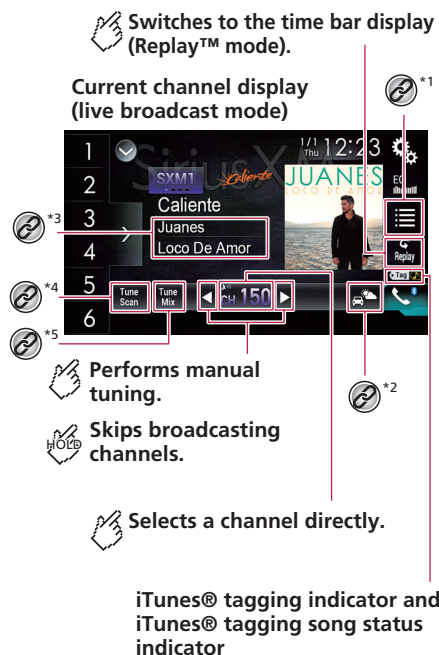
6 Touch [Bluetooth Audio].

Bluetooth audio player

Selecting files from the file name list

❑ This function is available only when the AVRCP version of the Bluetooth device is 1.4 or higher.

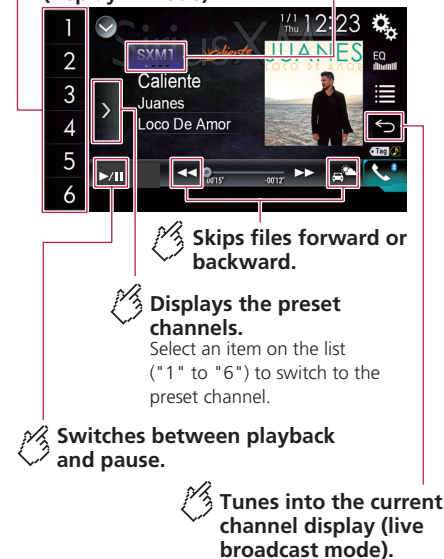
- 1 Touch .
- 2 Touch a file or a folder on the list to play back.



SiriusXM® Satellite Radio

- Recalls the preset channel stored to a key from memory.
- HOLD** Stores the current broadcast frequency to a key.

Time bar display (Replay™ mode)



- *1 Selects an item from the list.
➔ Refer to *Selecting a channel from the category list* on page 52
- *2 Switches to the channel broadcasting the traffic and weather information for the selected city.
➔ Refer to *Checking the update traffic and weather information* on page 53

SiriusXM® Satellite Radio

- ② *3 Memorizes the current channel content information for the alert function.
 - Refer to *Memorizing the current contents* on page 54
 - Stores song information to an iPod.
 - Refer to *Storing song information to an iPod (iTunes® Tagging)* on page 70
- ② *4 Performs TuneScan™.
 - Refer to *Using TuneScan™* on page 52
- ② *5 Switches TuneMix™ to on or off.
 - Refer to *Using TuneMix™* on page 52

- ❑ By pressing the **⏮** or **⏭** button, you can also move the preset channels up or down on the current channel screen, and skip files forward or backward on the play time indicator screen.
- ❑ By pressing and holding the **⏮** or **⏭** button, you can also move channels up or down on the current channel screen, and perform fast reverse or fast forward on the play time indicator screen.
- ❑ "RADIO ID" is displayed when Channel 0 is selected.

SiriusXM tuner operations

Only SiriusXM® brings you more of what you love to listen to, all in one place. Get over 140 channels, including commercial-free music plus the best sports, news, talk, comedy and entertainment. Welcome to the world of satellite radio. A SiriusXM Connect Vehicle Tuner and Subscription are required. For more information, visit the website (www.siriusxm.com).

- ❑ You can use this product to control a SiriusXM Connect Vehicle Tuner (sold separately).
- For information on how to install the SiriusXM Connect Vehicle Tuner, consult the installation guide included with the tuner.

Starting procedure

- 1 Display the AV source selection screen.



- 2 Touch [SiriusXM].

Subscribing to the SiriusXM Satellite Radio service

- 1 Select SiriusXM as the source.
 - Refer to *Starting procedure* on page 52
 - You should be able to tune in to Channel 1. If you cannot get Channel 1, ensure that your SiriusXM Connect Vehicle Tuner is installed correctly.
- 2 Switch to Channel 0 and check the Radio ID.
 - You will need this number to activate your subscription.
 - ❑ Note that the SiriusXM Radio ID does not include the letters I, O, S or F.

3 Activate the service either online or by phone.

- ❑ In the USA, you can activate online or by calling SiriusXM Listener care:
 - Visit the website www.siriusxm.com/activatenow
 - Call SiriusXM Listener Care at 1-866-635-2349
- For Canadian Subscriptions, please contact:
 - Visit the website www.siriusxm.ca/activatexm
 - Call XM customer Care at 1-877-438-9677
- ❑ The SiriusXM satellites will send an activation message to your tuner. When the tuner has received the message, "Subscription Updated" is displayed.
- ❑ The activation process usually takes 10 to 15 minutes but may take longer. Do not turn off this product while the activation message is displayed.


Selecting a channel from the category list

- ❑ The types of categories available depend on the types of channels available.
- ❑ It may take time to display the channel list depending on the SiriusXM reception condition.


- 1 Touch .

- 2 Touch the category name.

- 3 Touch the desired channel.

- If you touch , you can switch between list types.
- The displayed list switches in the following order.

Channel Name—Artist Name—Song Title—Content Info

- If you touch , you can scan each channel in the selected category.

Using TuneScan™

When you activate the **TuneScan™** feature, you will hear a few seconds of the songs, which have not been listened to, from each of the music channels stored as presets on the current band.

- ❑ When fewer than two music channels are stored as presets, you cannot perform scan tuning.
- ❑ **TuneScan™** may take a few minutes to become available after the product is turned on or the preset band is changed.

- 1 Touch .



- ① Continues playing the current scanning song or channel.
- ② Skips to the previous/next song during **TuneScan™** or to the previous/next channel during category scan.
- ③ Cancels scan play.

Using TuneMix™

TuneMix™ plays a unique blend of songs from music channels stored in the current SiriusXM Preset Band.

- ❑ SXV300 or later SiriusXM Connect vehicle tuner (sold separately) is required to use this function.
- ❑ When fewer than two music channels are stored as presets, you cannot perform TuneMix™.
- ❑ The locked channel cannot be used for the TuneMix™ until you clear the password.

- 1 Touch .

- To cancel TuneMix™, touch the key again.

Displaying the “SiriusXM Settings” screen

- 1 Display the “System” setting screen.



- 2 Touch [AV Source Settings].
- 3 Touch [SiriusXM Settings].

Setting TuneStart™

Automatically start songs from the beginning when you tune to one of your preset channels in the current preset band when TuneStart™ is turned on. The default setting is “On”.

- 1 Display the “SiriusXM Settings” screen.
➔ Refer to *Displaying the “SiriusXM Settings” screen* on page 53
- 2 Touch [Tune Start] to switch “On” or “Off”.

Setting parental lock

The Parental Control feature allows you to limit access to any SiriusXM channels, including those with mature content. When enabled, the Parental Control feature requires you to enter a passcode to tune to the locked channels. The default passcode is “0000”.

Setting the passcode

- 1 Display the “SiriusXM Settings” screen.
➔ Refer to *Displaying the “SiriusXM Settings” screen* on page 53
- 2 Touch [Parental Control].
- 3 Enter the passcode.
- 4 Touch
- 5 Touch [Edit Code].
- 6 Enter the passcode you want to set.
- 7 Touch

Locking the channel

- 1 Display the “SiriusXM Settings” screen.
➔ Refer to *Displaying the “SiriusXM Settings” screen* on page 53
- 2 Touch [Parental Control].
- 3 Enter the current passcode.
- 4 Touch
- 5 Touch the channel.
 appears and the channel is locked.
 - When you touch the locked channel, the channel is unlocked.
 - When you touch [Clear All], all locked channels are unlocked.

Checking the update traffic and weather information

Traffic & Weather Now™ allows you to access the latest traffic and weather report whenever you want to hear it.

- ☐ SXV300 or later SiriusXM Connect vehicle tuner (sold separately) is required to use this function.
- ☐ To use this function, select the city in advance.
➔ Refer to *Selecting the city for Traffic & Weather Now™* on page 53

- 1 Touch
 - Grayed out: traffic and weather broadcast for your market is not yet available.
 - With green dot: latest report available but not listened to yet.
 - White: latest report available to hear again.
- To cancel Traffic & Weather Now™, touch

Selecting the city for Traffic & Weather Now™

- 1 Display the “SiriusXM Settings” screen.
➔ Refer to *Displaying the “SiriusXM Settings” screen* on page 53
- 2 Touch [City Setting].
- 3 Touch the city.

Using SportsFlash™

SportsFlash™ will notify you when a big play happens during a game with one of your favorite sports teams. You can select whether or not to hear the play. In addition, you can select whether to continue listening to the notified game or to return to the previous channel you were listening to.

- ☐ SXV300 or later SiriusXM Connect vehicle tuner (sold separately) is required to use this function.
- ☐ This function is available only when “SportsFlash” is set to “On”.
➔ Refer to *Setting SportsFlash™* on page 53
- ☐ To use this function, before the game starts select the teams you want to follow. Up to 50 teams can be registered as the target of SportsFlash™.
➔ Refer to *Selecting teams for SportsFlash™* on page 53
- ☐ Touch [Play] to listen to the notified channel. To return to the original channel, touch within five minutes after the channel is switched.
- ☐ Touch [Ignore] to stay tuned to the current channel.
- ☐ Touch [Cancel] to cancel notifications regarding the game.

Setting SportsFlash™

The default setting is “On”.

- 1 Display the “SiriusXM Settings” screen.
➔ Refer to *Displaying the “SiriusXM Settings” screen* on page 53
- 2 Touch [SportsFlash] to switch “On” or “Off”.

Selecting teams for SportsFlash™

- ☐ To display “SportsFlash List” at all times, “SportsFlash” needs to be set to “On”.
➔ Refer to *Setting SportsFlash™* on page 53

- 1 Display the “SiriusXM Settings” screen.
➔ Refer to *Displaying the “SiriusXM Settings” screen* on page 53
- 2 Touch [SportsFlash List].
- 3 Touch [Edit List].
- 4 Select a league.
- 5 Select a team.
 - You can touch an item again to deselect it.
 - If you want to remove all the teams you have set, touch the [Clear All].

SiriusXM® Satellite Radio

Setting of priorities

If you set numerous favorite teams, you can receive alerts for up to five favorite teams in the order in which data are received.

You can set the order of priority for up to five teams, if more than six teams are set as favorite teams.

- 1 Touch [Prioritize] on the team selection screen.
- 2 Select the high priority five teams from the selected favorite teams.

Using the content alerts function

The song titles, artist names, and your favorite sport teams to which you are listening can be memorized to an alert list. When a program that matches a keyword memorized to the alert list is broadcast, a beep sounds and a message is displayed.

- ☐ You can register up to 50 keywords in the alert list.
 - Refer to *Memorizing the current contents* on page 54
- ☐ You can enable or disable alerts by setting the alert function.
 - Refer to *Setting the alert function* on page 54
- ☐ The radio will display an alert message when a matching artist, song or team is found on another channel. Touch [Jump] to switch to the channel. If you touch [Stay], the channel will not switch.

Memorizing the current contents

- 1 On the current channel content information area, touch the item for which you want an alert.
- 2 Touch [Set Alert] for artist or song, or touch [Team1] or [Team2] for game.

Setting the alert function

- 1 Display the “SiriusXM Settings” screen.
 - Refer to *Displaying the “SiriusXM Settings” screen* on page 53
- 2 Touch [Alert List].
- 3 Touch the artist name, song title or team.

The alert setting is enabled.

 - Touch [Alert On] or [Alert Off] to activate or deactivate the alert function.

- Touch [Delete All] to delete all items memorized to the alert list.
- If you touch and hold the list item, you can delete the item from the list.

Selecting teams for Game Alert

This product can notify you when games involving your favorite sports teams are about to start.

- 1 Display the “SiriusXM Settings” screen.
 - Refer to *Displaying the “SiriusXM Settings” screen* on page 53
- 2 Touch [Team Settings].
- 3 Select a league.
- 4 Select a team.

Using Featured Favorites Band

Featured Favorites are groups of channels that are created by the SiriusXM Programming department allowing you to discover new channels.

Featured Favorite channels are dynamic and can change often, allowing you to discover new channels.

- ☐ If this function is turned on, “Featured” will be available as a band selection.
 - Refer to *Setting the Featured Favorites function* on page 54
- ☐ The featured seasonal theme will be automatically updated. You can set whether to be notified of the update.
 - Refer to *Setting Featured Band Update Message* on page 54

Setting the Featured Favorites function

The default setting is “On”.

- 1 Display the “SiriusXM Settings” screen.
 - Refer to *Displaying the “SiriusXM Settings” screen* on page 53
- 2 Touch [Featured Favorites] to switch “On” or “Off”.

Setting Featured Band Update Message

You can set whether to be notified when the featured seasonal theme is updated.

The default setting is “On”.

- 1 Display the “SiriusXM Settings” screen.
 - Refer to *Displaying the “SiriusXM Settings” screen* on page 53
- 2 Touch [Featured Band Update Messages] to switch “On” or “Off”.

Restoring the “SiriusXM Settings” to the default


- ☐ This setting is available only when you stop your vehicle in a safe place and apply the parking brake.

⚠CAUTION

Do not turn off the engine while restoring the settings.

- 1 Display the “SiriusXM Settings” screen.
 - Refer to *Displaying the “SiriusXM Settings” screen* on page 53
- 2 Touch [SiriusXM Reset].
- 3 Touch [Restore].
 - ☐ The source is turned off and the Bluetooth connection is disconnected before the process starts.

AUX source

 **Hides the touch panel keys.**
To display again the keys, touch anywhere on the screen.



 **Switches between the video input and the sound input.**

- ❑ A Mini-jack AV cable (CD-RM10) (sold separately) is required for connection.
 - Refer to the Installation Manual.
- ❑ You can set the screen size for the video image.
 - Refer to *Changing the wide screen mode* on page 70

⚠CAUTION

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

Starting procedure

You can display the video image output by the device connected to video input.

1 Display the “System” setting screen.



- 2 Touch [Input/Output Settings].
- 3 Confirm that “AUX Input” is turned on.
- 4 Display the AV source selection screen.



5 Touch [AUX].

Setting the video signal

When you connect this product to an AUX equipment, select the suitable video signal setting. The default setting is “Auto”.

- ❑ You can operate this function only for the video signal input into the AUX input.

1 Display the “Video Setup” screen.



2 Touch [Video Signal Setting].


3 Touch [AUX].

4 Touch the item.

The following items are available:

Auto, PAL, NTSC, PAL-M, PAL-N, SECAM.

AV input

 **Hides the touch panel keys.**
To display again the keys, touch anywhere on the screen.



⚠CAUTION

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

Starting procedure (for AV source)

You can display the video image output by the device connected to video input.

- Refer to the Installation Manual.

1 Display the “System” setting screen.



2 Touch [Input/Output Settings].

3 Touch [AV Input].

4 Touch [Source].

- ❑ If “Source” is selected, “2nd Camera Input” is automatically set to “Off”.
- Refer to *Setting the second camera activation* on page 61

5 Display the AV source selection screen.

AV input



6 Touch [AV].

Starting procedure (for camera)

You can display the image output by the camera connected to video input.

➡ Refer to the Installation Manual.

1 Display the “System” setting screen.



2 Touch [Input/Output Settings].

3 Touch [AV Input].

4 Touch [Camera].

5 Display the AV source selection screen.



6 Touch [Camera View].

- ❑ When the camera view of both the rear view camera and 2nd camera are available, the key to switch the display appears. Touch this key to switch the display between the rear view image and 2nd camera image.

Setting the video signal

When you connect this product to an AV equipment, select the suitable video signal setting.

The default setting is “Auto”.

- ❑ You can operate this function only for the video signal input into the AV input.

