

Operation Manual

NAVIGATION AV SYSTEM

AVIC-F60DAB AVIC-F960DAB

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.

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.

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Manual overview

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

The screen examples shown in this manual are those for AVIC-F60DAB. The screens may vary according to the models.

How to use this manual

Finding the operation procedure for what you want to do

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

Finding the operation procedure from a menu name

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

Conventions used in this manual

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

- Buttons on this product are described in **ALL CAPITALS, BOLD** lettering:
e.g.) **HOME** button, **MODE** button.
- Menu items, screen titles, and functional components are described in **bold** with double quotation marks “ ”:
e.g.) “**System**” screen or “**Audio**” screen
- Touch panel keys that are available on the screen are described in **bold** in brackets []:
e.g.)

[**Disc**], [**AV Source Settings**].

- Extra information, alternatives and other notes are presented in the following format:
e.g.)
 If the home location has not been stored yet, set the location first.
- Functions of other keys on the same screen are indicated with ■ at the beginning of the description:
e.g.)
■ If you touch [**OK**], the entry is deleted.
- References are indicated like this:
e.g.)
☞ For details of the operations, refer to *How to use the screens* on page 18.
- Model icons shown in this manual indicate that the description is intended for the models indicated by the icons.
If the following icons are shown, the description is applied only to the models shown.
e.g.)

F60DAB **F960DAB**

Terms used in this manual

“Front display” and “Rear display”

In this manual, the screen that is attached to the body of this product will be referred to as the “Front display”. Any additional screen that is commercially available and can be connected to this product will be referred to as the “Rear display”.

“Video image”

“Video image” in this manual indicates moving images of DVD-Video, DivX®, iPod, and any equipment that is connected to this system with an RCA cable, such as general-purpose AV equipment.

Introduction

“External storage device (USB, SD)”

The SD memory card, SDHC memory card, microSD card, microSDHC card and USB memory device are collectively referred to as the “external storage device (USB, SD)”. If it indicates the USB memory only, it is referred to as the “USB storage device”.

“SD memory card”

The SD memory card, SDHC memory card, microSD card and microSDHC card are collectively referred to as the “SD memory card”.

“iPod”

In this manual, iPod and iPhone will be referred to as “iPod”.

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:

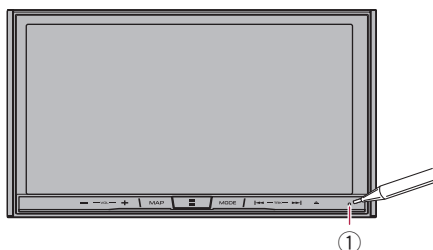
- Prior to using this product for the first time after installation.
- If this product fails to operate properly.
- If there appears to be problems with the operation of the system.
- If your vehicle position is shown on the map with a significant positioning error.

1 Turn the ignition switch OFF.

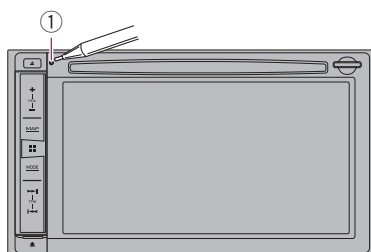
2 Press the **RESET** button with a pen tip or other pointed implement.

Settings and recorded contents are reset to the factory settings.

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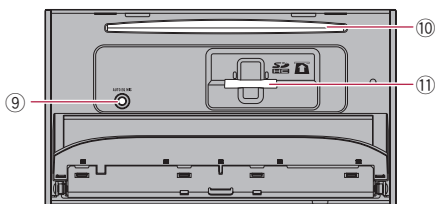
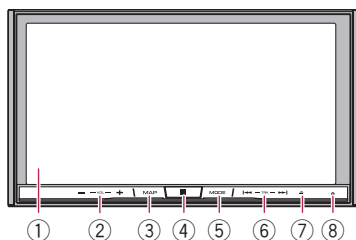


- ① **RESET** button

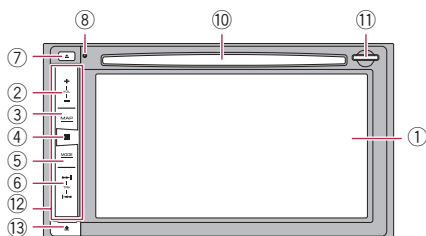
Checking part names and functions

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

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① LCD screen

② VOL (+/-) button

Press to adjust the AV (Audio and Video) source volume.

③ MAP button

- Press to display the Map screen.
 - ➔ For details of the operations, refer to *How to use the screens* on page 18.

④ HOME button

- Press to display the Top menu screen.
 - ➔ For details of the operations, refer to *How to use the screens* on page 18.
- Press and hold the **HOME** button to activate the voice recognition function.
 - ➔ For details, refer to *Using the voice recognition function (for iPhone)* on page 67.

⑤ MODE button

- Press to switch between the Application screen and the AV operation screen.
 - ☐ If the display cannot switch from the AV operation screen to the Application screen when the **MODE** button is pressed, the display will turn off.
 - ➔ For details of the operations, refer to *How to use the screens* on page 18.
- Press and hold to turn the display off.
 - ➔ For details, refer to *Turning off the display* on page 17.

⑥ TRK button

- Press to perform manual seek tuning, fast forward, reverse and track search controls.

⑦ ▲ button

⑧ RESET button

- ➔ For details of the operations, refer to *Resetting the microprocessor* on page 11.

⑨ Auto EQ microphone input jack

Use to connect a microphone for acoustical measurement (sold separately).

⑩ Disc-loading slot

Insert a disc to play.

- ➔ For details, refer to *Inserting and ejecting a disc* on page 14.

⑪ SD card slot


- ➔ For details, refer to *Inserting and ejecting an SD memory card* on page 15.

⑫ Detachable faceplate

Basic operation

⑬ button

Press to remove the detachable faceplate from this product.

- ➔ For details, refer to *Removing the detachable faceplate* on page 13. 

Protecting your product against theft


F960DAB

The detachable faceplate can be detached from this product to discourage theft, as described below.

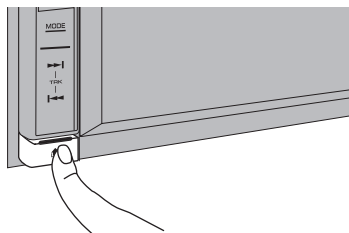
CAUTION

- 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

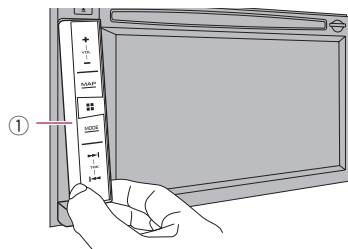
-  This product cannot be operated while the detachable faceplate is removed from this product.

1 Press the button.



When you release your finger, the bottom of the detachable faceplate separates slightly from this product.

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.

Make sure the detachable faceplate is securely connected to the mounting hooks of this product.

2 Push the lower part of the detachable faceplate until you hear a click.

If you fail to successfully attach the detachable faceplate to this product, try again but be careful not to force it as the panel could be damaged. 


Notes on using the LCD panel

F60DAB

⚠ WARNING

- Keep hands and fingers clear of this product when opening, closing, or adjusting the LCD panel. Be especially cautious of children's hands and fingers.
- Do not use with the LCD panel left open. If the LCD panel is left open, it may result in injury in the event of an accident.

⚠ CAUTION

- Do not open or close the LCD panel by force. This may cause a malfunction.
- Do not operate this product until the LCD panel has completely opened or closed. If this product is operated while the LCD panel is opening or closing, the LCD panel may stop at that angle for safety.
- Do not place a glass or can on the open LCD panel. Doing so may break this product. 

Adjusting the LCD panel angle

F60DAB

1 Press the button.

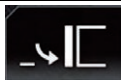
The following screen appears.



2 Touch the following keys to adjust the angle of the LCD panel.



Laying the panel down.




Returning the panel to the upright position.

3 Touch the following key.





Returns to the previous screen.

- The adjusted angle of the LCD panel will be memorised and the LCD panel will automatically return to that angle the next time the LCD panel is opened or closed. 

Inserting/ejecting/connecting media

⚠ CAUTION

- Do not insert anything other than a disc into the disc-loading slot.
- Do not insert anything other than SD memory cards into the SD card slot.
- Ejecting an SD memory card during data transfer can damage the SD memory card. Be sure to eject the SD memory card by the procedure described in this manual.
- Do not press the  button when an SD memory card is not fully inserted. Doing so may damage the card.
- Do not press the  button before an SD memory card has been completely removed. Doing so may damage the card.

Inserting and ejecting a disc

Inserting a disc

F60DAB

1 Press the button.

The following screen appears.



2 Touch the following key.



Opens the LCD panel.

3 Insert a disc into the disc-loading slot.

The disc is loaded, and the LCD panel closes.

Basic operation

Ejecting a disc

F60DAB

1 Press the button.

The following screen appears.



2 Touch the following key.



The LCD panel opens, and the disc is ejected.

3 Remove the disc, and press the button.

The LCD panel closes.

Inserting a disc

F960DAB

- Insert a disc into the disc-loading slot.

Ejecting a disc

F960DAB

- Press the  button.

The disc is ejected.

Inserting and ejecting an SD memory card

- This system is not compatible with the Multi Media Card (MMC).
- Compatibility with all SD memory cards is not guaranteed.
- This product may not achieve optimum performance with some SD memory cards.

Inserting an SD memory card

F60DAB

1 Press the button.

The following screen appears.



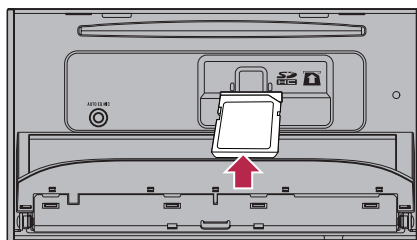
2 Touch the following key.



Opens the LCD panel.

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

Insert it with the label surface face-up and press the card until it clicks and completely locks.



4 Press the button.

The LCD panel closes.

Ejecting an SD memory card

F60DAB

1 Press the button.

The following screen appears.



2 Touch the following key.



Opens the LCD panel.

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

4 Pull the SD memory card out straight.

5 Press the button.

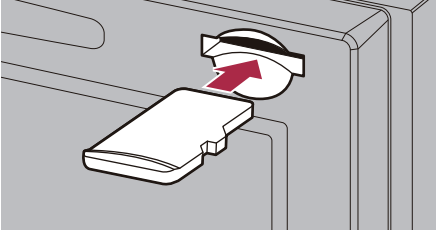
The LCD panel closes.

Inserting an SD memory card

F960DAB

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

Insert the SD memory card with the terminal contacts face-down, and press the card until it clicks and locks completely.



Ejecting an SD memory card

F960DAB

- 1 Press the middle of the SD memory card gently until it clicks.
- 2 Pull the SD memory card out straight.

Connecting and disconnecting an iPod

Connecting your iPod

- ➔ For details of the connections, refer to the Installation Manual.

Disconnecting your iPod

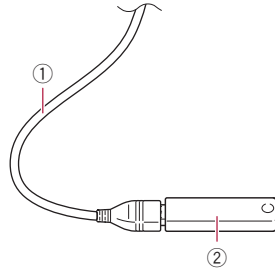
- Pull out the cables after confirming that no data is being accessed.

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.

Plugging in a USB storage device

- 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

Unplugging a USB storage device

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

Startup and termination

- 1 **Start the engine to boot up the system.**
After a short pause, the splash screen comes on for a few seconds.
- 2 **Turn off the vehicle engine to terminate the system.**
This product is also turned off.

On first-time startup

When you use this product for the first time, select the language that you want to use.

- 1 **Start the engine to boot up the system.**
After a short pause, the splash screen comes on for a few seconds.
The “**Select Program Language**” screen appears.
- 2 **Touch the language that you want to use on screen.**

Basic operation

3 Touch the following key.



Displays the "Smartphone Setup" screen.

4 Touch the item you want to set.

- ➔ For details, refer to *Information on the connections and functions for each device* on page 71.

5 Touch the following key.





Displays the "DAB ANTENA POWER SETTING" screen.

6 Touch the setting item according the DAB aerial to be used.

- **Yes** (default):
Supplies power to a Digital Radio aerial. Select when using the optional Digital Radio aerial (AN-DAB1) (sold separately) with this product.
- **No**:
Does not supply power. Select when using a passive aerial with no booster.

7 Touch [OK].

The Top menu screen appears.

- If you touch , the display returns to the previous screen. .

Regular startup


● Start the engine to boot up the system.

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

- The screen shown will differ depending on the previous conditions.
- If the anti-theft function is activated, you must enter your password.
- The terms appear if the screen displayed last was the navigation screen.
Read the terms carefully, checking the details, and then touch [OK] if you agree to the conditions.
After you touch [OK], the screen that was displayed just before turning off the ignition switch (ACC OFF) is displayed.

A message about the map database

After you start using this product, a message related to map data may be displayed.


- This message is displayed the first time you turn on this product each month. .

Turning off the display

You can turn off the display at night or when the screen is too bright.