1 Display the “Video Setup” screen.



2 Touch [Video Signal Setting].

3 Touch [AV].

4 Touch the item.

The following items are available:

Auto, PAL, NTSC, PAL-M, PAL-N, SECAM.

MIXTRAX


 Exits the MIXTRAX screen.

 Displays the LinkGate screen.


Touch the desired item. Songs related to the selected item are played.



 Selects a track.

 Turns on or off the MIXTRAX original visual display.

 Switches between playback and pause.




 Displays the item selected on the LinkGate screen or item selection screen.

 Specifies the BPM.



 Sets to the original BPM (Beats Per Minute).

 Specifies the playback portion.

-  : Plays back a middle portion.
-  : Plays back a long portion.
-  : Plays back a short portion.

- *1 Selects an item from the list.
➤ Refer to *Selecting an item from the list* on page 57
- *2 Selects songs not to be played.
➤ Refer to *Selecting songs not to be played* on page 57

Using MIXTRAX

MIXTRAX is original technology for creating non-stop mixes of selections from your audio library, complete with DJ effects that make them sound.

❑ FLAC files are skipped during MIXTRAX playback.

Starting procedure





- 1 Plug the USB storage device.
➤ Refer to *Plugging and unplugging a USB storage device* on page 5
- 2 Display the AV source selection screen.



- 3 Touch [USB].
- 4 Touch [MIXTRAX].

Selecting an item from the list



You can specify an item to play songs related to it.

- 1 Touch .
The following lists are available:
 -  : displays the mix pattern list.
 -  : displays the tag list.
 -  : displays the file list.

- 2 Touch an item in the list.

Selecting songs not to be played

You can select items or songs not to be played.

- 1 Touch .
- 2 Touch .
- 3 Touch the category.
- 4 Touch the box on the left of the item or song that you do not want to play.

Displaying the "MIXTRAX Settings" screen

- 1 Display the "System" setting screen.



- 2 Touch [AV Source Settings].
- 3 Touch [MIXTRAX Settings].

Setting the flash pattern

The flashing color changes with the changes in the sound and bass levels.

The default setting is "Sound1".

- 1 Display the "MIXTRAX Settings" screen.
➤ Refer to *Displaying the "MIXTRAX Settings" screen* on page 57
- 2 Touch [Flash Pattern].
- 3 Touch the item.
 - **Sound1 to Sound6:**
The flash pattern changes according to the sound level.
 - **L-Pass1 to L-Pass6:**
The flash pattern changes according to the bass level.
 - **Random1:**
The flash pattern changes randomly according to the sound level mode and low pass mode.
 - **Random2:**
The flash pattern changes randomly according to the sound level mode.
 - **Random3:**
The flash pattern changes randomly according to the low pass mode.
 - **Off:**
The flash pattern does not flash.

 Displays the Vehicle Information screen.

 Displays the Gauges screen.

Car Features screen (Example: Gauges)



 Displays the Parking Assist screen.

 Displays the Climate screen.

Using iDatalink

By connecting the optional iDatalink adapter, you can access the satellite radio source provided for the vehicle and the vehicle information can be displayed on this product.

Important

- For details about vehicle models that are compatible with the iDatalink adapter, refer to the information on our website.
- For information on installing the iDatalink adapter, refer to the install guide of the iDatalink adapter.
- After installing the iDatalink adapter, be sure to check the operations.
- Functions and displays vary depending on the vehicle model. For details of the functions available for each model, refer to the information on our website.
- Please note that the device number of this product and a computer with internet access are required to program

your Maestro RR module. For troubleshooting information about iDatalink functions, visit the following website.
<http://maestro.idatalink.com/support>

Limitations:

- The iDatalink list screen can be scrolled up or down by page.
- It is possible to retain many OEM systems such as steering wheel controls, warning chimes, driver safety systems, voice-controlled Bluetooth hands-free phone, media players and satellite radios. It is also possible to add visual screens such as gauges, vehicle information, climate control and parking assist. However, an additional interface module is required to access these features. Since the type of module varies depending on the vehicle model, please search for your vehicle at the following URL to determine what features are available for each module. Remember to select the correct radio model for accurate results.

<http://maestro.idatalink.com/>

- The data are transmitted to this product from your vehicle system via the connected iDatalink adapter. Therefore, the actual data contents displayed on your product may be different from the contents on the screen described in this manual.
- When information on your vehicle or on the devices of your vehicle is sent from the iDatalink Maestro module, a screen notifying you of such information may pop up.

Activating iDatalink Maestro

Before using and/or connecting the iDatalink Maestro adapter, you will need to first flash the Maestro RR module with the appropriate vehicle and head unit firmware.

- Find the device number (12 alphanumeric characters) on the label on the packaging of this product or on this product itself.**
 - Device number input is required for updating the iDatalink Maestro module. Take a note of the device number as necessary.
 - You can also check the device number on the "Firmware Information" screen of this product.
 - Refer to *Displaying the firmware version* on page 62
- Access the following website and follow the on-screen directions to configure the desired firmware.**

<http://maestro.idatalink.com/>

- When the serial number input is required, please input the device number of this product.

3 Install the vehicle/head unit specific firmware on your iDatalink Maestro module.

- For details, please refer to iDatalink Maestro website.

4 Connect this product to iDatalink Maestro, and then install this product to the vehicle.

- Refer to the Installation Manual. The iDatalink function will be active.

Starting procedure

1 Connect the iDatalink Maestro adapter.

- Refer to the Installation Manual.

2 Display the AV source selection screen.



3 Touch [Car Sources] or [Car Features].

- If you touch [Car Sources], the source select menu appears.
 - Refer to *Using functions in Car Sources* on page 58
- If you touch [Car Features], the vehicle features menu appears.
 - Refer to *Using functions in Car Features* on page 58

Using functions in Car Sources

Almost operations are very similar to the built-in AV sources of this product. For details of the operations, refer to the related pages.

USB/iPod operations

- Refer to *Compressed files* on page 40.

SiriusXM tuner operations

- Refer to *SiriusXM® Satellite Radio* on page 51.

Bluetooth Audio operations

- Refer to *Bluetooth audio player* on page 50.

Hands-free phone operations

- Refer to *Hands-free phoning* on page 31.

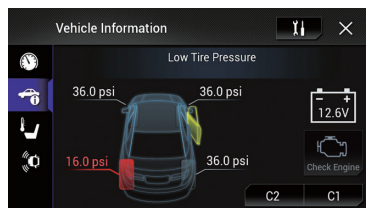
Using functions in Car Features

You can check and operate the following screens.

Gauges screen



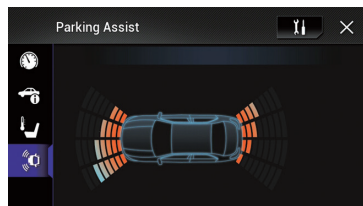
Vehicle Information screen



Climate screen



Parking Assist screen



Displaying obstacle detection information

CAUTION

This function is intended solely to assist the driver's vision. It does not detect all dangers and obstacles and is not a substitute for your attentiveness, judgement, and care while parking your vehicle.

- ☐ This function is only available for vehicles equipped with a parking sensor system.

Displaying the setting screen for iDatalink

- ☐ Functions and displays vary depending on the connected type of iDatalink adapter and the vehicle model.

1 Display the "System" setting screen.



2 Touch [OEM Settings].

Displaying the "System" setting screen

- 1 Press the button.
- 2 Touch and then .

Setting the navigation information bar

You can set whether to display the guidance information of the navigation on the AV operation screen.

- 1 Display the "System" setting screen.
➤ Refer to *Displaying the "System" setting screen* on page 59
- 2 Touch [Navigation Related Settings].
- 3 Touch [Navigation info window] to switch "On" or "Off".

Setting navigation screen interruption

You can set whether to automatically switch to the navigation screen from the AV screen or the application screen when your vehicle approaches a guidance point such as an intersection.

- 1 Display the "System" setting screen.
➤ Refer to *Displaying the "System" setting screen* on page 59
- 2 Touch [Navigation Related Settings].
- 3 Touch [AV/App Guide Mode] to switch "On" or "Off".

Setting Bluetooth audio source activation

The default setting is "On".

- 1 Display the "System" setting screen.
➤ Refer to *Displaying the "System" setting screen* on page 59
- 2 Touch [AV Source Settings].

System settings

- 3 Touch [Bluetooth Audio] to switch “On” or “Off”.

Setting the ever scroll

When “Ever Scroll” is set to “On”, the recorded text information scrolls continuously in the display while the vehicle is stopped. The default setting is “Off”.

- 1 Display the “System” setting screen.

➤ Refer to *Displaying the “System” setting screen* on page 59

- 2 Touch [Ever Scroll] to switch “On” or “Off”.

Setting the beep tone

The default setting is “On”.

- 1 Display the “System” setting screen.

➤ Refer to *Displaying the “System” setting screen* on page 59

- 2 Touch [Beep Tone] to switch “On” or “Off”.

Setting the rear view camera

A separately sold rear view camera (e.g. ND-BC8) is required for utilizing the rear view camera function. (For details, consult your dealer.)

Rear view camera

This product features a function that automatically switches to the full-screen image of the rear view camera installed on your vehicle, when the shift lever is in the REVERSE (R) position.

Camera View mode also allows you to check what is behind you while driving.

Camera for Camera View mode

Camera View can be displayed at all times. Please note that with this setting, the camera image is not resized to fit, and that a portion of what is seen by the camera is not viewable.

To display the camera image, touch [Camera View] on the AV source selection screen.

➤ Refer to *Source on the AV source selection screen* on page 8

❑ To set the rear view camera as the camera for Camera View mode, set “Back Camera Input” to “On”.

❑ When using the 2nd camera, set “AV Input” to “Camera”.

⚠CAUTION

Check to make sure settings for rear view camera displays a mirror reversed image.

- ❑ Immediately verify whether the display changes to a rear view camera image when the shift lever is moved to REVERSE (R) from another position.
- ❑ When the screen changes to full-screen rear view camera image during normal driving, switch to the opposite setting in “Reverse Gear Setting”.
- ❑ If you touch [🔄] while the camera image is displayed, the displayed image will turn off temporarily.
- ❑ When the camera view of both the rear view camera and 2nd camera are available, the key to switch the display appears. Touch this key to switch the display between the rear view image and 2nd camera image.

Setting rear view camera activation

The default setting is “Off”.

- 1 Display the “System” setting screen.

➤ Refer to *Displaying the “System” setting screen* on page 59

- 2 Touch [Camera settings].

- 3 Touch [Back Camera Input] to switch “On” or “Off”.

Setting the polarity of the rear view camera

The default setting is “Battery”.

- 1 Display the “System” setting screen.

➤ Refer to *Displaying the “System” setting screen* on page 59

- 2 Touch [Camera settings].

- 3 Touch [Reverse Gear Setting].

● Battery:

The polarity of the connected lead is positive.

● Ground:

The polarity of the connected lead is negative.

- ❑ If no camera connection is made and the camera polarity setting is wrong, a black screen is displayed as the rear view camera image immediately after startup. In such a case, press and hold the **MAP** button to release the rear view camera screen and then change the camera polarity setting to “Battery”.

Setting the reversed image display for the rear view image

You can set whether to reverse the rear view camera images to be displayed on the front screen.

The default setting is “Off”.

❑ This setting is available only when you stop your vehicle in a safe place and apply the parking brake.

❑ This function is available when “Back Camera Input” is set to “On”.

➤ Refer to *Setting rear view camera activation* on page 60

- 1 Display the “System” setting screen.

➤ Refer to *Displaying the “System” setting screen* on page 59

- 2 Touch [Camera settings].

- 3 Touch [Back Camera: Reverse Video] to switch “On” or “Off”.

Setting the parking assist guidelines

Displaying the parking assist guidelines

You can set whether to display the parking assist guidelines on the rear view camera images when backing up your vehicle. The default setting is “Off”.

- 1 Display the “System” setting screen.

➤ Refer to *Displaying the “System” setting screen* on page 59

- 2 Touch [Camera settings].

- 3 Touch [Parking Assist Guide] to switch “On” or “Off”.

Adjusting the parking assist guidelines

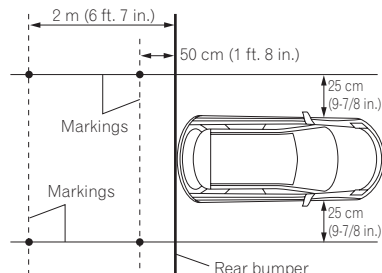
⚠CAUTION

- When adjusting the guidelines, be sure to park the vehicle in a safe place and apply the parking brake.
- Before getting out of the car to place the markings, be sure to turn the ignition switch off (ACC OFF).
- The range projected by the rear view camera is limited. Also, the vehicle width and distance guidelines displayed on the rear view camera image may differ from the actual vehicle width and distance. (The guidelines are straight lines.)

System settings

- The image quality may deteriorate depending on the usage environment, such as at night or in dark surroundings.

- 1 **Park your vehicle in a safe place and apply the parking brake.**
- 2 **Using packing tape or similar, place markings as follows.**



- 3 **Display the "System" setting screen.**
 - Refer to *Displaying the "System" setting screen* on page 59
- 4 **Touch [Camera settings].**
- 5 **Touch [Parking Assist Guide Adjust].**
- 6 **Set the guidelines by dragging the four points.**

Adjust the guidelines so that the guidelines can be overlaid to the markings

 - ❑ Touch ▲/▼/◀/▶/↶/↷ to adjust the guidelines if necessary. Touch [Default] to reset the settings.

Setting the second camera

You can view images of the second camera (a front camera etc.) on the screen of this product.

Setting the second camera activation

The default setting is "Off".

- ❑ This function is synchronized with "AV Input" setting.

- 1 **Display the "System" setting screen.**
 - Refer to *Displaying the "System" setting screen* on page 59
- 2 **Touch [Camera settings].**

- 3 **Touch [2nd Camera Input] to switch "On" or "Off".**

Setting the reversed image

The default setting is "Off".

- ❑ This setting is available only when you stop your vehicle in a safe place and apply the parking brake.
- ❑ This function is available when "AV Input" is set to "Camera" or "2nd Camera Input" is set to "On".

- 1 **Display the "System" setting screen.**
 - Refer to *Displaying the "System" setting screen* on page 59
- 2 **Touch [Camera settings].**
- 3 **Touch [2nd Camera: Reverse video] to switch "On" or "Off".**

Setting the camera for Camera View mode

To display Camera View at all times, "Camera View" needs to be set to "On". (The same mode is turned on when [⏏] is touched on the camera view screen. The setting value is synchronized.) The default setting is "Off".

- ❑ To set the rear view camera as the camera for Camera View mode, set "Back Camera Input" to "On".
 - Refer to *Setting rear view camera activation* on page 60
- ❑ When using the second camera, set "AV Input" to "Camera" or "2nd Camera Input" to "On" (both settings are synchronized).
 - Refer to *Setting the second camera* on page 61

- 1 **Display the "System" setting screen.**
 - Refer to *Displaying the "System" setting screen* on page 59
- 2 **Touch [Camera settings].**
- 3 **Touch [Camera View] to switch "On" or "Off".**
 - ❑ You can also turn this function on by touching [Camera View] on the AV source selection screen or in the source list.

Setting the demo mode

The default setting is "On".

- 1 **Display the "System" setting screen.**
 - Refer to *Displaying the "System" setting screen* on page 59

- 2 **Touch [Demo Mode] to switch "On" or "Off".**

Selecting the system language

- ❑ If the embedded language and the selected language setting are not the same, text information may not display properly.
- ❑ Some characters may not be displayed properly.

- 1 **Display the "System" setting screen.**
 - Refer to *Displaying the "System" setting screen* on page 59
- 2 **Touch [System Language].**
- 3 **Touch the language.**

Setting the keyboard language with the application for iPhone

You can use the keyboard in **AppRadio Mode** by setting the language of the keyboard for iPhone.

- ❑ This function is only available in **AppRadio Mode** on the iPhone.

- 1 **Display the "System" setting screen.**
 - Refer to *Displaying the "System" setting screen* on page 59
- 2 **Touch [Keyboard].**
- 3 **Touch the language.**

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.