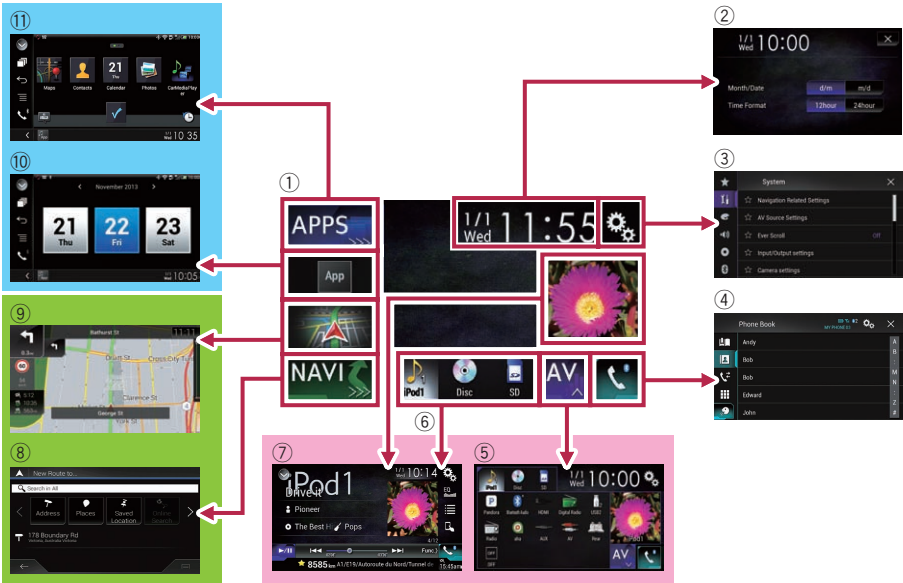
● Press and hold the MODE button.

The display turns off.

- If you touch the screen when the display is off, it reverts to the original screen. .

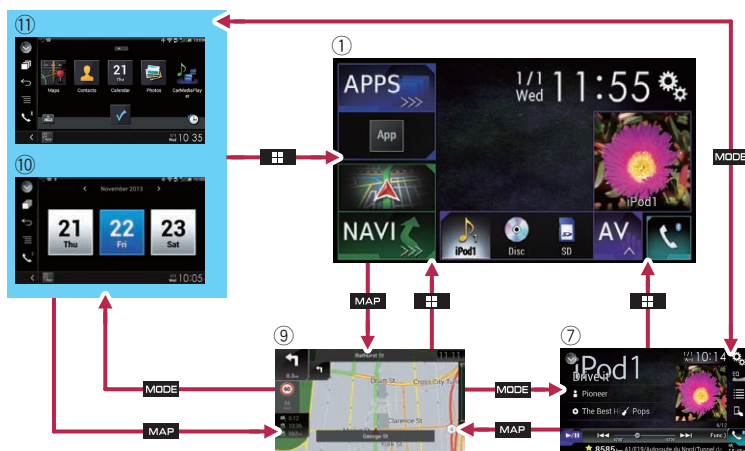
How to use the screens

Switching screens using the touch panel keys



Basic operation

Switching screens using the hardware buttons



① Top menu screen

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

- If you press the **HOME** button, the Top menu screen is displayed.

② Time and date setting screen

You can set the time and date settings.

③ Setting menu screen

You can customise the system and audio settings, etc.

④ Phone menu screen

You can access the screen that is related to hands-free phoning.

⑤ AV source selection screen

You can select the AV source.

⑥ Favourite source icons

You can display the icons of frequently used sources by dragging the icons to the display area.

- ➡ For details of the operation, refer to *Changing the display order of source icons* on page 21.

⑦ AV operation screen

You can customise the settings for each source.

⑧ Navigation menu screen

You can specify way points and a destination.

⑨ Map screen

- You can use this screen to check the current vehicle position information and route to the destination.
- You can customise navigation settings.
- If you press the **MAP** button, the Map screen is displayed.

⑩ Application operation screen

You can control the iPhone or smartphone applications directly on this product.

- If applications are not available, the Application operation screen will not be displayed.

⑪ Application menu screen

This product can switch to the application menu, on which you can display and operate the application for an iPhone or a smartphone on the screen.

- ❑ If application menus are not available, the Application menu screen will not be displayed. ❑

Supported AV source

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

- Digital Radio (DAB)
- Radio (FM, AM)
- CD
- ROM (compressed audio files)
- DVD-Video
- USB
- SD

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

- iPod
- Pandora®
- Aha Radio
- Bluetooth audio
- AV input (AV)
- AUX
- HDMI ❑

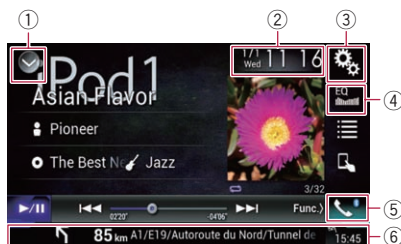
Displaying the AV operation screen

- 1 Press the HOME button to display the Top menu screen.
- 2 Touch the AV operation key.



- ① **AV operation key**

The AV operation screen appears.



- ① **Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the Time and date setting screen.**
 - ➔ For details, refer to *Setting the time and date* on page 181.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
 - ➔ For details, refer to *Using the equaliser* on page 160.
- ⑤ **Displays the Phone menu screen.**
 - ➔ For details, refer to *Displaying the phone menu* on page 61.
- ⑥ **Shows the navigation information.**

The distance to the next guidance point, the name of the street on which the next guidance point is located, the name of the street that the vehicle is currently travelling on, the estimated time of arrival, and warning icons, etc. are displayed.

- ❑ This is not displayed for some sources.
- ❑ This is not displayed when “**Navigation info window**” is set to “**Off**”.
- ➔ For details, refer to *Navigation info window* on page 138.

Selecting a front source on the AV source selection screen

- 1 Press the HOME button to display the Top menu screen.

Basic operation

2 Touch the following key.



Displays the AV source selection screen.

3 Touch the source icon you want to select.

The AV operation screen of the selected source appears.

Selecting a front source on the source list

1 Press the HOME button to display the Top menu screen.

2 Touch the AV operation key.



① AV operation key

The AV operation screen appears.

3 Touch the following key.



Displays the source list.

4 Touch the source key you want to select.

The AV operation screen of the selected source appears.

Selecting a rear source

You can select a source output to the rear display.

➔ For details of the operations, refer to *Selecting the video for the rear display* on page 183.

Turning off the AV source

Turn off the AV source to stop playing or receiving the AV source.

1 Press the HOME button to display the Top menu screen.

2 Touch the following key.



Displays the AV source selection screen.

3 Touch [OFF].

The AV source is turned off.

Changing the display order of source icons

You can change the display order of source icons on the AV source selection screen.

1 Press the HOME button to display the Top menu screen.

2 Touch the following key.



Displays the AV source selection screen.

3 Touch and hold a source icon, and drag the icon to the desired position.

- If the source icon is moved, the order of the source list is also changed.

Changing the display order of source keys

You can change the display order of source keys on the source list.

- 1 Press the **HOME** button to display the **Top menu screen**.
- 2 Touch the **AV operation key**.



① AV operation key

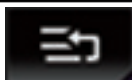
The AV operation screen appears.

- 3 Touch the following key.



Displays the source list.

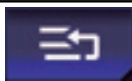
- 4 Touch the following key.



The source keys can be moved.

- 5 Drag the source key to the desired position.

- 6 Touch the following key.



Returns to the previous screen.

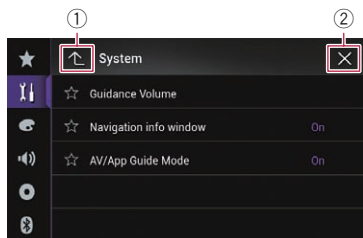
- ❑ If the source key is moved, the source icons displayed on the Top menu screen and the AV source screen are also moved. ❑

Using the touch panel

You can operate this product by touching the marks and items (touch panel keys) displayed on the screen directly with your fingers.

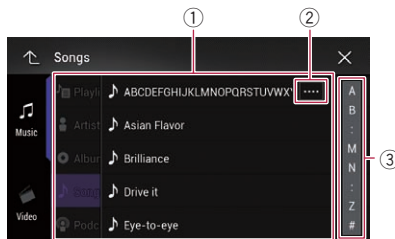
- ❑ To protect the LCD screen from damage, be sure to touch the touch panel keys only with your finger and do so gently.

Using the common touch panel keys



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

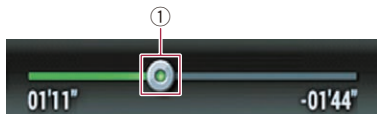
Operating list screens



- 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 of the characters are scrolled for display.
- ③ Appears when items cannot be displayed on a single page only. Drag the scrubber bar to view any hidden items. Also, you can drag the list to view any hidden items.

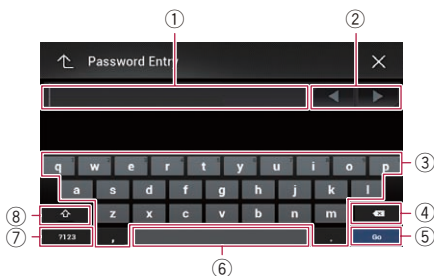
Basic operation

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.

Operating the on-screen keyboard



- ① Displays the characters that are entered. If there is no text in the box, an informative guide with text appears.
- ② Allows you to move the cursor to the right or left for a number of characters equivalent to the number of touches.
- ③ Touching the keys enters the characters in the text box.
- ④ Deletes the input text one letter at a time, beginning at the end of the text. Continuing to touch the key deletes all of the text.
- ⑤ Confirms the entry and allows you to proceed to the next step.
- ⑥ You can leave spaces.
A space equivalent to the number of touches is inserted.
- ⑦ Switches between alphabet and numbers/symbols.
- ⑧ You can switch between capital and lower case letters.

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.

1 Press the HOME button to display the Top menu screen.

2 Touch the following key.



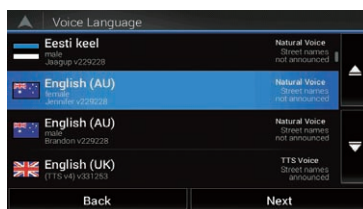
Initiates the initial startup of the navigation system.

- The first time that the **MAP** button is pressed, the navigation system begins its initial startup.

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

The **"Language"** screen appears.

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



- Later you can change it in **"Regional"** settings.
 - For details, refer to *Customising the navigation settings* on page 47.

The **"End User Licence Agreement"** screen appears.

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



The “Usage Reports” screen appears.

5 Touch [Yes].

The software collects usage information and GPS logs that may be used for improving the application and the quality and coverage of maps.

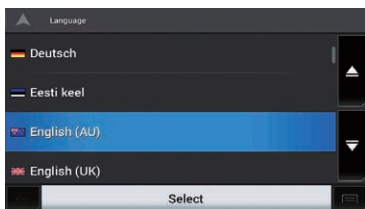
- Later you can turn them on or off individually in the “Usage Reports” menu.
 - ➔ For details, refer to *Customising the navigation settings* on page 47.

The configuration wizard starts.

6 Touch [Next].

The “Voice Language” screen appears.

7 Select the language that you want to use for voice guidance messages, then touch [Next].



- Later you can change it in “Regional” settings.
 - ➔ For details, refer to *Customising the navigation settings* on page 47.

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

- Later you can change it in “Regional” settings.
 - ➔ For details, refer to *Customising the navigation settings* on page 47.

The “Route Preferences” screen appears.

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


- Later you can change it in “Route Preferences” settings.
 - ➔ For details, refer to *Customising the navigation settings* on page 47.

10 Touch [Activate], then [Next].

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

- You will need to install the **AVICSYNC App** on your iPhone or smartphone first in order to be able to use online services, which require a subscription. The service coverage for each online service may vary depending on the content provider providing the service.
 - ➔ For details, refer to “Connected Services” settings on page 53.

11 Select 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. 

How to use the Navigation menu screen

Operating the Navigation menu screen

1 Press the MAP button.

The Map screen appears.

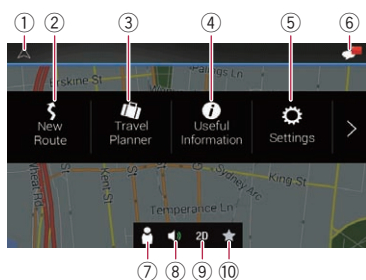
2 Touch the following key.



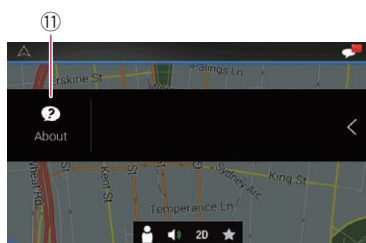
Displays the navigation menu on the Map screen.

The following screen appears.

Touch panel keys (Page 1)



Touch panel keys (Page 2)



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

- ① Returns to the Map screen.
- ② Searches for your destination by entering an address, its coordinate, or selecting a place of interest, etc.
 - ➔ For details, refer to Chapter 5.
- ③ Builds your route using the list of destinations.
 - ➔ For details, refer to *Building a route using "Route Planner"* on page 41.
- ④ Displays useful information to support your driving.
 - ➔ For details, refer to Chapter 9.

- ⑤ Configures the programme settings.
 - ➔ For details, refer to Chapter 10.
- ⑥ Sees notifications that contain important information for the users.
- ⑦ Displays the "Driver Profiles" screen where you can create new profiles or edit the existing profiles.
 - If more 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.
- ⑧ Mutes the sound of the navigation system (the voice guidance, or beep sounds, for example).
- ⑨ Switches among 2D, 3D, or 2D North up view modes.
- ⑩ Displays the location where you saved as a favourite.
 - ➔ For details, refer to *Selecting a destination from stored locations* on page 34.
- ⑪ Displays the information of your navigation system (the version information, or licences, for example).
 - ❑ When you are navigating a planned route, the following route-related keys are available.