- ❑ This setting is available only when you stop your vehicle in a safe place and apply the parking brake.
- ❑ Do not use sharp pointed tools such as a ballpoint or mechanical pen, which could damage the screen.
- ❑ Do not turn off the engine while saving the adjusted position data.

- 1 **Display the "System" setting screen.**
 - Refer to *Displaying the "System" setting screen* on page 59
- 2 **Touch [Touch Panel Calibration].**

System settings

- 3 Touch two corners of the screen along the arrows, and then touch the centers of two + marks at the same time twice.

- 4 Press the button.

The adjustment results are saved.

- 5 Press the button once again.

Proceed to 16-point adjustment.

- 6 Gently touch the center of the “+” mark displayed on the screen.

The target indicates the order.

- When you press the button, the previous adjustment position returns.
- When you press and hold the button, the adjustment is canceled.

- 7 Press and hold the button.

The adjustment results are saved.

Setting the dimmer

Setting the dimmer trigger

The default setting is “Auto”.

- ☐ This setting is available only when you stop your vehicle in a safe place and apply the parking brake.

- 1 Display the “System” setting screen.

- Refer to *Displaying the “System” setting screen* on page 59

- 2 Touch [Dimmer Settings].

- 3 Touch [Dimmer Trigger].

- 4 Touch the item.

- **Auto:**
Switches the dimmer to on or off automatically according to your vehicle's headlight turning on or off.
- **Manual:**
Switches the dimmer to on or off manually.
- **Time:**
Switches the dimmer to on or off at the time you adjusted.

Setting the dimmer duration in day or night

The default setting is “Day”.

- ☐ You can use this function when “Dimmer Trigger” is set to “Manual”.
- ☐ This setting is available only when you stop your vehicle in a safe place and apply the parking brake.

- 1 Display the “System” setting screen.

- Refer to *Displaying the “System” setting screen* on page 59

- 2 Touch [Dimmer Settings].

- 3 Touch [Day/Night] to switch the following items.

- **Day:**
Turns the dimmer function to off.
- **Night:**
Turns the dimmer function to on.

Setting the dimmer duration optional

You can adjust the time that the dimmer is turned on or off. The default setting is 18:00-6:00 (6:00 PM-6:00 AM).

- ☐ You can use this function when “Dimmer Trigger” is set to “Time”.
- ☐ This setting is available only when you stop your vehicle in a safe place and apply the parking brake.

- 1 Display the “System” setting screen.

- Refer to *Displaying the “System” setting screen* on page 59

- 2 Touch [Dimmer Settings].

- 3 Touch [Dimmer Duration].

- 4 Drag the cursors to set the dimmer duration.

- You can also set the dimmer duration touching or .
- ☐ The time display of the dimmer duration adjusting bar is depending on the clock display setting.
- Refer to *Setting the time and date* on page 70

Adjusting the picture

You can adjust the picture for each source and rear view camera.

⚠CAUTION

For safety reasons, you cannot use some of these functions while your vehicle is in motion. To enable these functions, you must stop in a safe place and apply the parking brake.

- 1 Display the screen you want to adjust.

- 2 Display the “System” setting screen.

- Refer to *Displaying the “System” setting screen* on page 59

- 3 Touch [Picture Adjustment].

- 4 Touch the item to select the function to be adjusted.

- **Brightness:**
Adjusts the black intensity. (–24 to +24)
- **Contrast:**
Adjusts the contrast. (–24 to +24)
- **Color:**
Adjusts the color saturation. (–24 to +24)
- **Hue:**
Adjusts the tone of color (which color is emphasized, red or green). (–24 to +24)
- **Dimmer Level:**
Adjusts the brightness of the display. (+1 to +48)
- **Temperature:**
Adjusts the color temperature, resulting in a better white balance. (–3 to +3)
- ☐ With some pictures, you cannot adjust “Hue” and “Color”.
- When you touch [Rear View] or [2nd Camera], the mode changes to the selected camera mode. By touching [Source], [Navi] or [Apps], you can return to the selected mode.

- 5 Touch , , , to adjust.

- ☐ The adjustments of “Brightness”, “Contrast” and “Dimmer Level” are stored separately for the on/off status of the dimmer function. These are switched automatically depending on whether the dimmer function is on or off.
- ☐ The picture adjustment may not be available with some rear view cameras.
- ☐ The setting contents can be memorized separately.

Displaying the firmware version

- 1 Display the “System” setting screen.

- Refer to *Displaying the “System” setting screen* on page 59

- 2 Touch [System Information].

- 3 Touch [Firmware Information].

System settings

Displaying the open source licenses

You can check the open source licenses of the functions that this product is equipped with.

- 1 **Display the "System" setting screen.**
➤ Refer to *Displaying the "System" setting screen* on page 59
- 2 **Touch [System Information].**
- 3 **Touch [Firmware Information].**
- 4 **Touch [License].**

Updating firmware

⚠CAUTION

- The USB storage device for updating must contain only the correct update file.
- Never turn this product off, disconnect the USB storage device while the firmware is being updated.
- You can only update the firmware when the vehicle is stopped and the parking brake is engaged.

- 1 **Download the firmware update files into your computer.**
- 2 **Connect a blank (formatted) USB storage device to your computer, and then locate the correct update file and copy it onto the USB storage device.**
- 3 **Connect the USB storage device to this product.**
➤ Refer to *Plugging and unplugging a USB storage device* on page 5
- 4 **Turn the source off.**
➤ Refer to *Selecting a source* on page 8
- 5 **Display the "System" setting screen.**
➤ Refer to *Displaying the "System" setting screen* on page 59
- 6 **Touch [System Information].**
- 7 **Touch [Firmware Update].**
- 8 **Touch [Continue] to display the data transfer mode.**

Follow the on-screen instructions to finish updating the firmware.

- ❑ If an error message appears on the screen, touch the display and perform the above steps again.

Checking sensor learning status and driving status

You can check the sensor learning status, such as the degree of learning. You can also check the current sensor values and the total number of speed pulses.

- 1 **Display the "System" setting screen.**
➤ Refer to *Displaying the "System" setting screen* on page 59
- 2 **Touch [System Information].**
- 3 **Touch [3D Calibration Status].**

Clearing the status

You can delete the learned results stored in the sensor.

- 1 **Display the "3D Calibration Status" screen.**
- 2 **Touch [Distance] or [Speed Pulse], and then touch [Yes].**
- 3 **Touch [Learning] and then touch [Reset All].**
❑ Touch [Reset All] to reset the sensor after changing the installation position or angle.
❑ If you touch [Reset Distance], all learned results stored in "Distance" are cleared.

Checking the connections of leads

Check that the leads are properly connected between this product and vehicle.

- 1 **Display the "System" setting screen.**
➤ Refer to *Displaying the "System" setting screen* on page 59
- 2 **Touch [System Information].**
- 3 **Touch [Connection Status].**
 - **GPS Antenna**
Displays the connection status of the GPS antenna ("OK" or "NOK") and the reception sensitivity.
❑ If reception is poor, please change the installation position of the GPS antenna.

- **Positioning Status**
Displays the positioning status (3D positioning, 2D positioning, or no positioning), the number of satellites used for positioning (orange), and the number of satellites whose signal has been received (yellow). If signals from more than three satellites are received, the current location can be measured.
➤ Refer to *Positioning technology* on page 76
- **Installation**
Indicates whether the installation position of this product is correct or not. If installed correctly, "OK" appears. When this product is installed at an extreme angle exceeding the limitation of the installing angle, "NOK(Inst. Angle)" will be displayed. If the installation of this product is continually changed and it is not firmly fixed into place, "NOK(Vibration)" will be displayed.
- **Speed Pulse**
The speed pulse value detected by this product is shown.
- **Illumination**
Displays the status of headlights or small lamps of the vehicle.
- **Back Signal**
When the shift lever is shifted to "R" (reverse position), the signal switches to "High" or "Low". The signal displayed will vary depending on the vehicle.
- **iDataLink**
Displays the status of the optional iDataLink adapter.

Audio adjustments

Displaying the “Audio” setting screen

- 1 Press the **⏏** button.
- 2 Touch **[⏏]**, and then **[⏏]**.

Using fader/balance adjustment

- 1 Display the “Audio” setting screen.
 - Refer to *Displaying the “Audio” setting screen* on page 64
- 2 Touch **[Fader/Balance]**.
 - ❑ Only the balance can be adjusted when “On” is selected in “Rear Speaker”. Touch **[Balance]** and skip to step 4.
 - Refer to *Setting the rear speaker output* on page 64.
- 3 Touch **[▲]** or **[▼]** to adjust the front/rear speaker balance.
 - ❑ Set “Front” and “Rear” to “0” when using a dual speaker system.
- 4 Touch **[◀]** or **[▶]** to adjust the left/right speaker balance.
 - You can also set the value by dragging the point on the displayed table.

Switching sound muting/attenuation

You can automatically mute or attenuate the AV source volume and the iPhone or smartphone application volume when the navigation outputs the guidance voice. The default setting is “ATT”.

- 1 Display the “Audio” setting screen.
 - Refer to *Displaying the “Audio” setting screen* on page 64
- 2 Touch **[Mute Level]**.
- 3 Touch the item.
 - **ATT:**
The volume becomes 20 dB lower than the current volume.
 - **Mute:**
The volume becomes 0.
 - **Off:**
The volume does not change.

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.
- ❑ This function is not available when the FM tuner is selected as the AV source.

- 1 Compare the FM tuner volume level with the level of the source.
- 2 Display the “Audio” setting screen.
 - Refer to *Displaying the “Audio” setting screen* on page 64
- 3 Touch **[Source Level Adjuster]**.
- 4 Touch **[▲]** or **[▼]** to adjust the source volume.
 - ❑ If you directly touch the area where the cursor can be moved, the SLA setting will be changed to the value of the touched point.
 - ❑ “+4” to “-4” is displayed as the source volume is increased or decreased.
 - ❑ The default setting is “0”.

Setting the rear speaker output

A rear speaker output of this product can be turned on or off. The default setting is “On”.

- 1 Display the “Audio” setting screen.
 - Refer to *Displaying the “Audio” setting screen* on page 64
- 2 Touch **[Rear Speaker]** to switch “On” or “Off”.
 - ❑ If “Off” is selected, the rear speaker adjustment is not available in “Speaker Level”, “Time Alignment” and “Crossover”.

Setting the subwoofer output

This product is equipped with a subwoofer output mechanism, which can be turned on or off. The default setting is “On”.

- 1 Display the “Audio” setting screen.
 - Refer to *Displaying the “Audio” setting screen* on page 64
- 2 Touch **[Subwoofer]** to switch “On” or “Off”.
 - ❑ If “Off” is selected, the rear speaker adjustment is not available in “Speaker Level”, “Time Alignment” and “Crossover”.

Adjusting the cutoff frequency value

You can adjust the cutoff frequency value of each speaker. The following speakers can be adjusted:

Front, Rear, Subwoofer

- ❑ “Rear” is available only when “Rear Speaker” is set to “On”.
- Refer to *Setting the rear speaker output* on page 64
- ❑ “Subwoofer” is available only when “Subwoofer” is set to “On”.
- Refer to *Setting the subwoofer output* on page 64

- 1 Display the “Audio” setting screen.
 - Refer to *Displaying the “Audio” setting screen* on page 64
- 2 Touch **[Crossover]** or **[Subwoofer Settings]**.
- 3 Touch **[<]** or **[>]** to switch the speaker.
- 4 Drag the graph line to set the cutoff position.
- 5 Drag the lowest point of the graph to set the cutoff slope.
 - ❑ The following items can also be set.
 - **Phase** **[↔]**
Switches the subwoofer phase between normal and reverse position.
 - **LPF/HPF:**
Switches the LPF/HPF setting to “On” or “Off”. When it is turned off, the high-pass filter or low-pass filter of each speaker can also be turned on by touching the graph lines.

Selecting the listening position

You can select a listening position that you want to make as the center of sound effects. The default setting is “Off”.

- 1 Display the “Audio” setting screen.
 - Refer to *Displaying the “Audio” setting screen* on page 64
- 2 Touch **[Listening Position]**.
- 3 Touch the desired position to change the listening position.

The following items are available:
Off, Front-L, Front-R, Front, All.

Audio adjustments

Adjusting the speaker output levels finely

Fine adjustments of the speaker output level can be made by listening to audio output.

1 Display the "Audio" setting screen.

➔ Refer to *Displaying the "Audio" setting screen* on page 64

2 Touch [Speaker Level].

3 Touch [<] or [>] to select the listening position if necessary.

The following items are available:

Off, Front-L, Front-R, Front, All.

- ☐ The default setting is "Off".
- ☐ If you change the setting for the listening position, the output levels of all the speakers will change according to the setting.

4 Touch [<] or [>] to adjust the speaker output level.

- ☐ "-24" dB to "10" dB is displayed as the level to be corrected is increased or decreased.

The following items are available:

Front Left, Front Right, Rear Left, Rear Right, Subwoofer

- ☐ If the Auto EQ measurement has been done, the result of the Auto EQ measurement will be applied by touching [Apply Auto EQ] (the results are also applied to some settings simultaneously).

Adjusting the time alignment

By adjusting the distance from each speaker to the listening position, time alignment is able to correct the time required for sound to reach the listening position.

1 Measure the distance between the head of the listener and each speaker unit.

2 Display the "Audio" setting screen.

➔ Refer to *Displaying the "Audio" setting screen* on page 64

3 Touch [Time Alignment].

4 Touch [<] or [>] to select the listening position if necessary.

The following items are available:

Off, Front-L, Front-R, Front, All.

- ☐ The default setting is "Off".
- ☐ If you change the listening position setting, the distance value of all the speakers will change in conjunction with the setting.

5 Touch [<] or [>] to input the distance between the selected speaker and the listening position.

The following items are available:

Front Left, Front Right, Rear Left, Rear Right, Subwoofer

- ☐ You can input the value between 0 inch and 200 inch.
- ☐ The distance can be adjusted manually only when the listening position setting is set to "Front-L" or "Front-R".
- ☐ If the Auto EQ measurement has been done, the result of the Auto EQ measurement will be applied by touching [Apply Auto EQ] (the results are also applied to some settings simultaneously).
- ☐ If you touch [TA On], the time alignment is turned off mandatorily.

Using the equalizer

Recalling equalizer curves

There are multiple equalizer curves that you can easily recall at any time. The equalizer curves you can recall are as follows:

S.Bass, Powerful, Natural, Vocal, Flat, Custom1 and Custom2

- ☐ The default setting is "Powerful".

1 Display the "Audio" setting screen.

➔ Refer to *Displaying the "Audio" setting screen* on page 64

2 Touch [Graphic EQ].

3 Touch the equalizer curve name.

Customizing the equalizer curves

- ☐ If the preset equalizer curve other than "Custom1" or "Custom2" is modified, the equalizer curve settings in "Custom1" will be overwritten.
- ☐ If the equalizer curve stored in "Custom1" or "Custom2" is modified, each stored curve will be overwritten.

1 Display the "Audio" setting screen.

➔ Refer to *Displaying the "Audio" setting screen* on page 64

2 Touch [Graphic EQ].

3 Select a curve that you want to use as the basis of customizing.

4 Touch the frequency for which you want to adjust the level.

- ☐ If you touch "Custom1" or "Custom2", recall the equalizer curve currently stored in "Custom1" or "Custom2".

- ☐ If you trail a finger across the bars of multiple equalizer bands, the equalizer curve settings will be set to the value of the touched point on each bar.

Setting the auto-adjusted equalizer

You can set the auto-adjusted equalizer to suit the vehicle's acoustics. To use this function, the Auto EQ measurement must be done in advance.

➔ Refer to *Adjusting the equalizer curve automatically (Auto EQ)* on page 65

The default setting is "Off".

1 Display the "Audio" setting screen.

➔ Refer to *Displaying the "Audio" setting screen* on page 64

2 Touch [Auto EQ&TA] to switch "On" or "Off".

Adjusting the equalizer curve automatically (Auto EQ)

By measuring the vehicle's acoustics, the equalizer curve can be adjusted automatically to suit the vehicle interior.

⚠WARNING

A loud tone (noise) may be emitted from the speakers when measuring the vehicle's acoustics. Never perform Auto EQ measurement while driving.

⚠CAUTION

- Thoroughly check the conditions before performing Auto EQ, as the speakers may be damaged if this is performed under the following conditions:
 - When the speakers are incorrectly connected. (For example, when a rear speaker is connected as a subwoofer output.)
 - When a speaker is connected to a power amp delivering output higher than the speaker's maximum input power capability.
- If a microphone for acoustical measurement (sold separately) is not placed in an appropriate location, the measurement tone may become loud and measurement may take a long time, resulting in battery drainage. Be sure to place the microphone in the specified location.

Before operating the Auto EQ function

- Perform Auto EQ in as quiet a place as possible, with the vehicle engine and air conditioning switched off. Also, cut

Audio adjustments

power to car phones or cellular phones in the vehicle, or remove them in advance. Surrounding sounds may prevent correct measurement of the vehicle's acoustics.

- Be sure to use the microphone for acoustical measurement (sold separately). Using another microphone may prevent measurement, or result in incorrect measurement of the vehicle's acoustics.
- To perform Auto EQ, the front speakers must be connected.
- When this product is connected to a power amp with input level control, Auto EQ may be impossible if the power amp's input level is set below the standard level.
- When this product is connected to a power amp with an LPF (low pass filter), turn the LPF off before performing Auto EQ. Also, set the cut-off frequency for the built-in LPF of an active subwoofer to the highest frequency.
- The distance has been calculated by a computer to provide optimum delay to ensure accurate results. Do not change this value.
 - The reflected sound within the vehicle is strong and delays occur.
 - The LPF on active subwoofers or external amps delay the lower sounds.
- If an error occurs during measurement, check the following before measuring the vehicle's acoustics.
 - Front speakers (left/right)
 - Rear speakers (left/right)
 - Noise
 - Microphone for acoustical measurement (sold separately)
 - Low battery

Performing Auto EQ

⚠CAUTION

Do not turn off the engine while the measurement is in progress.

- ☐ Auto EQ changes the audio settings as follows:
 - The fader/balance settings return to the center position.
- ➡ Refer to *Using fader/balance adjustment* on page 64
 - "Mute Level" is set to "Off".
- ➡ Refer to *Switching sound muting/attenuation* on page 64
- ☐ Previous settings for Auto EQ will be overwritten.

1 Stop the vehicle in a quiet place, close all the doors, windows and sun roof, and then turn the engine off.

If the engine is left running, engine noise may prevent correct Auto EQ.

- ☐ If driving restrictions are detected during measurement, measurement is canceled.

2 Fix the microphone for acoustical measurement (sold separately) in the center of the headrest of the driver's seat, facing forward.

The Auto EQ may differ depending on where you place the microphone. If desired, place the microphone on the front passenger seat and perform Auto EQ.

3 Disconnect the iPhone or smartphone device.

4 Turn on the ignition switch (ACC ON).

If the vehicle's air conditioner or heater is turned on, turn it off.

5 Turn the source off.

- ➡ Refer to *Selecting a source* on page 8

6 Display the "Audio" setting screen.

- ➡ Refer to *Displaying the "Audio" setting screen* on page 64

7 Touch [A-EQ&TA Measurement].

8 Connect the microphone for acoustical measurement (sold separately) with this product.

Plug the microphone into the AUX input jack on the back panel of this product.

- ➡ Refer to the Installation Manual.
- ☐ Use an extension cable (sold separately) if the cord of the Microphone (sold separately) is not long enough.

9 Touch [Front Left] or [Front Right] to select the current listening position.

10 Touch [Start].

A 10-second countdown starts.

- ☐ The Bluetooth connection is disconnected before the process starts.

11 Exit the vehicle and keep the doors closed until the countdown finishes.

When the countdown finishes, a measurement tone (noise) is emitted from the speakers and the Auto EQ measurement begins.

12 Wait until the measurement is completed.

When Auto EQ is completed, a message is displayed.

- ☐ The measurement time varies depending on the type of vehicle.
 - To stop the measurement, touch [Stop].

13 Store the microphone carefully in the glove compartment or another safe place.

If the microphone is subjected to direct sunlight for an extended period, high temperatures may cause distortion, color change or malfunction.

Using the automatic sound levelizer

During driving, noise in the car changes according to the driving speed and road conditions. ASL (automatic sound levelizer) monitors such varying noise and automatically increases the volume level, if this noise becomes greater. The sensitivity (variation of volume level to noise level) of ASL can be set to one of five levels.

1 Display the "Audio" setting screen.




- ➡ Refer to *Displaying the "Audio" setting screen* on page 64

2 Touch [ASL].

3 Touch the desired level.

Theme menu

Displaying the “Theme” setting screen

- 1 Press the  button.
- 2 Touch , and then .

Selecting the wallpaper

The wallpaper can be selected from some preset items. Furthermore, you can set your original pictures.



- 1 Display the “Theme” screen.
➤ Refer to *Displaying the “Theme” setting screen* on page 67

- 2 Touch [Background].

- 3 Touch [Home] or [AV] to switch the screen displays.

The setting contents can be memorized separately for the AV operation screen and the top menu screen.

- 4 Touch the item.

- Preset displays: Selects the desired preset background display.
-  (custom): Displays the background display image imported from the USB storage device.
➤ Refer to *Changing to the wallpaper stored on the USB storage device* on page 67
-  (off): Hides the background display.

Changing to the wallpaper stored on the USB storage device

⚠CAUTION

Do not turn off the engine while importing an image from the USB storage device.

- Background display image must be used within the following formats.
 - JPEG image files (.jpg or .jpeg)
 - Allowable data size is 10 MB or smaller
 - Allowable image size is 4 000 pixels × 4 000 pixels or smaller

- 1 Plug the USB storage device.

- Refer to *Plugging and unplugging a USB storage device* on page 5

- 2 Display the “Theme” screen.

- Refer to *Displaying the “Theme” setting screen* on page 67

- 3 Touch [Background].

- 4 Touch .

- 5 Touch the desired USB storage device.

- 6 Touch the image.

Setting the illumination color

The illumination color can be selected from some preset colors. Furthermore, the illumination can be switched between these colors in order.

Selecting the color from the preset colors



You can select an illumination color from the color list.

- 1 Display the “Theme” screen.

- Refer to *Displaying the “Theme” setting screen* on page 67

- 2 Touch [Illumination].

- 3 Touch the color.

- Colored keys: Selects the desired preset color.
-  (custom): Displays the screen to customize the illumination color.
➤ Refer to *Creating a user-defined color* on page 67
-  (rainbow): Shifts gradually between the preset colors in sequence.

Creating a user-defined color

You can create a user-defined color. The created color is stored, and you can select the color when setting the illumination color the next time.



- 1 Display the “Theme” screen.

- Refer to *Displaying the “Theme” setting screen* on page 67

- 2 Touch [Illumination].

- 3 Touch .

- 4 Drag the color bar to adjust the color tone.

- You can also adjust the color tone by touching  or .

- 5 Touch and hold [Memo] to store the customized color in the memory.

The customized color is stored in the memory. The set color will be recalled from the memory the next time you touch the same key.

Selecting the theme color

- 1 Display the “Theme” screen.

- Refer to *Displaying the “Theme” setting screen* on page 67

- 2 Touch [Theme].

- 3 Touch the color.

- You can preview the top menu screen or the AV operation screen by touching [Home] or [AV] respectively.

Selecting the style of the clock

- 1 Display the “Theme” screen.

- Refer to *Displaying the “Theme” setting screen* on page 67

- 2 Touch [Clock].

- 3 Touch the item.

- Preset images: Selects the desired preset style for the clock.
-  (off): Hides the clock display.

Changing the preinstalled splash screen


You can change the splash screen to other images preinstalled in this product.

- 1 Display the “Theme” screen.

- Refer to *Displaying the “Theme” setting screen* on page 67

- 2 Touch [Splash Screen].

- 3 Touch the item.

- Preset images: Selects the desired preset splash screen image.
-  (custom): Displays the splash screen image imported from the USB storage device.
➤ Refer to *Changing to the splash screen stored on the USB storage device* on page 67


Changing to the splash screen stored on the USB storage device

⚠CAUTION

Do not turn off the engine while importing an image from the USB storage device.

- 1 Plug the USB storage device.

Theme menu

- Refer to *Plugging and unplugging a USB storage device* on page 5
- 2 **Display the "Theme" screen.**
 - Refer to *Displaying the "Theme" setting screen* on page 67
- 3 **Touch [Splash Screen].**
- 4 **Touch .**
- 5 **Touch the desired USB storage device.**
- 6 **Touch the image.**

Replicating the settings

You can export settings you have made on the "Theme" screen to a USB storage device. Also, you can import them from a USB storage device.

⚠CAUTION

Do not turn off the engine while exporting or importing the settings.

- ❑ If multiple USB storage devices that include available data are connected to this product, the order of priority for the targets that the "Theme" settings are exported to or imported from is as follows:
 - ① USB storage device (USB port 1)
 - ② USB storage device (USB port 2)
- ❑ This setting is available only when you stop your vehicle in a safe place and apply the parking brake.

Exporting "Theme" settings

- 1 **Plug the USB storage device.**
 - Refer to *Plugging and unplugging a USB storage device* on page 5
- 2 **Display the "Theme" screen.**
 - Refer to *Displaying the "Theme" setting screen* on page 67
- 3 **Touch [Export].**
- 4 **Touch the item you want to export.**

The following items are available:
Illumination, Theme, Splash Screen, Select All
- 5 **Touch [Export].**

Importing "Theme" settings

- 1 **Plug the USB storage device.**
 - Refer to *Plugging and unplugging a USB storage device* on page 5

A message confirming whether to import the stored setting data appears.




- 2 **Touch [Import].**

Video settings

Setting up the video player

This setting is available only when "Disc" is selected as the source.


Displaying the "DVD/DivX Setup" screen

- 1 **Press the  button.**
- 2 **Touch , and then .**
- 3 **Touch [DVD/DivX Setup].**

Setting the top-priority languages

You can assign the top-priority language to the top-priority subtitle, audio and menu in initial playback. If the selected language is recorded on the disc, subtitles, audio and menu are displayed or output in that language.

- 1 **Display the "DVD/DivX Setup" screen**
 - Refer to *Displaying the "DVD/DivX Setup" screen* on page 68
- 2 **Touch [Subtitle Language], [Audio Language] or [Menu Language].**
- 3 **Touch the desired language.**

When you select "Others", a language code input screen is shown. Input the four-digit code of the desired language then touch .

 - ❑ You can switch the language by touching the switch languages key during playback.
 - ❑ The setting made here will not be affected even if the language is switched during playback using the appropriate key.

Setting the angle icon display

The angle icon can be set so it appears on scenes where the angle can be switched.
The default setting is "On".

- 1 **Display the "DVD/DivX Setup" screen**
 - Refer to *Displaying the "DVD/DivX Setup" screen* on page 68
- 2 **Touch [Multi Angle] to switch "On" or "Off".**

Video settings

Setting the aspect ratio


There are two kinds of displays. A wide screen display has a width-to-height ratio (TV aspect) of 16:9, while a regular display has a TV aspect of 4:3. If you use a regular rear display with a TV aspect of 4:3, you can set the aspect ratio suitable for your rear display. (We recommend use of this function only when you want to fit the aspect ratio to the rear display.) The default setting is "16:9".

1 Display the "DVD/DivX Setup" screen

- Refer to *Displaying the "DVD/DivX Setup" screen* on page 68

2 Touch [TV Aspect].

3 Touch the item.

- **16:9**: Displays the wide screen image (16:9) as it is (initial setting).
- **Letter Box**: Makes the image in the shape of a letterbox with black bands on the top and bottom of the screen.
- **Pan Scan**: Cuts the image short on the right and left sides of the screen.
- When playing discs that do not have a panscan system, the disc is played back with "Letter Box" even if you select the "Pan Scan" setting. Confirm whether the disc package bears the  mark.
- The TV aspect ratio cannot be changed for some discs. For details, refer to the disc's instructions.

Setting parental lock

Some DVD-Video discs let you use parental lock to set restrictions so that children cannot watch violent or adult-oriented scenes. You can set the parental lock level in steps as desired.

- When you set a parental lock level and then play a disc featuring parental lock, code number input indications may be displayed. In this case, playback will begin when the correct code number is input.

1 Display the "DVD/DivX Setup" screen

- Refer to *Displaying the "DVD/DivX Setup" screen* on page 68

2 Touch [Parental].

3 Touch [0] to [9] to input a four-digit code number.

4 Touch .

5 Touch any number between [1] to [8] to select the desired level.

- The lower the level is set, the tighter the restriction is applied.
- The default setting is "8".

6 Touch .

- We recommend to keep a record of your code number in case you forget it.
- The parental lock level is recorded on the disc. You can confirm it by looking at the disc package, the included literature or the disc itself. You cannot use parental lock with discs that do not feature a recorded parental lock level.
- With some discs, parental lock operates to skip certain scenes only, after which normal playback resumes. For details, refer to the disc's instructions.

Displaying your DivX VOD registration code

If you want to play DivX® VOD (video on demand) content on this product, you must first register this product with your DivX VOD content provider. You do this by generating a DivX VOD registration code, which you submit to your provider.

- Keep a record of the code as you will need it when you register this product to the DivX VOD provider.

1 Display the "DVD/DivX Setup" screen

- Refer to *Displaying the "DVD/DivX Setup" screen* on page 68

2 Touch [DivX® VOD].

- If a registration code has already been activated, it cannot be displayed.

3 Touch [Registration Code].

Your 10-digit registration code is displayed.

- Make a note of the code as you will need it when you deregister from a DivX VOD provider.

Displaying your DivX VOD deregistration code

A registration code registered with a deregistration code can be deleted.

1 Display the "DVD/DivX Setup" screen

- Refer to *Displaying the "DVD/DivX Setup" screen* on page 68

2 Touch [DivX® VOD].

3 Touch [Deregistration Code].

Your 8-digit deregistration code is displayed.

- Make a note of the code as you will need it when you deregister from a DivX VOD provider.

Automatic playback of DVDs

When a DVD disc with a DVD menu is inserted, this product will cancel the menu automatically and start playback from the first chapter of the first title.

The default setting is "Off".

- Some DVDs may not operate properly. If this function is not fully operable, turn this function off and start playback.

1 Display the "DVD/DivX Setup" screen

- Refer to *Displaying the "DVD/DivX Setup" screen* on page 68

2 Touch [DVD Auto Play] to switch "On" or "Off".

Setting the video signal for the rear view camera

When you connect a rear view camera to this product, select the suitable video signal setting. The default setting is "Auto".

- You can operate this function only for the video signal input into the AV input.

1 Display the "Video Setup" screen.



2 Touch [Video Signal Setting].

3 Touch [Camera].

4 Touch the item.

The following items are available:

Auto, PAL, NTSC, PAL-M, PAL-N, SECAM.

Favorite menu

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

- Up to 12 menu items can be registered in the favorite menu.

Creating a shortcut

1 Display the setting menu screen.



2 Touch the star icon of the menu item.

The star icon for the selected menu is filled in.

- To cancel the registration, touch the star icon in the menu column again.

Selecting a shortcut

1 Display the "Favorites" screen.



2 Touch the menu item.

Removing a shortcut

1 Display the "Favorites" screen.



2 Touch the favorite menu column.

The selected menu item is removed from the **"Favorites"** screen.

- You can also remove a shortcut by touching the registered menu column.

Other functions

Setting the time and date

1 Touch the current time on the screen.

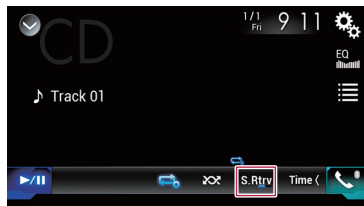
2 Touch one of the items to adjust.

- You can change the time display format to **"12hour"** (default) or **"24hour"**.
- You can change the order of date display format: Day-month, Month-day.

Setting the "Sound Retriever" function

The **"Sound Retriever"** function automatically enhances compressed audio and restores rich sound. The default setting is **"Mode1"**.