Displays route alternatives, parts of the route to avoid, or specific roads in your planned route to avoid.



Displays the route in its full length on the map, and displays route parameters and route alternatives.



Adds a waypoint.



Removes a waypoint.

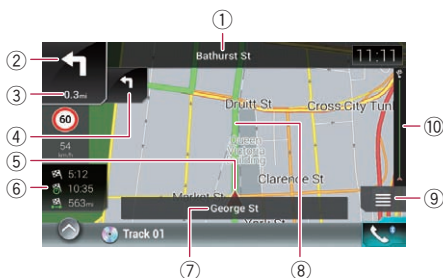


Deletes your route.



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



- ❑ Information with an asterisk (*) appears only when the route is set.
- ❑ Depending on the conditions and settings, some items may not be displayed.
- ❑ The AV information is displayed in the bottom of the Map screen.
- ❑ You can decide whether you want to see the speed limit sign on the map all the time. If you exceed the speed limit, the sign colour is changed.
- ➔ For details, refer to “Warnings” settings on page 50.
- ① Shows the number and name of the street to be used (or next guidance point).*
- ② Shows the next guidance point (manoeuvre).* Both the type of the event (turn, roundabout, exiting motorway, etc.) and its distance from the current position are displayed. A smaller icon shows the type of the second next manoeuvre if it is near the next manoeuvre.
 - ➔ For details, refer to *Frequently shown route events* on page 26.
- ③ Shows the distance to the next guidance point (manoeuvre).*
- ④ Shows the second manoeuvre arrow.*
- 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.
- ⑥ Displays the data field.

Touching this field displays route information during navigation.

- ➔ For details, refer to *Browsing the data field* on page 27.
- ⑦ Shows the name of the street (or city) that your vehicle is travelling on (or in).
- ⑧ Indicates the current route.*
The route currently set is highlighted in colour on the map.
- ⑨ Displays the Navigation menu screen.
- ⑩ Indicates the progress to the final destination.* ❑

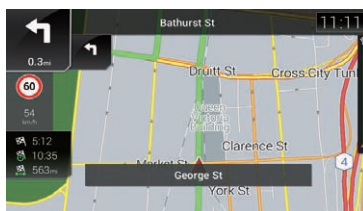
Frequently shown route events

Icon	Meaning
	Turn left.
	Turn right.
	Turn back.
	Bear right.
	Turn sharp left.
	Keep left.
	Continue straight in the intersection.
	Go left on the roundabout, 3rd exit (next manoeuvre).
	Enter roundabout (second next manoeuvre).

How to use the map

Icon	Meaning
	Enter motorway.
	Exit motorway.
	Board ferry.
	Leave ferry.
	Approaching a waypoint.
	Approaching the destination.

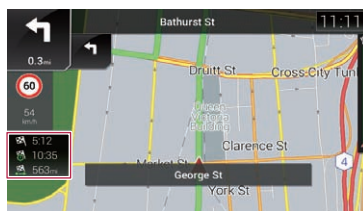
When GPS position is available, the arrow mark is displayed in full colour, now showing your current position.



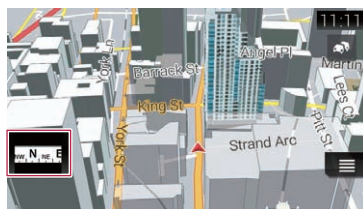
Browsing the data field

The data fields are different when you are navigating the current route and when you have no specified destination. 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



- When the route is not set:



- You can change the value by touching and holding any of the fields.

Seeing the current position on the map

The Map screen shows the current position, recommended route and surrounding map area.

When there is no GPS position, the arrow mark is transparent. It shows your last known position.



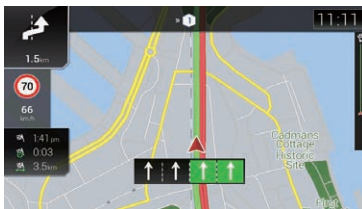
- ❑ The estimated time of arrival is an ideal value calculated based on the value set for “**Max. Speed**” and the actual driving speed. The estimated time of arrival is only a reference value, and does not guarantee arrival at that time. ❑

Configuring the driving display

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

If there is lane information available in the map data, the navigation system will display the lanes and corresponding directions of travel at the bottom of the map using small arrows. Highlighted arrows represent the lane and direction that you need to take for the recommended route.

Lane information



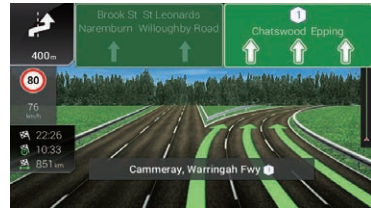
Signs display at the top of the map. Sign colours and design styles are similar to those of the actual signs in place above or along the indicated roads. These signs display select destinations and the road number of the road that the relevant lane leads to.

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

Signposts



Junction view



- ❑ 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.

An icon showing a petrol station or a restaurant will appear on the map during you are driving on motorways. Touch the icon to open the details of the next few exits or service stations.

- ❑ You can add any of them as a waypoint to your route.
- ❑ If you want to display other types of POIs for the exits, you can change the icons in “**Navigation Map**”.
- ➔ For details, refer to “*Navigation Map*” settings on page 51. ❑

How to use the map

Operating the Map screen

Changing the scale of the map

You can change how much of the map is displayed on the screen with street names and other text displayed in the same font size.

1 Press the MAP button.

The Map screen appears.

2 Touch anywhere on the map during navigation.

The map stops following the current position and control keys appear.

3 Touch the following key to change the map scale.



Zooms in.



Zooms out.

- You can also pinch to zoom in or out.
- Map scaling has a limit in 3D map view mode. If you zoom out further, the map switches to 2D view mode.
- ➔ For details, refer to *Switching between 2D, 3D, and 2D North up views* on page 29.

4 Touch the following key.



Returns to the Map screen.

- If you press the **MAP** button, you can return to the Map screen.

Smart Zoom

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

- When the route is set:
When approaching a turn, it will zoom in and raise the view angle to let you easily re-

cognise your manoeuvre 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 shows your vehicle's direction between “Heading up” and “North up”.

- Heading up:
The map display always shows the vehicle's direction as proceeding toward the top of the screen.
- North up:
The map display always has north at the top of the screen.
- The map orientation is fixed at “Heading up” when the 3D map screen is displayed.

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch the following key.



Displays the map in 2D view mode.



Displays the map in 3D view mode.