1 Touch **[S.Rtrv]** to switch the settings.



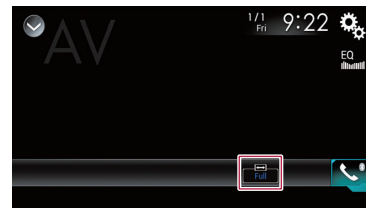
- **[S.Rtrv]** (Mode1), **[S.Rtrv]** (Mode2): Activates the **"Sound Retriever"** function.
- Mode2 has a stronger effect than Mode1.
- **[S.Rtrv]** (Off): Deactivates the **"Sound Retriever"** function.

Changing the wide screen mode

The default setting is **"Full"**, and for JPEG images is **"Normal"**.

- JPEG can be set to either **"Normal"** or **"Trimming"** in wide screen mode.
- This setting is available only when you stop your vehicle in a safe place and apply the parking brake.

1 Touch the screen display mode key.



2 Touch the desired mode.

- **Full:**
A 4:3 picture is enlarged in the horizontal direction only, enabling you to enjoy an image without any omissions.
- **Zoom:**
A 4:3 picture is enlarged in the same proportion both vertically and horizontally.
- **Normal:**
A 4:3 picture is displayed normally, without changing its proportion.
- **Trimming**
An image is displayed across the entire screen with the horizontal-to-vertical ratio left as is. If the screen ratio differs from the image, the image may be displayed partly cut off either at the top/bottom or sides.
- Different settings can be stored for each video source.
- When a video is viewed in a wide screen mode that does not match its original aspect ratio, it may appear different.
- The video image will appear coarser when viewed in **"Zoom"** mode.

Storing song information to an iPod (iTunes® Tagging)

You can store song information to the iPod when this product receives song information. The songs will appear in a playlist called **"Tagged playlist"** in iTunes the next time you synchronize your iPod. You can directly buy the songs via iTunes.

- The iTunes® Tagging function is available when the song information is available.
- This function is available for the following iPod models:
iPhone 4s, iPhone 4, iPhone 3GS, and iPhone 3G
iPod touch (1st through 4th generation)
iPod classic (1st and 2nd generation)
- The version of iTunes must be 7.4 or higher.

Other functions

1 Display the "System" setting screen.

- Refer to *Displaying the "System" setting screen* on page 59

2 Touch [AV Source Settings].

3 Touch [Tag Forwarding] to select the USB port you use.

4 Tune into the broadcast station.

- Radio
 - Refer to *Radio* on page 37
- SiriusXM
 - Refer to *SiriusXM® Satellite Radio* on page 51

5 Touch the song information.

- SiriusXM
 - The artist name, song title, category name or content text
 - The information on the song on air is stored in this product.
 - When the information is acquired, turns off and is displayed.
 - ☐ The song information for up to 50 songs can be stored in this product.

6 Connect your iPod.

- The song information is transferred to your iPod.
- ☐ When your iPod is already connected, the song information will be transferred directly to your iPod every time you touch the song information.

Selecting the video for the rear display

- You can choose either to show the same image as the front screen or to show the selected source on the rear display.
- ☐ Video files on the USB storage device are not available as a source for the rear display when [Apple CarPlay] is activated in [Smartphone Setup].

1 Display the AV source selection screen.



2 Touch [Rear].

3 Touch the source you want to show on the rear display.

- Mirror
 - The video on the front screen of this product is output to the rear display.
 - Not all videos or sounds can be output to the rear display.

• DVD/CD

- The video and sound of a disc are output to the rear display.
- Compatible video types are DVD-V, Video-CD, DivX, MPEG-1, MPEG-2, and MPEG-4 only.

• USB/iPod1

- The video and sound of the USB storage device or iPod are output to the rear display.
- The port that supports the rear display will only be USB port 1.
- Compatible file types are MPEG-4, H.264, WMV, MKV, and FLV only.

• AV

- The video and/or sound of the AV input source are output to the rear display.
- The video image and sound are output only when "AV Input" is set to "Source".
- Refer to *Starting procedure (for AV source)* on page 55.

• Source OFF

- Nothing is output to the rear display.

Setting the anti-theft function

You can set a password for this product. If the back-up lead is cut after the password is set, this product prompts for the password at the time of next boot up.

Important

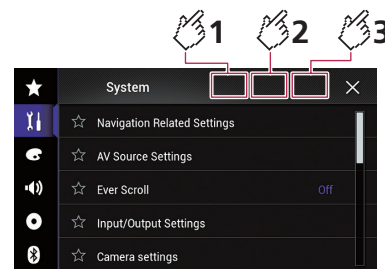
If you forgot your password, contact the nearest authorized Pioneer Service Station.

Setting the password

1 Display the "System" setting screen.

- Refer to *Displaying the "System" setting screen* on page 59

2 Touch 1, followed by 2, and then touch and hold 3.



3 Touch [Set Password].

4 Enter the password.

- ☐ 5 to 16 characters can be entered for a password.

5 Touch [Go].

6 Enter a password hint.

- ☐ Up to 40 characters can be entered for a hint.

7 Touch [Go].

- ☐ If you want to change the password currently set, enter the current password and then enter the new one.

8 Check the password, and then touch [OK].

Deleting the password

The current password and password hint can be deleted.

1 Display the "System" setting screen.

- Refer to *Displaying the "System" setting screen* on page 59

2 Touch 1, followed by 2, and then touch and hold 3.

- Refer to *Setting the password* on page 71.

3 Touch [Clear Password].

4 Touch [Yes].

5 Touch [OK].

6 Enter the current password.

7 Touch [Go].

A message indicating that the security setting is canceled appears.

Other functions

Restoring this product to the default settings

You can restore settings or recorded content to the default settings. Various methods are used to clear user data.

Method 1: Remove the vehicle battery

- Some of the settings and recorded contents will not be reset.

Method 2: Restore the default settings from the "System" menu

- ☞ Refer to *Restoring the default settings* on page 72.

Method 3: Press the RESET button

- ☞ Refer to *Resetting the microprocessor* on page 4
- Some of the settings and recorded contents will not be reset.

Restoring the default settings

⚠ CAUTION

Do not turn off the engine while restoring the settings.

- This setting is available only when you stop your vehicle in a safe place and apply the parking brake.

1 Display the "System" setting screen.

- ☞ Refer to *Displaying the "System" setting screen* on page 59

2 Touch [AV Source Settings].

3 Touch [Restore Settings].

A message confirming whether to initialize the settings appears.

4 Touch the item you want to initialize.

- **All Settings**
Almost all settings or recorded content returns to the default.
 - **Audio Settings**
 - This setting is available when the source is turned off.
 - **Theme Settings**
 - **Bluetooth Settings**
- 5 Touch [Restore].

Appendix

Troubleshooting

If you have problems operating this product, 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.

Common problems

A black screen is displayed, and operation is not possible using the touch panel keys.

- "Power OFF" mode is on.
 - Press any button on this product to release the mode.
- The rear view camera image is displayed with no camera connection and the wrong camera polarity setting.
 - Press and hold the **MAP** button to release the rear view camera screen and then change the camera polarity setting to "Battery".

Problems with the AV screen

CD or DVD playback is not possible.

- The disc is inserted upside down.
 - Insert the disc with the label upward.
- The disc is dirty.
 - Clean the disc.
- The disc is cracked or otherwise damaged.
 - Insert a normal, round disc.
- The files on the disc are in 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 product cannot play.
 - Check what type of disc it is.

The screen is covered by a caution message and the video cannot be shown.

- The parking brake lead is not connected or the parking brake is not applied.
 - Connect the parking brake lead correctly, and apply the parking brake.
- The parking brake interlock is activated.
 - Park your vehicle in a safe place and apply the parking brake.

No video output from the connected equipment.

- The "AV Input" or "AUX Input" setting is incorrect.
 - Correct the settings.

The audio or video skips.

- This product is not firmly secured.
 - Secure this product firmly.

No sounds are produced. The volume level will not rise.

- Cables are not connected correctly.
 - Connect the cables correctly.
- The system is performing still, slow motion, or frame-by-frame playback with DVD-Video.
 - There is no sound during still, slow motion, or frame-by-frame playback with DVD-Video.
- The system is paused or performing fast reverse or forward during the disc playback.
 - For the media other than music CD (CD-DA), there is no sound on fast reverse or forward.

The icon  is displayed, and operation is impossible.

- The operation is not compatible with the video configuration.
 - The operation is not possible. (For example, the DVD playing does not feature that angle, audio system, subtitle language, etc.)

The picture stops (pauses) and this product cannot be operated.

- The reading of data is impossible during disc playback.
 - Stop playback once, then restart.

The picture is stretched, with an incorrect aspect ratio.

- The aspect setting is incorrect for the display.
 - Select the appropriate setting for that image.

A parental lock message is displayed and DVD playback is not possible.

- The parental lock is on.
 - Turn the parental lock off or change the level.

The parental lock for DVD playback cannot be canceled.

- The code number is incorrect.
 - Input the correct code number.

The DVD video is not played back with the audio/subtitle language specified in "DVD/DivX Setup".

- The DVD does not support the language selected in "DVD/DivX Setup".
 - Playback in the selected language is not possible if the language selected in "DVD/DivX Setup" is not recorded on the disc.

Appendix

The picture is extremely unclear/distorted and dark during playback.

- The disc features a signal to prohibit copying. (Some discs may have this.)
- Since this product is compatible with the copy guard analog copy protect system, the picture may suffer from horizontal stripes or other imperfections when a disc with that kind of protection signal is viewed on some displays. This is not a malfunction.

iPod cannot be operated.

- The iPod is frozen.
 - Reconnect the iPod with the USB interface cable for iPod / iPhone.
 - Update the iPod software version.
- An error has occurred.
 - Reconnect the iPod with the USB interface cable for iPod / iPhone.
 - Park your vehicle in a safe place, and then turn off the ignition switch (ACC OFF). Subsequently, turn the ignition switch to on (ACC ON) again.
 - Update the iPod software version.
- Cables are not connected correctly.
 - Connect the cables correctly.

Sound from the iPod cannot be heard.

- The audio output direction may switch automatically when the Bluetooth and USB connections are used at the same time.
 - Use the iPod to change the audio output direction.

Problems with the phone screen

Dialing is impossible 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 this product cannot be established.
 - Perform the connection process.

Problems with the Application screen

A black screen is displayed.

- While operating an application, the application was ended on the smartphone side.
 - Press the **⏏** button to display the top menu screen.
- The smartphone OS may be awaiting screen operation.
 - Stop the vehicle in a safe place and check the screen on the smartphone.

The screen is displayed, but operation does not work at all.

- An error has occurred.
 - Park your vehicle in a safe place, and then turn off the ignition switch (ACC OFF). Subsequently, turn the ignition switch to on (ACC ON) again.
 - When an Android device is connected, disconnect the Bluetooth connection from this product and then reconnect it.

The smartphone was not charged.

- Charging stopped because the temperature of the smartphone rose due to prolonged use of the smartphone during charging.
 - Disconnect the smartphone from the cable, and wait until the smartphone cools down.
- More battery power was consumed than was gained from charging.
 - This problem may be resolved by stopping any unnecessary services on the smartphone.

Error messages

When problems occur with this product, an error message appears on the display. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists, record the error message and contact your dealer or your nearest Pioneer service center.

Common

AMP Error

- This product fails to operate or the speaker connection is incorrect; the protective circuit is activated.
 - Check the speaker connection. If the message fails to disappear even after the engine is switched off/on, contact your dealer or an authorized Pioneer Service Station for assistance.

TEMP

- The temperature of this product is outside the normal operating range.
 - Wait until this product returns to a temperature within the normal operating limits.

Product overheat. System will be shut down automatically in 1 minute. Restart the product by ACC-Off/On may fix this problem. If this message keeps showing up, it is possible that some problem occurred in the product.

- The temperature is too high for this product to operate.
 - Follow the instructions displayed on the screen. If this does not solve the problem, contact your dealer or an authorized Pioneer Station for assistance.

Positioning is not possible due to the hardware. Please contact your dealer or Pioneer service center.

- The location display is not possible due to hardware failure.
 - Contact your dealer or an authorized Pioneer Station for assistance.

No GPS antenna. Check connection.

- GPS reception is lost.
 - Check the antenna connection. If the message fails to disappear even after the engine is switched off/on, contact your dealer or an authorized Pioneer Station for assistance.

GPS antenna problem detected. Contact dealer or service center.

- GPS antenna lead is short-circuited.
 - Contact your dealer or an authorized Pioneer Station for assistance.

Calibration will start, but may be inaccurate without speed pulse.

- The speed pulse sensor is not connected correctly.
 - Contact your dealer or an authorized Pioneer Station for assistance.

Sensor error. Please contact your dealer or Pioneer Service Center.

- An error has occurred with the sensor.
 - Contact your dealer or an authorized Pioneer Station for assistance.

Detected unusual speed pulses.

- The speed pulse cannot be detected correctly.
 - Contact your dealer or an authorized Pioneer Station for assistance.

Detected changes in the installation angle or position. The in-dash receiver is updating the sensor learning data.

- Changes in the installation angle or position are detected.
 - Wait until the sensor learning finishes.

Speed pulse wire is not connected. The system will operate in simple hybrid mode.

- Speed pulse wire is not connected.
 - The speed pulse cannot be detected if the speed pulse wire is not connected correctly.

Pandora

Error-19

(Communication error occurred.)

- Communication failed.
 - Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.

Appendix

Skip limit reached.

- Skip limit reached.
 - Do not exceed the skip limit.
 - Pandora limits the total number of skips per hour.

Please sign in to your Pandora account

- You are not logged in to the Pandora application.
 - Please log in to the Pandora application.

Incompatible USB

- The connected USB storage device is not supported by this product.
 - Disconnect your device and replace it with a compatible USB storage device.

Check Application

- The Pandora application used on your device is not supported by this product.
 - Disconnect your device and update the application and then reconnect the device.

Check USB

- The USB connector or USB cable has short-circuited.
 - Check that the USB connector or USB cable is not caught in something or damaged.
- The connected USB storage device consumes more than maximum allowable current.
 - Disconnect the USB storage device and do not use it. Turn the ignition switch to OFF, then to ACC or ON and then connect a compliant USB storage device.

Cannot play music due to licensing restrictions.

- The Pandora application is accessed/relocated from outside the licensing region.
 - Access Pandora from within the licensing region.

SiriusXM Satellite Radio

Check Antenna

- The antenna connection is incorrect.
 - Check the antenna connection. If the message fails to disappear even after the engine is switched off/on, contact your dealer or the nearest authorized Pioneer service center for assistance.

Check Tuner

- The SiriusXM Connect Vehicle Tuner connection is incorrect.
 - Check the tuner connection and battery voltage. If the message fails to disappear even after the engine is switched off/on, contact your dealer or the nearest authorized Pioneer service center for assistance.

No Signal

- The SiriusXM Connect Vehicle Tuner is having difficulty receiving the SiriusXM satellite signal.
 - Verify that your vehicle is outdoors with a clear view of the southern sky.
 - Verify that the SiriusXM magnetic mount antenna is mounted on a metal surface on the outside of the vehicle.
 - Move the SiriusXM antenna away from any obstructions.

No Content

- **TuneScan™** is not available.
 - Perform the operation with another preset channel.

Channel Not Available

- The channel that you have requested is not a valid SiriusXM channel.
 - Check the SiriusXM channel lineup.

Subscription Updated Press Enter to Continue

- This product has detected a change in your SiriusXM subscription status.
 - Touch **[Enter]** to clear the message.

Channel Not Subscribed. Call SiriusXM to Subscribe.

- The channel that you have requested is not included in your SiriusXM subscription package.
 - Check the content of your SiriusXM subscription package.

Channel Locked Please Enter the Lock Code

- Locked by the radio Parental Control feature.
 - Release the channel lock.

Artist Unavailable

- The alert memo function is not available.
 - Perform the operation with another channel.

Song Unavailable

- The alert memo function is not available.
 - Perform the operation with another channel.

Team Unavailable

- The alert memo function is not available.
 - Perform the operation with another channel.