Displays the map in 2D North up view mode.

Each time you touch the key the setting changes.

How to use the map

4 Touch the following key.



Returns to the Map screen.

- If you press the **MAP** button, you can return to the Map screen.

Changing the view angle of the map

You can change the view angle of the map horizontally or vertically.

- You can change the vertical view angle of the map in 3D mode only.
- ➔ For details, refer to *Switching between 2D, 3D, and 2D North up views* on page 29.

1 Press the MAP button.

The Map screen appears.

2 Touch anywhere on the map during navigation.

The map stops following the current position and control keys appear.

3 Touch the following key to change the view angle of the map.



Tilts up.



Tilts down.



Rotates left.



Rotates right.

- Touching the key once modifies the view in large steps and touching and holding the key modifies it continuously and smoothly.

4 Touch the following key.



Returns to the Map screen.

- If you press the **MAP** button, you can return to the Map screen.

Scrolling the map to the position you want to see

1 Press the MAP button.

The Map screen appears.

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

- Positioning the cursor to the desired location results in a brief information overview about the location being displayed at the top of the screen, with street name and other information for this location being shown.
- The scrolling increment depends on your dragging length.

3 Touch the following key.



Returns to the Map screen.

- If you press the **MAP** button, you can return to the Map screen.

Searching for and selecting a location

CAUTION

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

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

Searching for a location by address

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

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

1 Press the **MAP** button.

The Map screen appears.

2 Touch the following key.



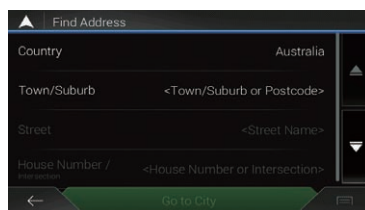
Displays the navigation menu on the Map screen.

3 Touch **[New Route]**.

The “**New Route to...**” screen appears.

4 Touch **[Address]**.

The “**Find Address**” screen appears.



5 Touch the following key and set the destination you are looking for.

- **Country:**
By default, your navigation system proposes the country where you are.
- **Town/Suburb:**
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 centre of the selected city/town becomes the destination of the route.
- **House Number / Intersection:**
This key will be active after you have set a street. If the house number is not available, touch **[Go to Street]** and select the street. This way the centre 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.

6 Touch **[Select as Destination]**.

After a short summary of the route parameters, a map appears showing the entire route. The route is automatically calculated.

- ❑ If needed, you can change some of the route setting parameters before selecting a destination.
- For details, refer to “*Route Preferences*” settings on page 48.

7 Touch **[Start Navigation]**.

Your navigation system starts the route guidance.

- ❑ If needed, you can select from different route alternatives or change the route planning method before starting navigation.
 - ➔ For details, refer to *Checking route alternatives when planning the route* on page 39. ❑

Searching for Points of Interest (POI)

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

Searching for POIs using preset categories

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

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [New Route].

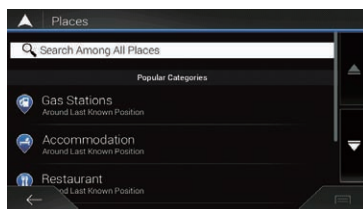
The "New Route to..." screen appears.

4 Touch [Places].

The "Places" screen appears.

The preset search categories are as follows.

- **Petrol Stations Along Route:**
- **Accommodation At My Destination:**
- **Restaurant Along Route:**
- **Parking At My Destination:**



- ❑ When the route is not set, they are searched around the current position.
- ❑ When the current position is not available (either (no GPS signal), they are searched around the last known position.

5 Touch the category you want.

Finally, the results appear in a list.

6 Touch the POI you want.

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.

7 Touch [Select as Destination].

After a short summary of the route parameters, a map appears showing the entire route. The route is automatically calculated.

- ❑ If needed, you can change some of the route setting parameters before selecting a destination.
 - ➔ For details, refer to "Route Preferences" settings on page 48.

8 Touch [Start Navigation].

Your navigation system starts the route guidance.

- ❑ If needed, you can select from different route alternatives or change the route planning method before starting navigation.
 - ➔ For details, refer to *Checking route alternatives when planning the route* on page 39.

Searching for and selecting a location

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.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

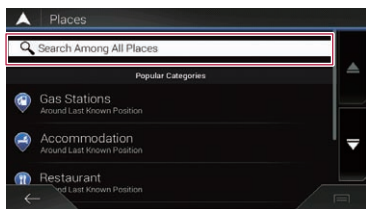
3 Touch [New Route].

The “New Route to...” screen appears.

4 Touch [Places].

The “Places” screen appears.

5 Touch [Search Among All Places].



The “Search by Category” screen appears.

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

- **Around Here:**
Searches around the current position or if it is not available, around the last known position. (The result list will be ordered by the distance from this position.)
- **In a Town/Suburb:**
Searches for a place within a selected city/town. (The result list will be ordered by the distance from the centre of the selected city/town.)

- If you have selected [**In a Town/Suburb**], select the city/town to search in.

- **Around Destination:**

Searches for a place around the destination of the current route. (The result list will be ordered by the distance from the destination.)

- **Along Route:**

Searches along the current route, and not around a given point. This is useful when you search for a later stopover that results in a minimal detour only, such as searching for upcoming petrol stations or restaurants. (The result list will be ordered by the length of the necessary detour.)

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

7 Select one of the main place categories (e.g. Accommodation).

The screen appears showing all places in the selected main category around the selected location or along the route.

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

8 Select one of the place subcategories (e.g. Hotel or Motel).

The screen appears showing all places in the selected subcategory around the selected location or along the route.

Sometimes the list of brands in the selected place subcategory appears.

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

9 Select one brand.

Finally, the results appear in a list.

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

10 Touch the POI you want.

The searched location appears on the Map screen.

- Touch [**Search by Name**] and enter the name of the place using the keyboard if you have not done it before.
- If you touch , you can sort the results.

11 Touch [Select as Destination].

After a short summary of the route parameters, a map appears showing the entire route. The route is automatically calculated.

- If needed, you can change some of the route setting parameters before selecting a destination.
 - ➔ For details, refer to *“Route Preferences” settings* on page 48.

12 Touch [Start Navigation].

Your navigation system starts the route guidance.

- If needed, you can select from different route alternatives or change the route planning method before starting navigation.
 - ➔ For details, refer to *Checking route alternatives when planning the route* on page 39.

Searching for providers nearby that offer emergency or roadside assistance services

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

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.

Displays the navigation menu on the Map screen.

3 Touch [Useful Information].

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

4 Touch [Help Nearby].

The **“Help Nearby”** screen appears.

The preset search categories are as follows.

- **Car Repair:**
- **Health:**
- **Police:**
- **Petrol Stations:**

**5 Touch the category you want.**

Finally, the results appear in a list.