Alert Memory Full You can manage alert memory in the alert list

- The memory is full.
 - Clear the alert list.

Memory Full

- The memory has become full while playback was paused.
 - Resume playback.

Memory Nearly Full

- The memory has become nearly full while playback was paused.
 - Resume playback.

No qualified TuneMix music channels in this band.

- There are no qualified **TuneMix™** channels in this band.
 - Requires two or more qualified music channels to be stored as presets in the current band.

Disc

Error-02-XX/FF-FF

- The disc is dirty.
 - Clean the disc.
- The disc is scratched.
 - Replace the disc.
- The disc is loaded upside down.
 - Check that the disc is loaded correctly.
- There is an electrical or mechanical error.
 - Press the **RESET** button.

Different Region Disc

- The disc does not have the same region number as this product.
 - Replace the DVD with one bearing the correct region number.

Unplayable Disc

- This type of disc cannot be played on this product.
 - Replace the disc with one that can be played on this product.

Unplayable File

- This type of file cannot be played on this product.
 - Select a file that can be played.

Skipped

- The inserted disc contains DRM protected files.
 - The protected files are skipped.

Protect

- All the files on the inserted disc are embedded with DRM.
 - Replace the disc.

This DivX rental has expired.

- The inserted disc contains expired DivX VOD content.
 - Select a file that can be played.

Video resolution not supported

- Files that cannot be played on this product are included in the file.
 - Select a file that can be played.

Appendix

Unable to write to flash memory.

- The playback history for VOD contents cannot be saved for some reason.
 - Retry.
 - If the message appears frequently, consult your dealer.

Your device is not authorized to play this DivX protected video.

- This product's DivX registration code has not been authorized by the DivX VOD contents provider.
 - Register this product to the DivX VOD contents provider.

Video frame rate not supported

- DivX file's frame rate is more than 30 fps.
 - Select a file that can be played.

Audio Format not supported

- This type of file is not supported on this product.
 - Select a file that can be played.

USB storage device

Error-02-9X/-DX

- Communication failed.
 - Turn the ignition switch OFF and back ON.
 - Disconnect the USB storage device.
 - Change to a different source. Then, return to the USB storage device.

Unplayable File

- This type of file cannot be played on this product.
 - Select a file that can be played.
- Security for the connected USB storage device is enabled.
 - Follow the USB storage device instructions to disable security.

Skipped

- The connected USB storage device contains DRM protected files.
 - The protected files are skipped.

Protect

- All the files on the connected USB storage device are embedded with DRM.
 - Replace the USB storage device.

Incompatible USB

- The connected USB storage device is not supported by this product.
 - Disconnect your device and replace it with a compatible USB storage device.

Check USB

- The USB connector or USB cable has short-circuited.
 - Check that the USB connector or USB cable is not caught in something or damaged.
- The connected USB storage device consumes more than maximum allowable current.
 - Disconnect the USB storage device and do not use it. Turn the ignition switch to OFF, then to ACC or ON and then connect a compliant USB storage device.

HUB Error

- The connected USB hub is not supported by this product.
 - Directly connect the USB storage device to this product.

No Response

- This product cannot recognize the connected USB storage device.
 - Disconnect the device and replace it with another USB storage device.

Video resolution not supported

- Files that cannot be played on this product are included in the file.
 - Select a file that can be played.

USB1 was disconnected for device protection. Do not re-insert this USB memory into the unit. Press reset to restart USB memory.

(USB2 was disconnected for device protection. Do not re-insert this USB memory into the unit. Press reset to restart USB memory.)

- The USB connector or USB cable is short-circuited.
 - Check that the USB connector or USB cable is not caught in something or damaged.
- The connected USB storage device consumes more than maximum allowable current.
 - Disconnect the USB storage device and do not use it. Turn the ignition switch to OFF, then to ACC or ON and then connect a compliant USB storage device.
- The USB interface cable for iPod / iPhone is short-circuited.
 - Confirm that the USB interface cable for iPod / iPhone or USB cable is not caught in something or damaged.

Audio Format not supported

- This type of file is not supported on this product.
 - Select a file that can be played.

iPod

Error-02-6X/-9X/-DX

- iPod failure.
 - Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.

Error-02-67

- The iPod firmware version is old.
 - Update the iPod version.

iTunes tagging

Error-8D

- Built-in FLASH ROM encountered an error.
 - Turn the ignition switch to OFF and then to ON.

Tag store failed.

- Tag information cannot be stored in this product.
 - Try again.

Already stored.

- This tag information is already stored in memory.
 - Tag information can only be saved once for any given song. Tag information cannot be saved for the same song more than once.

Memory full. Connect iPod.

- The tag information is successfully stored. The flash memory of this product has become full.
 - The tag information on this product is transferred to the iPod automatically when an iPod is connected.

Memory full. Tags not stored. Connect iPod.

- This product's flash memory used as the temporary storage area is full.
 - The tag information on this product is transferred to the iPod automatically when an iPod is connected.

iPod full. Tags not transferred.

- Memory used for tag information on the iPod is full.
 - Synchronize the iPod with iTunes and clean up the tagged playlist.

Tag transfer failed. Reconnect your iPod.

- This product's tag information cannot transfer to the iPod.
 - Check the iPod and try again.

Apple CarPlay

Attempting to connect to Apple CarPlay.

- Communication failed and the system is trying to connect.
 - Wait for a while. Then, perform the actions below if the error message is still displayed.
 - Restart the iPhone.
 - Disconnect the cable from the iPhone, and then connect the iPhone again after a few seconds.
 - Turn the ignition switch to OFF and then to ON.
- If the error message is still displayed after performing the above action, please contact your dealer or an authorized Pioneer Service Station.

Bluetooth

Error-10

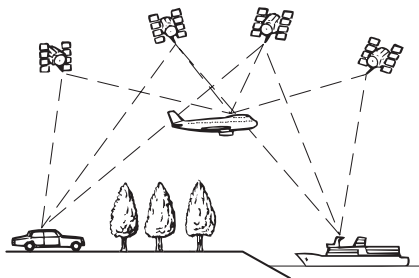
- The power failed for the Bluetooth module of this product.
 - Turn the ignition switch to OFF and then to ON.
- If the error message is still displayed after performing the above action, please contact your dealer or an authorized Pioneer Service Station.

Positioning technology

Positioning by GPS

The Global Positioning System (GPS) uses a network of satellites orbiting the Earth. Each of the satellites, which orbit at a height of 68 900 000 feet (21 000 km), continually broadcasts radio signals giving time and position information. This ensures that signals from at least three can be picked up from any open area on the ground's surface.

The accuracy of the GPS information depends on how good the reception is. When the signals are strong and reception is good, GPS can determine latitude, longitude and altitude for accurate positioning in three dimensions. But if signal quality is poor, only two dimensions, latitude and longitude, can be obtained and positioning errors are somewhat greater.



Positioning by dead reckoning

The built-in sensor in the navigation system also calculates your position. The current location is measured by detecting driving distance with the speed pulse, the turning direction with the gyro sensor and inclination of the road with the G sensor.

The built-in sensor can even calculate changes of altitude, and correct the discrepancies in the distance traveled caused by driving along winding roads or up slopes.

If you use this navigation system with connecting the speed pulse, the system will become more accurate than no connection of speed pulse. So you connect the speed pulse without fail to get the accuracy of positioning.

- The position of the speed detection circuit vary depending on the vehicle model. For details, consult your authorized Pioneer dealer or an installation professional.

- Some types of vehicles may not output a speed signal while driving at just a few kilometers per hour. In such a case, the current location of your vehicle may not be displayed correctly while in traffic congestion or in a parking lot.

How do GPS and dead reckoning work together?

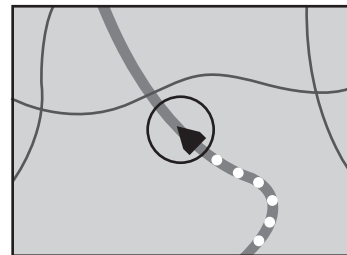
For maximum accuracy, your navigation system continually compares GPS data with your estimated position as calculated from the data of built-in sensor. However, if only the data from the built-in sensor is available for a long period, positioning errors are gradually compounded until the estimated position becomes unreliable. For this reason, whenever GPS signals are available, they are matched with the data of the built-in sensor and used to correct it for improved accuracy.

- If you use chains on your wheels for winter driving or put on the spare wheel, errors may suddenly increase because of difference in wheel diameter. Initialize the sensor status and it may recover the accuracy to normal condition.
 - ➔ For details, refer to *Clearing the status* on page 63.

Map matching

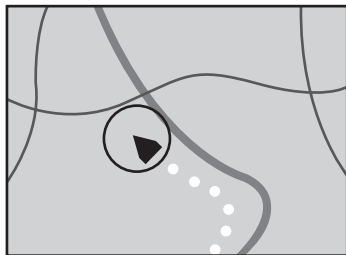
As mentioned, the positioning systems used by this navigation system are susceptible to certain errors. Their calculations may, on occasion, place you in a location on the map where no road exists. In this situation, the processing system understands that vehicles travel only on roads, and can correct your position by adjusting it to a nearby road. This is called map matching.

With map matching



Without map matching

Appendix



Handling large errors

Positioning errors are kept to a minimum by combining GPS, dead reckoning and map matching. However, in some situations, these functions may not work properly, and the error may become bigger.

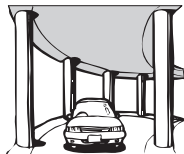
When positioning by GPS is impossible

- GPS positioning is disabled if signals cannot be received from more than two GPS satellites.
- In some driving conditions, signals from GPS satellites may not reach your vehicle. In this case, it is impossible for the system to use GPS positioning.

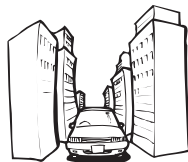
In tunnels or enclosed parking garages



Under elevated roads or similar structures



When driving among high buildings



When driving through a dense forest or tall trees

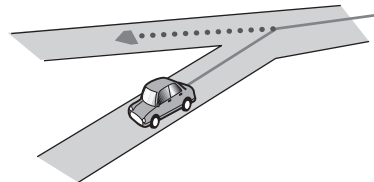


- If a car phone or cellular phone is used near the GPS antenna, GPS reception may be lost temporarily.
- Do not cover the GPS antenna with spray paint or car wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals, so keep the antenna clear.
- If a GPS signal has not been received for a long time, your vehicle's actual position and the current position mark on the map may diverge considerably or may not be updated. In such case, once GPS reception is restored, accuracy will be recovered.

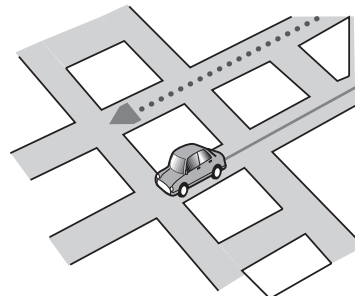
Conditions likely to cause noticeable positioning errors

For various reasons, such as the state of the road you are traveling on and the reception status of the GPS signal, the actual position of your vehicle may differ from the position displayed on the map screen.

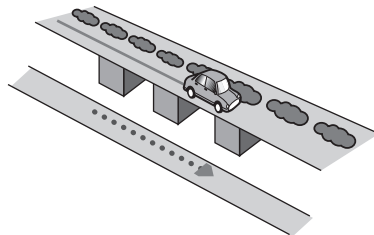
- If you make a slight turn.



- If there is a parallel road.

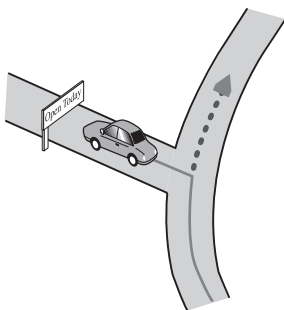


- If there is another road very nearby, such as in the case of an elevated freeway.

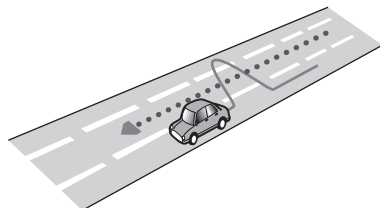


- If you take a recently opened road that is not on the map.

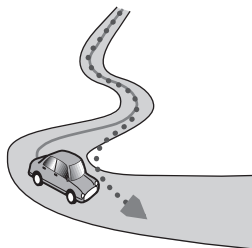
Appendix



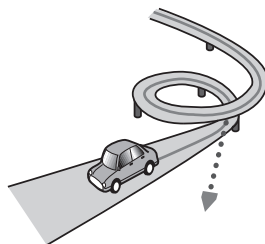
- If you drive in zigzags.



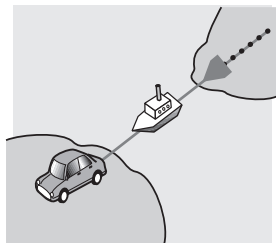
- If the road has a series of hairpin bends.



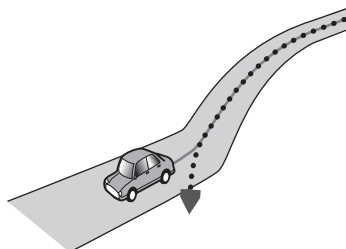
- If there is a loop or similar road configuration.



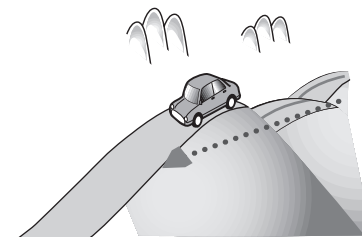
- If you take a ferry.



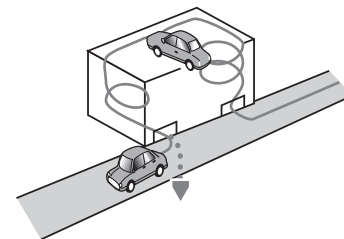
- If you are driving on a long, straight road or a gently curving road.



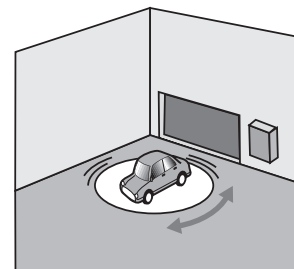
- If you are on a steep mountain road with many height changes.



- If you enter or exit a multi-storey parking lot or similar structure using a spiral ramp.



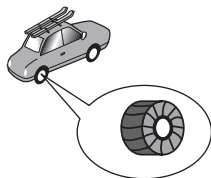
- If your vehicle is turned on a turntable or similar structure.



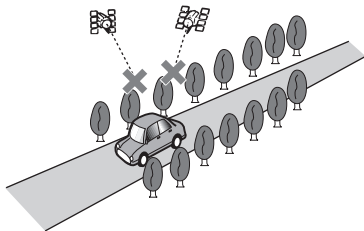
- If your vehicle's wheels spin, such as on a gravel road or in snow.



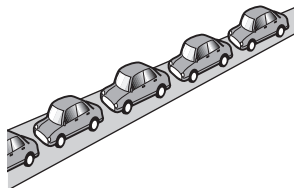
- If you put on chains, or change your tires for ones with a different size.



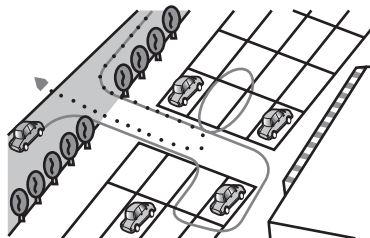
- If trees or other obstacles block the GPS signals for a considerable period.



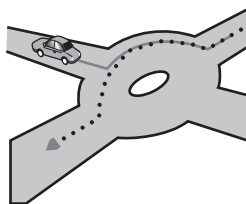
- If you drive very slowly, or in a start-and-stop manner, as in a traffic congestion.



- If you join the road after driving around a large parking lot.



- When you drive around a traffic circle.



- When starting driving immediately after starting the engine.

Route setting information

Route search specifications

Your navigation system sets a route to your destination by applying certain built-in rules to the map data. This section provides some useful information about how a route is set.