6 Touch the POI you want.

The searched location appears on the Map screen.

- If you touch you can sort the results.

7 Touch [Select as Destination].

After a short summary of the route parameters, a map appears showing the entire route. The route is automatically calculated.

- If needed, you can change some of the route setting parameters before selecting a destination.
 - ➔ For details, refer to *“Route Preferences” settings* on page 48.

8 Touch [Start Navigation].

Your navigation system starts the route guidance.

- If needed, you can select from different route alternatives or change the route planning method before starting navigation.
 - ➔ For details, refer to *Checking route alternatives when planning the route* on page 39.

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.

Searching for and selecting a location

- ❑ This function is available if locations have been registered in **"Saved Location"**.
 - ➔ For details, refer to *Storing a location in "Saved Location"* on page 43.

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.




Displays the navigation menu on the Map screen.

3 Touch [New Route].

The **"New Route to..."** screen appears.

4 Touch [Saved Location].

The **"Saved Location"** screen appears.

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

5 Touch the entry you want.

The searched location appears on the Map screen.


6 Touch [Select as Destination].

After a short summary of the route parameters, a map appears showing the entire route. The route is automatically calculated.

- ❑ If needed, you can change some of the route setting parameters before selecting a destination.
 - ➔ For details, refer to *"Route Preferences" settings* on page 48.

7 Touch [Start Navigation].

Your navigation system starts the route guidance.

- ❑ If needed, you can select from different route alternatives or change the route planning method before starting navigation.
 - ➔ For details, refer to *Checking route alternatives when planning the route* on page 39. 

Selecting a destination from stored routes

Storing routes you set frequently saves time and effort.

- ❑ This function is not available if no routes have been registered in **"Saved Routes"**.
 - ➔ For details, refer to *Storing a route in "Saved Routes"* on page 43.

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [New Route].

The **"New Route to..."** screen appears.

- This screen has several options. Touch  to see the full list.

4 Touch [Saved Routes].

The **"Saved Routes"** screen appears.

5 Touch the entry you want.

The **"Route Planner"** screen appears.

- ❑ You can add waypoints or change the final destination on the **"Route Planner"** screen.
 - ➔ For details, refer to *Checking route alternatives when planning the route* on page 39.


6 Touch [Show Route].

After a short summary of the route parameters, a map appears showing the entire route. The route is automatically calculated.

- ❑ If needed, you can change some of the route setting parameters before selecting a destination.
 - ➔ For details, refer to *"Route Preferences" settings* on page 48.

7 Touch [Start Navigation].

Your navigation system starts the route guidance.

- ❑ If needed, you can select from different route alternatives or change the route planning method before starting navigation.
 - ➔ For details, refer to *Checking route alternatives when planning the route* on page 39. 

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.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [New Route].

The “New Route to...” screen appears.

4 Touch [History].

The list of recent destinations appears.

5 Touch the entry you want.

The searched location appears on the Map screen.

6 Touch [Select as Destination].

After a short summary of the route parameters, a map appears showing the entire route. The route is automatically calculated.

- ❑ If needed, you can change some of the route setting parameters before selecting a destination.
 - ➔ For details, refer to *“Route Preferences” settings* on page 48.


7 Touch [Start Navigation].

Your navigation system starts the route guidance.

- ❑ If needed, you can select from different route alternatives or change the route planning method before starting navigation.
 - ➔ For details, refer to *Checking route alternatives when planning the route* on page 39.

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.

Two of the 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.

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.

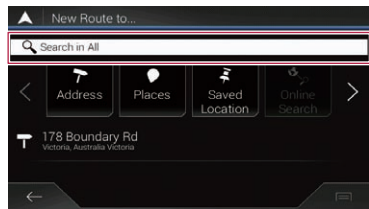


Displays the navigation menu on the Map screen.

3 Touch [New Route].

The “New Route to...” screen appears.

4 Touch [Search in All].



The “Combined Search” screen appears.

Searching for and selecting a location

You can see the text box at the top of the screen. Right next to it you can see the search area which is the city/town where the search is carried out. The default search area is the area where you are located.

To search in a different area, touch the default search area and enter the name of the new search area using the keyboard.

5 Enter the name, address, or category of the destination you are looking for, then touch the following key.



Displays the **"Search Results"** screen.

6 Touch the entry you want.

The searched location appears on the Map screen.

- Touching the following search categories allows you to narrow down the search results:



Displays the list of all destinations with a matching name or address.



Displays the list of recent destinations with a matching name or address.



Displays the list of your saved location destinations with a matching name.



Displays the list of matching addresses.



Displays the list of place categories.



Displays the list of matching places ordered by their distance from your current location.

- If you touch a provider logo as the search category, you can further narrow the list by showing the results from the provider.


7 Touch [Select as Destination].

After a short summary of the route parameters, a map appears showing the entire route. The route is automatically calculated.

- If needed, you can change some of the route setting parameters before selecting a destination.
- For details, refer to *"Route Preferences" settings* on page 48.

8 Touch [Start Navigation].

Your navigation system starts the route guidance.

- If needed, you can select from different route alternatives or change the route planning method before starting navigation.
- For details, refer to *Checking route alternatives when planning the route* on page 39. 

Searching for a location by coordinates

Entering a latitude and longitude pinpoints the location.

1 Press the MAP button.

The Map screen appears.


2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [New Route].


The **"New Route to..."** screen appears.

- This screen has several options. Touch  to see the full list.

4 Touch [Coordinates].

The **"Coordinates"** screen appears.

5 Enter the latitude value and touch [OK].

- You can enter the latitude and longitude values in any of the following formats: Decimal degrees; degrees and decimal minutes; or degrees, minutes and decimal seconds.
- When entering the coordinate in UTM format, touch , then [Units & Formats].

6 Enter the longitude value and touch [Go!].

The searched location appears on the Map screen.


7 Touch [Select as Destination].

After a short summary of the route parameters, a map appears showing the entire route. The route is automatically calculated.

- If needed, you can change some of the route setting parameters before selecting a destination.
 - ➔ For details, refer to “Route Preferences” settings on page 48.

8 Touch [Start Navigation].

Your navigation system starts the route guidance.

- If needed, you can select from different route alternatives or change the route planning method before starting navigation.
 - ➔ For details, refer to *Checking route alternatives when planning the route* on page 39. 

3 Touch the location that you want to select as your destination.

The cursor appears.


4 Touch [Select as Destination].

After a short summary of the route parameters, a map appears showing the entire route. The route is automatically calculated.

- If needed, you can change some of the route setting parameters before selecting a destination.
 - ➔ For details, refer to “Route Preferences” settings on page 48.

5 Touch [Start Navigation].

Your navigation system starts the route guidance.