⚠ CAUTION

When a route is calculated, the route and voice guidance for the route are automatically set. Also, for day or time traffic regulations, only information about traffic regulations applicable at the time when the route was calculated is considered. One-way streets and street closures may not be taken into consideration. For example, if a street is open during the morning only, but you arrive later, it would be against the traffic regulations so you cannot drive along the set route. When driving, please follow the actual traffic signs. Also, the system may not know some traffic regulations.

- The calculated route is one example of the route to your destination decided by the navigation system while taking the type of streets or traffic regulations into account. It is not necessarily an optimum route. (In some cases, you may not be able to set the streets you want to take. If you need to take a certain street, set a waypoint on that street.)
- If the destination is too far, there may be instances where the route cannot be set. (If you want to set a long-distance route going across several areas, set waypoints along the way.)
- During voice guidance, turns and intersections from the freeway are announced. However, if you pass intersections, turns, and other guidance points in rapid succession, some may delay or not be announced.
- It is possible that guidance may direct you off a freeway and then back on again.
- In some cases, the route may require you to travel in the opposite direction to your current heading. In such cases, you are instructed to turn around, so please turn around safely by following the actual traffic rules.
- In some cases, a route may begin on the opposite side of a railway or river from your actual current location. If this happens, drive towards your destination for a while, and try route calculation again.
- When there is a traffic congestion ahead, a detour route may not be suggested if driving through the traffic congestion would still be better than taking the detour.
- There may be instances when the starting point, the waypoint and the destination point are not on the highlighted route.

Appendix

- The number of traffic circle exits displayed on the screen may differ from the actual number of roads.

Route highlighting

- Once set, the route is highlighted in bright color on the map.
- The immediate vicinity of your starting point and destination may not be highlighted, and neither will areas with particularly complex road layouts. Consequently, the route may appear to be cut off on the display, but voice guidance will continue.

Auto reroute function

- If you deviate from the set route, the system will re-calculate the route from that point so that you remain on track to the destination.
- This function may not work under certain conditions.

Handling and care of discs

Some basic precautions are necessary when handling your discs.

Built-in drive and care

- Use only conventional, fully circular discs. Do not use shaped discs.
- Do not use cracked, chipped, warped, or otherwise damaged discs as they may damage the built-in drive.
- Use 12-cm discs. Do not use 8-cm discs or an adapter for 8-cm discs.
- When using discs that can be printed on label surfaces, check the instructions and the warnings of the discs. Depending on the discs, inserting and ejecting may not be possible. Using such discs may result in damage to this equipment.
- Do not attach labels, write on or apply chemicals to the surface of the discs.
- Do not attach commercially available labels or other materials to the discs.
- To clean a disc, wipe it with a soft cloth, moving outward from the center.
- Condensation may temporarily impair the built-in drive's performance.
- Playback of discs may not be possible because of disc characteristics, disc format, recorded application, playback environment, storage conditions and so on.
- Road shocks may interrupt disc playback.
- Read the precautions for discs before using them.

Ambient conditions for playing a disc

- At extremely high temperatures, a temperature cutoff protects this product by switching it off automatically.
- Despite our careful design of the product, small scratches that do not affect actual operation may appear on the disc surface as a result of mechanical wear, ambient conditions for use or handling of the disc. This is not a sign of the malfunction of this product. Consider it to be normal wear and tear.

Playable discs

DVD-Video



- ❑ **DVD** is a trademark of DVD Format/Logo Licensing Corporation.
- It is not possible to play DVD-Audio discs. This DVD drive may not be able to play all discs bearing the marks shown above.

CD



AVCHD recorded discs

This unit is not compatible with discs recorded in AVCHD (Advanced Video Codec High Definition) format. Do not insert AVCHD discs. If inserted, the disc may not be ejected.

Playing DualDisc

- DualDiscs are two-sided discs that have a recordable CD for audio on one side and a recordable DVD for video on the other.
- Playback of the DVD side is possible with this product. However, since the CD side of DualDiscs is not physically compatible with the general CD standard, it may not be possible to play the CD side with this product.
- Frequent loading and ejecting of a DualDisc may result in scratches to the disc.
- Serious scratches can lead to playback problems on this product. In some cases, a DualDisc may become stuck in the disc-loading slot and will not eject. To prevent this, we recommend you refrain from using DualDisc with this product.
- Please refer to the manufacturer for more detailed information about DualDiscs.

Dolby Digital

This product will down-mix Dolby Digital signals internally and the sound will be output in stereo.

- ❑ Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.



Detailed information for playable media

Compatibility

Common notes about disc compatibility

- Certain functions of this product may not be available for some discs.
- Compatibility with all discs is not guaranteed.
- It is not possible to play back DVD-RAM discs.

Appendix

- Playback of discs may become impossible with direct exposure to sunlight, high temperatures, or depending on the storage conditions in the vehicle.

DVD-Video discs

- DVD-Video discs that have incompatible region numbers cannot be played on this DVD drive. The region number of the player can be found on this product's chassis.

DVD-R/DVD-RW/DVD-R SL (Single Layer)/DVD-R DL (Dual Layer) discs

- Unfinalized discs which have been recorded with the Video format (video mode) cannot be played back.
- Discs which have been recorded with the Video Recording format (VR mode) cannot be played back.
- DVD-R DL (Dual Layer) discs which have been recorded with Layer Jump recording cannot be played back.
- For detailed information about recording mode, please contact the manufacturer of media, recorders, or writing software.

CD-R/CD-RW discs

- Unfinalized discs cannot be played back.
- It may not be possible to playback CD-R/CD-RW discs recorded on a music CD recorder or a computer because of disc characteristics, scratches or dirt on the disc, or dirt, scratches or condensation on the lens of the built-in drive.
- Playback of discs recorded on a computer may not be possible, depending on the recording device, writing software, their settings, and other environmental factors.
- Please record with the correct format. (For details, please contact manufacturer of media, recorders, or writing software.)
- Titles and other text information recorded on a CD-R/CD-RW disc may not be displayed by this product (in the case of audio data (CD-DA)).
- Read the precautions with CD-R/CD-RW discs before using them.

Common notes about the USB storage device

- Do not leave the USB storage device in any location with high temperatures.
- Depending on the kind of the USB storage device you use, this product may not recognize the storage device or files may not be played back properly.
- The text information of some audio and video files may not be correctly displayed.
- File extensions must be used properly.
- There may be a slight delay when starting playback of files on a USB storage device with complex folder hierarchies.

- Operations may vary depending on the kind of a USB storage device.
- It may not be possible to play some music files from USB because of file characteristics, file format, recorded application, playback environment, storage conditions, and so on.
- Copyright protected files cannot be played back.

USB storage devices

- For details about USB storage device compatibility with this product, refer to *Specifications* on page 85.
- Protocol: bulk
- You cannot connect a USB storage device to this product via a USB hub.
- Partitioned USB storage device is not compatible with this product.
- Firmly secure the USB storage device when driving. Do not let the USB storage device fall onto the floor, where it may become jammed under the brake or gas pedal.
- There may be a slight delay when starting playback of audio files encoded with image data.
- Some USB storage devices connected to this product may generate noise on the radio.
- Do not connect anything other than the USB storage device.
- For a USB storage device that plays music files alone, the playback or search sequence with this product may be different from that of the device.

Common notes about DivX files

- Only DivX files downloaded from DivX partner sites are guaranteed for proper operation. Unauthorized DivX files may not operate properly.
- DRM rental files cannot be operated until playing back is started.
- This product corresponds to a DivX file display of up to 1 590 minutes 43 seconds. Search operations beyond this time limit are prohibited.
- DivX VOD file playback requires supplying the ID code of this product to the DivX VOD provider. Regarding the ID code, refer to *Displaying your DivX VOD registration code* on page 69.
- For details on the DivX video versions that can be played on this product, refer to *Specifications* on page 85.
- For more details about DivX, visit the following site: <http://www.divx.com/>

DivX subtitle files

- Srt format subtitle files with the extension ".srt" can be used.
- Only one subtitle file can be used for each DivX file. Multiple subtitle files cannot be associated.
- Subtitle files that are named with the same character string as the DivX file before the extension are associated with the DivX file. The character strings before the extension must be

exactly the same. However, if there is only one DivX file and one subtitle file in a single folder, the files are associated even if the file names are not the same.

- The subtitle file must be stored in the same folder as the DivX file.
- Up to 255 subtitle files may be used. Any more subtitle files will not be recognized.
- Up to 64 characters can be used for the name of the subtitle file, including the extension. If more than 64 characters are used for the file name, the subtitle file may not be recognized.
- The character code for the subtitle file should comply with ISO-8859-1. Using characters other than ISO-8859-1 may cause the characters to be displayed incorrectly.
- The subtitles may not be displayed correctly if the displayed characters in the subtitle file include control code.
- For materials that use a high transfer rate, the subtitles and video may not be completely synchronized.
- If multiple subtitles are programmed to display within a very short time frame, such as 0.1 seconds, the subtitles may not be displayed at the correct time.

Media compatibility chart

General

- Files may not be played back properly depending on the environment in which the file was created or on the contents of the file.
- This product may not play back files, depending on the application used to encode the files.
- This product may not operate correctly, depending on the application used to encode WMA files.
- Depending on the version of Windows Media™ Player used to encode WMA files, album names and other text information may not be correctly displayed.
- There may be a slight delay when starting playback of audio files encoded with image data.
- This product is not compatible with packet write data transfer.
- This product can recognize up to 32 characters, beginning with the first character, including extension for the file and folder name. Depending on the display area, this product may try to display them with a reduced font size. However, the maximum number of the characters that you can display varies according to the width of each character, and of the display area.
- Folder selection sequence or other operations may be altered, depending on the encoding or writing software.

Appendix

- Regardless of the length of blank section between the songs of original recording, compressed audio discs play with a short pause between songs.
- Maximum playback time of audio file stored in the disc: 60 h
- Maximum playback time of audio file stored on a USB storage device: 7.5 h (450 minutes)
- This product assigns folder numbers. The user cannot assign folder numbers.

CD-R/-RW

File system: ISO9660 level 1.ISO9660 level 2.Romeo, Joliet.UDF 1.02/1.50/2.00/2.01/2.50
Maximum number of folders: 700
Maximum number of files: 999
Playable file types: MP3, WMA, AAC, DivX, MPEG1, MPEG2, MPEG4

DVD-R/-R SL/-R DL/ DVD-RW

File system: ISO9660 level 1.ISO9660 level 2.Romeo, Joliet.UDF 1.02/1.50/2.00/2.01/2.50
Maximum number of folders: 700
Maximum number of files: 3 500
Playable file types: MP3, WMA, AAC, DivX, MPEG1, MPEG2, MPEG4

USB storage device

File system: FAT16/FAT32/NTFS
Maximum number of folders: 1 500
Maximum number of files: 15 000
Playable file types: MP3, WMA, AAC, WAV, FLAC, H.264, MPEG-2, MPEG-4, WMV, FLV, MKV, PEG

MP3 compatibility

- Ver. 2.x of ID3 tag is prioritized when both Ver. 1.x and Ver. 2.x exist.
- This product is not compatible with the following: MP3i (MP3 interactive), mp3 PRO, m3u playlist

CD-R/-RW, DVD-R/-R SL/-R DL/DVD-RW

File extension: .mp3
Bit rate: 8 kbps to 320 kbps (CBR), VBR
Sampling frequency: 16 kHz to 48 kHz (32 kHz, 44.1 kHz, 48 kHz for emphasis)
ID3 tag: ID3 tag Ver. 1.0, 1.1, 2.2, 2.3

USB storage device

File extension: .mp2, .mp3, .m2a, .mka
Bit rate: 8 kbps to 320 kbps (CBR), VBR
Sampling frequency: 8 kHz to 48 kHz
ID3 tag: ID3 tag Ver. 1.0, 1.1, 2.2, 2.3, 2.4

WMA compatibility

- This product is not compatible with the following: Windows Media™ Audio 9 Professional, Lossless, Voice

CD-R/-RW, DVD-R/-R SL/-R DL/DVD-RW

File extension: .wma
Bit rate: 5 kbps to 320 kbps (CBR), VBR
Sampling frequency: 8 kHz to 48 kHz

USB storage device

File extension: .wma
Bit rate: 5 kbps to 320 kbps (CBR), VBR
Sampling frequency: 8 kHz to 48 kHz

WAV compatibility

- The sampling frequency shown in the display may be rounded.
- WAV files on the CD-R/-RW, DVD-R/-RW/-R SL/-R DL cannot be played.

USB storage device

File extension: .wav
Format: Linear PCM (LPCM)
Sampling frequency: 16 kHz to 48 kHz
Quantization bits: 8 bits and 16 bits

AAC compatibility

- This product plays back AAC files encoded by iTunes.

CD-R/-RW, DVD-R/-R SL/-R DL/DVD-RW

File extension: .m4a
Bit rate: 8 kbps to 320 kbps (CBR)
Sampling frequency: 8 kHz to 44.1 kHz

USB storage device

File extension: .aac, .adts, .mka, .m4a
Bit rate: 8 kbps to 320 kbps (CBR)
Sampling frequency: 8 kHz to 48 kHz

FLAC compatibility

- FLAC files on the CD-R/-RW, DVD-R/-RW/-R SL/-R DL cannot be played.

USB storage device

File extension: .flac, .ogg
Quantization bit rate: 8 bit, 16 bit, 24 bit
Sampling frequency: 8 kHz to 48 kHz

DivX compatibility

- This product is not compatible with the following: DivX Ultra format, DivX files without video data, DivX files encoded with LPCM (Linear PCM) audio codec

- Depending on the file information composition, such as the number of audio streams, there may be a slight delay in the start of playback on discs.
- If a file contains more than 4 GB, playback stops before the end.
- Some special operations may be prohibited because of the composition of DivX files.
- Files with high transfer rates may not be played back correctly. The standard transfer rate is 4 Mbps for CDs and 10.08 Mbps for DVDs.
- DivX files on the USB storage device cannot be played.

CD-R/-RW, DVD-R/-R SL/-R DL/DVD-RW

File extension: .avi/.divx
Profile (DivX version): Home Theater Ver. 3.11/Ver. 4.x/Ver. 5.x/Ver. 6.x
Compatible audio codec: MP3, Dolby Digital
Bit rate (MP3): 8 kbps to 320 kbps (CBR), VBR
Sampling frequency (MP3): 16 kHz to 48 kHz (32 kHz, 44.1 kHz, 48 kHz for emphasis)
Maximum image size: 720 pixels × 576 pixels
Maximum file size: 4 GB

Audio and video files compatibility (USB)

- Files may not be able to be played back depending on the bit rate.

.avi

Compatible video codec: MPEG-4/H.264/H.263/Xvid
Compatible audio codec: Linear PCM (LPCM)/MP3/AAC
Maximum resolution: 720 pixels × 480 pixels
Maximum frame rate: 30 fps
Maximum file size: 4 GB
Maximum playback time: 150 minutes

.mp4

Compatible video codec: MPEG-4/H.264/H.263
Compatible audio codec: MP3/AAC
Maximum resolution: 720 pixels × 480 pixels
Maximum frame rate: 30 fps
Maximum file size: 4 GB
Maximum playback time: 150 minutes

.3gp

Compatible video codec: MPEG-4/H.264/H.263
Compatible audio codec: AAC
Maximum resolution: 720 pixels × 480 pixels
Maximum frame rate: 30 fps
Maximum file size: 4 GB
Maximum playback time: 150 minutes

Appendix

.mkv

Compatible audio codec: MPEG-4/H.264/VC-1/Xvid
Compatible audio codec: MP3/AAC/Vorbis
Maximum resolution: 720 pixels × 480 pixels
Maximum frame rate: 30 fps
Maximum file size: 4 GB
Maximum playback time: 150 minutes

.mov

Compatible video codec: MPEG-4/H.264/H.263
Compatible audio codec: MP3/AAC
Maximum resolution: 720 pixels × 480 pixels
Maximum frame rate: 30 fps
Maximum file size: 4 GB
Maximum playback time: 150 minutes

.f4v

Compatible video codec: H.264/H.263
Compatible audio codec: MP3/AAC
Maximum resolution: 720 pixels × 480 pixels
Maximum frame rate: 30 fps
Maximum file size: 4 GB
Maximum playback time: 150 minutes

.wmv

Compatible video codec: WMV/VC-1
Compatible audio codec: WMA
Maximum resolution: 720 pixels × 480 pixels
Maximum frame rate: 30 fps
Maximum file size: 4 GB
Maximum playback time: 150 minutes

.asf

Compatible video codec: WMV/VC-1
Compatible audio codec: WMA
Maximum resolution: 720 pixels × 480 pixels
Maximum frame rate: 30 fps
Maximum file size: 4 GB
Maximum playback time: 150 minutes

.flv

Compatible video codec: H.264
Compatible audio codec: MP3/AAC
Maximum resolution: 720 pixels × 480 pixels
Maximum frame rate: 30 fps
Maximum file size: 4 GB
Maximum playback time: 150 minutes

.vob

Compatible video codec: H.264/MPEG-2
Compatible audio codec: Linear PCM (LPCM)/MP3/AAC
Maximum resolution: 720 pixels × 480 pixels
Maximum frame rate: 30 fps
Maximum file size: 4 GB

Maximum playback time: 150 minutes

Bluetooth



The *Bluetooth*® word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. and any use of such marks by PIONEER CORPORATION is under license. Other trademarks and trade names are those of their respective owners.

SiriusXM® satellite radio



Sirius, XM and all related marks and logos are trademarks of SiriusXM Radio, Inc. All rights reserved.

WMA/WMV

Windows Media and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

- ☐ This product includes technology owned by Microsoft Corporation and cannot be used or distributed without a license from Microsoft Licensing, Inc.

FLAC

Copyright © 2000-2009 Josh Coalson
Copyright © 2011-2013 Xiph.Org Foundation
Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of the Xiph.org Foundation nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE FOUNDATION OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

DivX



DivX Certified® devices have been tested for high-quality DivX® (.divx, .avi) video playback. When you see the DivX logo, you know you have the freedom to play your favorite DivX movies. DivX®, DivX Certified® and associated logos are trademarks of DivX, LLC and are used under license. This DivX Certified® device has passed rigorous testing to ensure it plays DivX® video. To play purchased DivX movies, first register your device at vod.divx.com. Find your registration code in the DivX VOD section of your device setup menu.

- Refer to *Displaying your DivX VOD registration code* on page 69

Appendix

AAC

AAC is short for Advanced Audio Coding and refers to an audio compression technology standard used with MPEG-2 and MPEG-4. Several applications can be used to encode AAC files, but file formats and extensions differ depending on the application which is used to encode. This unit plays back AAC files encoded by iTunes.

Google, Google Play, Android™

Android and Google Play are trademarks of Google Inc.

MIXTRAX

MIXTRAX is a trademark of the PIONEER CORPORATION.

Detailed information regarding connected iPod devices

- Pioneer accepts no responsibility for data lost from an iPod, even if that data is lost while using this product. Please back up your iPod data regularly.
- Do not leave the iPod in direct sunlight for extended amounts of time. Extended exposure to direct sunlight can result in iPod malfunction due to the resulting high temperature.
- Do not leave the iPod in any location with high temperatures.
- Firmly secure the iPod when driving. Do not let the iPod fall onto the floor, where it may become jammed under the brake or gas pedal.
 - For details, refer to the iPod manuals.

iPhone, iPod and Lightning®

Made for
 iPhone | iPod

Use of the Made for Apple badge means that an accessory has been designed to connect specifically to the Apple product(s) identified in the badge, and has been certified by the developer to meet Apple performance standards. Apple is not responsible

for the operation of this device or its compliance with safety and regulatory standards.
Please note that the use of this accessory with an Apple product may affect wireless performance.
iPhone, iPod, iPod nano, iPod touch, and Lightning are trademarks of Apple Inc., registered in the U.S. and other countries.

App Store

App Store is a service mark of Apple Inc.

iOS

iOS is a trademark on which Cisco holds the trademark right in the US and certain other countries.

iTunes

iTunes is a trademark of Apple Inc., registered in the U.S. and other countries.

Apple Music

Apple Music is a trademark of Apple Inc., registered in the U.S. and other countries.

Apple CarPlay



Apple CarPlay is a trademark of Apple Inc.
Use of the Works with Apple badge means that an accessory has been designed to work specifically with the technology identified in the badge and has been certified by the developer to meet Apple performance standards.

Siri

Works with Siri through the microphone.

Using app-based connected content

Important

Requirements to access app-based connected content services using this product:

- Latest version of the Pioneer compatible connected content application(s) for the smartphone, available from the service provider, downloaded to your smartphone.
- A current account with the content service provider.
- Smartphone Data Plan.
Note: if the Data Plan for your smartphone does not provide for unlimited data usage, additional charges from your carrier may apply for accessing app-based connected content via 3G, EDGE and/or LTE (4G) networks.
- Connection to the Internet via 3G, EDGE, LTE (4G) or Wi-Fi network.
- Optional Pioneer adapter cable connecting your iPhone to this product.

Limitations:

- Access to app-based connected content will depend on the availability of cellular and/or Wi-Fi network coverage for the purpose of allowing your smartphone to connect to the Internet.
- Service availability may be geographically limited to the region. Consult the connected content service provider for additional information.
- Ability of this product to access connected content is subject to change without notice and could be affected by any of the following: compatibility issues with future firmware versions of smartphone; compatibility issues with future versions of the connected content application(s) for the smartphone; changes to or discontinuation of the connected Content application(s) or service by its provider.
- Pioneer is not liable for any issues that may arise from incorrect or flawed app-based content.
- The content and functionality of the supported applications are the responsibility of the App providers.
- In **AppRadio Mode** and **Apple CarPlay**, functionality through the product is limited while driving, with available functions determined by the App providers.
- Availability of **AppRadio Mode** and **Apple CarPlay** functionalities is determined by the App provider, and not determined by Pioneer.
- **AppRadio Mode** and **Apple CarPlay** allow access to applications other than those listed (subject to limitations while driving), but the extent to which content can be used

Appendix

is determined by the App providers.

Pandora®

Pandora, the Pandora logo, and the Pandora trade dress are trademarks or registered trademarks of Pandora Media, Inc. Used with permission. Pandora is only available in certain countries. Please visit <http://www.pandora.com/legal> for more information.

MHL

MHL, the MHL Logo, and Mobile High-Definition Link are trademarks or registered trademarks of MHL, LLC in the United States and other countries.

IVONA Text-to-Speech



Notice regarding video viewing

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

Notice regarding DVD-Video viewing

This item incorporates copy protection technology that is protected by U.S. patents and other intellectual property rights of Rovi Corporation. Reverse engineering and disassembly are prohibited.

Notice regarding MP3 file usage

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

Notice regarding open source licenses

For details about the open source licenses for the functions that this product is equipped with, please visit <http://www.oss-pioneer.com/car/multimedia/>

Map coverage

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

Using the LCD screen correctly

Handling the LCD screen

- When the LCD screen is subjected to direct sunlight for a long period of time, it will become very hot, resulting in possible damage to the LCD screen. When not using this product, avoid exposing it to direct sunlight as much as possible.
- The LCD screen should be used within the temperature ranges shown in *Specifications* on page 85.
- Do not use the LCD screen at temperatures higher or lower than the operating temperature range, because the LCD screen may not operate normally and could be damaged.
- The LCD screen is exposed in order to increase its visibility within the vehicle. Please do not press strongly on it as this may damage it.
- Do not push the LCD screen with excessive force as this may scratch it.
- Never touch the LCD screen with anything besides your finger when operating the touch panel functions. The LCD screen can scratch easily.

Liquid crystal display (LCD) screen

- If the LCD screen is near the vent of an air conditioner, make sure that air from the air conditioner is not blowing on it. Heat from the heater may break the LCD screen, and cool air from the cooler may cause moisture to form inside this product, resulting in possible damage.
- Small black dots or white dots (bright dots) may appear on the LCD screen. These are due to the characteristics of the LCD screen and do not indicate a malfunction.
- The LCD screen will be difficult to see if it is exposed to direct sunlight.
- When using a cellular phone, keep the antenna of the cellular phone away from the LCD screen to prevent disruption of the video in the form of disturbances such as spots or colored stripes.

Maintaining the LCD screen

- When removing dust from or cleaning the LCD screen, first turn this product off and then wipe the screen with a soft dry cloth.
- When wiping the LCD screen, take care not to scratch the surface. Do not use harsh or abrasive chemical cleaners.

LED (light-emitting diode) backlight

A light emitting diode is used inside the display to illuminate the LCD screen.

- At low temperatures, using the LED backlight may increase image lag and degrade the image quality because of the characteristics of the LCD screen. Image quality will improve with an increase in temperature.
- The product lifetime of the LED backlight is more than 10 000 hours. However, it may decrease if used in high temperatures.
- If the LED backlight reaches the end of its product lifetime, the screen will become dimmer and the image will no longer be visible. In that case, please consult your dealer or the nearest authorized Pioneer Service Station.

Specifications

General

Rated power source	14.4 V DC (10.8 V to 15.1 V allowable)
Grounding system	Negative type
Maximum current consumption	10.0 A

Appendix

Dimensions (W × H × D):

Chassis.....	178 mm × 100 mm × 164 mm (7 in. × 3-7/8 in. × 6-1/2 in.)
Nose.....	170 mm × 97 mm × 8 mm (6-3/4 in. × 3-7/8 in. × 3/8 in.)
Weight.....	1.8 kg (4 lbs)
NAND flash memory.....	.8 GB

Navigation

GPS receiver:	
System.....	L1, C/Acode GPS SPS (Standard Positioning Service)
Reception system.....	50-channel multi-channel reception system
Reception frequency.....	1 575.42 MHz
Sensitivity.....	~140 dBm (typ)
Position update frequency.....	Approx. once per second
GPS antenna:	
Antenna.....	Micro strip flat antenna/right-handed helical polarization
Antenna cable.....	3.55 m (11 ft. 7 in.)
Dimensions (W × H × D).....	33 mm × 14.7 mm × 36 mm (1-1/4 in. × 1/2 in. × 1-3/8 in.)
Weight.....	73.7 g (0.2 lbs)

Display

Screen size/aspect ratio.....	6.2 inch wide/16:9 (effective display area: 136.2 mm × 72 mm) (5-3/8 in. × 2-7/8 in.)
Pixels.....	1 152 000 (2 400 × 480)
Display method.....	TFT Active matrix driving
Color system.....	PAL/NTSC/PAL-M/PAL-N/SECAM compatible
Durable temperature range:	
Power off.....	-4 °F to +176 °F

Audio

Maximum power output.....	50 W × 4
Continuous power output.....	22 W × 4 (50 Hz to 15 kHz, 5 %THD, 4 Ω LOAD, Both Channels Driven)
Load impedance.....	4 Ω (4 Ω to 8 Ω allowable)
Preout output level (max).....	4.0 V
Equalizer (13-Band Graphic Equalizer):	
Frequency.....	50 Hz/80 Hz/125 Hz/200 Hz/315 Hz/500 Hz/800 Hz /1.25 kHz/2 kHz/3.15 kHz/5 kHz/8 kHz/12.5 kHz
Gain.....	±12 dB
HPF:	
Frequency.....	50 Hz/63 Hz/80 Hz/100 Hz/125 Hz/160 Hz/200 Hz
Slope.....	-6 dB/oct, -12 dB/oct, -18 dB/oct
Subwoofer (mono):	
Frequency.....	50 Hz/63 Hz/80 Hz/100 Hz/125 Hz/160 Hz/200 Hz
Slope.....	-6 dB/oct, -12 dB/oct, -18 dB/oct
Gain.....	-24 dB to +10 dB

Phase.....	Normal/Reverse
Time alignment.....	0 to 200 step (1 inch/step)

DVD drive

System.....	DVD-Video, VCD, CD, MP3, WMA, AAC, DivX, MPEG player
Region number.....	1
Usable discs.....	DVD-VIDEO, VIDEO-CD, CD, CD-R, CD-RW, DVD-R, DVD-RW, DVD-RDL
Frequency response.....	5 Hz to 44 000 Hz (with DVD, at sampling frequency 96 kHz)
Signal-to-noise ratio.....	96 dB (1 kHz) (IHF-A network) (RCA level)
Output level:	
Video.....	1.0 Vp-p/75 Ω (±0.2 V)
Number of channels.....	2 (stereo)
MP3 decoding format.....	MPEG-1, 2 & 2.5 Audio Layer 3
WMA decoding format.....	Ver.7, 8, 9 (2 ch audio) (Windows Media Player)
AAC decoding format.....	MPEG-4 AAC (iTunes encoded only): .m4a (Ver. 11 and earlier)
DivX decoding format.....	Home Theater Ver.3.11, Ver.4.X, Ver.5.X, Ver.6.X : .avi, .divx
MPEG video decoding format.....	MPEG-1: mpg, mpeg, dat MPEG-2 PS: mpg, mpeg MPEG-4 Part2 (Visual), MS MPEG-4 Ver.3: avi

USB

USB standard spec.	USB 1.1, USB 2.0 High speed
Max current supply.....	1.6 A
USB Class.....	MSC (Mass Storage Class) device, iPod (AudioClass, HID Class) device
File system.....	FAT16, FAT32, NTFS
MP3 decoding format.....	MPEG-1/Layer 1, MPEG-1/Layer 2, MPEG-1/Layer 3, MPEG-2/Layer 1, MPEG-2/Layer 2, MPEG-2/ Layer 3, MPEG-2.5/Layer 3
WMA decoding format.....	WMA10 Std, WMA10 Pro, WMA9 Lossless
AAC decoding format.....	MPEG-2 AAC-LC, MPEG-4 AAC-LC
WAV signal format.....	Linear PCM
FLAC decoding format.....	Ver. 1.3.0 (Free Lossless Audio Codec)
H.264 video decoding format.....	Base Line Profile, Main Profile, High Profile
WMV video decoding format.....	VC-1 SP/MP/AP, WMV 7/8
MPEG4 video decoding format.....	Simple Profile, Advanced Simple Profile (except GMC)
JPEG decoding format.....	JPEG

Bluetooth

Version.....	Bluetooth 3.0 + EDR certified
Output power.....	+4 dBm Max. (Power class 2)
Frequency band.....	2 400 MHz to 2 483.5 MHz

FM tuner

Frequency range.....	87.9 MHz to 107.9 MHz
Usable sensitivity.....	11 dBf (0.8 μV/75 Ω, mono, S/N: 30 dB)
Signal-to-noise ratio.....	72 dB (analog broadcasting) (IHF-A network)

AM tuner

Frequency range.....	530 kHz to 1 710 kHz
Usable sensitivity.....	25 μV (S/N: 20 dB)
Signal-to-noise ratio.....	62 dB (analog broadcasting) (IHF-A network)

CEA2006 Specifications



Power output.....	14 W RMS × 4 Channels (4 Ω and ≤1 % THD+N)
-------------------	---

S/N ratio.....	91 dBA (reference: 1 W into 4 Ω)
----------------	----------------------------------

■ Specifications and design are subject to possible modifications without notice due to improvements.



Register your product at

<http://www.pioneerelectronics.com>

in Canada **<http://www.pioneerelectronics.ca>**

To keep up to date with the latest navigational data, you can periodically update your navigation system. For further details, please visit:

<http://pioneer.naviextras.com>



PIONEER CORPORATION

28-8, Honkomagome 2-chome, Bunkyo-ku,
Tokyo 113-0021, 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.

2 Jalan Kilang Barat, #07-01, Singapore 159346
TEL: 65-6378-7888

PIONEER ELECTRONICS AUSTRALIA PTY. LTD.

5 Arco Lane, Heatherton, Victoria, 3202 Australia
TEL: (03) 9586-6300

PIONEER ELECTRONICS DE MÉXICO S.A. DE C.V.

Blvd. Manuel Ávila Camacho 138, 10 piso
Col.Lomas de Chapultepec, México, D.F. 11000
Tel: 52-55-9178-4270, Fax: 52-55-5202-3714

先鋒股份有限公司

台北市內湖區瑞光路407號8樓
電話：886-(0) 2-2657-3588

先鋒電子（香港）有限公司

香港九龍長沙灣道909號5樓
電話：852-2848-6488