- If needed, you can select from different route alternatives or change the route planning method before starting navigation.
 - ➔ For details, refer to *Checking route alternatives when planning the route* on page 39. 

Searching for a location by scrolling the map

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

1 Press the MAP button.

The Map screen appears.

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

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.

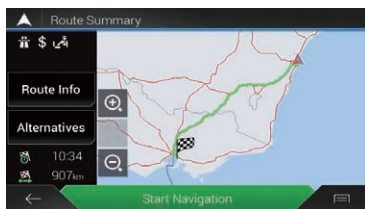
Checking route alternatives when planning the route

You can select from different route alternatives or change the route planning method after you have selected a new destination.

1 Search for a location.

- ➔ For details, refer to Chapter 5.

The “**Route Summary**” screen appears.



2 Touch [Alternatives].

You can see the details of route alternatives. Touch any of them to see it on the map.

- If you cannot find a good alternative, touch [More Results] and scroll down for other alternative routes with different route planning methods.

3 Select one of the route alternatives and touch [Select].

The previous screen returns.

4 Touch [Start Navigation].

Your navigation system starts the route guidance.

Checking route alternatives for an existing route

You can select another route and compare different route alternatives.

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [Detours & Alternatives] then [Alternative Routes].

The “**Alternative Routes**” screen appears. You can see details of route alternatives. Touch any of them to see it on the map.

- If you cannot find a good alternative, touch [More Results] and scroll down for other alternative routes with different route planning methods.

4 Select one of the route alternatives and touch [Select].

Setting a new starting position for the route

For normal navigation, all routes are planned from the current position. In order to check future routes, simulate them or see their length in time and distance, you can turn off the GPS receiver. Then you can set the starting point of the route to a different location than the current GPS position.

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [Route Planner].

The “**Route Planner**” screen appears.

4 Touch [Current GPS Position].

The pop-up menu appears.

5 Touch [Set Start Point].

A confirmation message appears.

6 Touch [Set Start Point].

The “New Route to...” screen appears.

7 Set the starting point of the route.

- ➔ For details, refer to Chapter 5.

8 Touch [Set Start Point].

The “Route Planner” screen appears.

You can continue and add a destination to your route.

- If you touch [Continue Without Route], the Map screen returns with a transparent arrow mark (showing that there is no GPS reception).

9 Touch [Show Route].

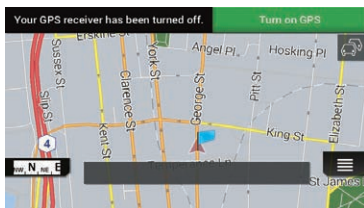
After a short summary of the route parameters, a map appears showing the entire route. The route is automatically calculated.

- ❑ If the current route already existed, it is now recalculated starting from the selected location.

10 Touch [Start Navigation].

Your navigation system starts the route guidance with a transparent arrow mark (showing that there is no GPS reception).

- ❑ If needed, you can select from different route alternatives or change the route planning method before starting navigation.
 - ➔ For details, refer to *Checking route alternatives when planning the route* on page 39.



- ❑ Touch [Turn on GPS] to return normal navigation.

Editing the list of destinations

You can edit the route by modifying the list of destinations (adding a waypoint, or changing a final destination, for example).

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.

Displays the navigation menu on the Map screen.

3 Touch [My Route].

The “My Route” screen appears.

4 Edit the route by modifying the list of destinations.

- ❑ To add the newly selected location as a waypoint to your route, touch [Add Waypoint]. If you have a route with at least one waypoint, you can delete it from the list right from the navigation menu.
- ❑ To edit the route, touch a location from the list. You can move up or down the given route point in the list, and change the newly selected destination at the end of the route.
- ❑ To save or delete a location, touch the location on the list.
- ❑ To delete all the destinations, touch [Delete All].

5 When you are done editing, touch [Show Route].

After a short summary of the route parameters, a map appears showing the entire route. The route is automatically calculated.

6 Touch [Start Navigation].

A map of the current position appears.

Cancelling the current route guidance

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

Checking and modifying the current route

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [Cancel Route].

The current route is deleted with all its waypoints.

Building a route using “Route Planner”

The “**Route Planner**” feature lets you build your route using the list of destinations. You can modify the list as you like (adding or removing a destination, changing a final destination, or setting a new starting position, for example).

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [Route Planner].

The “**Route Planner**” screen appears. There is only one line in the list of route points, the start point of the route, normally the current GPS position.

4 Touch [Add Destination].

You can select the destination of the route.

- For details, refer to Chapter 5.

When the selected location appears on the Map screen, touch [**Select as Destination**] to select the destination and return to the “**Route Planner**” screen.

5 Touch [Show Route].

After a short summary of the route parameters, a map appears showing the entire route. The route is automatically calculated.

- ❑ If needed, you can change some of the route setting parameters before selecting a destination.

- For details, refer to “*Route Preferences settings*” on page 48.

6 Touch [Start Navigation].

Your navigation system starts the route guidance.

- ❑ If needed, you can select from different route alternatives or change the route planning method before starting navigation.

- For details, refer to *Checking route alternatives when planning the route* on page 39.

Checking route information and preferences

You can get a map overview of the current route and check the different parameters of the planned route in “**Route Summary**”.

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [Route Summary].

The “**Route Summary**” screen appears. The current route is displayed in its full length on the map together with additional information and options.

4 Touch any of route information to see its details.

The following pieces of information are displayed:

- The name and/or address of the destination.
- The total time of the route.
- The total length of the route.

The following options are available:

- **Route Info:**

Displays detailed information about the route. There are also additional icons for displaying all detailed information, only motorways, and only toll roads.

- **Alternatives:**

Lists the route alternatives.

Watching the simulation of the route

You can run a simulated navigation that demonstrates the current route. Follow the steps below.

1 Set a route to your destination.

➔ For details, refer to Chapter 5.

2 Press the MAP button.

The Map screen appears.

3 Touch the following key.



Displays the navigation menu on the Map screen.

4 Touch [Route Summary].

The "Route Summary" screen appears.

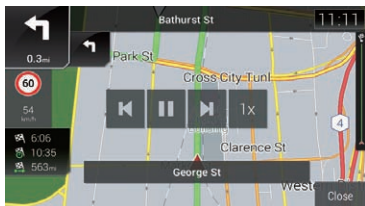
5 Touch the following key.



Displays the list of additional features on the certain screen.

6 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.



- During simulation, you can use the following control keys (they disappear after a few

seconds but you can open them again by touching the map).



Jumps to the previous guidance point (manoeuvre).



Pauses the simulation.



Jumps to the next guidance point (manoeuvre).



Increases the speed of the simulation to four, eight or 16 times faster. Touching the key again returns to the normal speed.

- Touch [Close] to stop the simulation. □

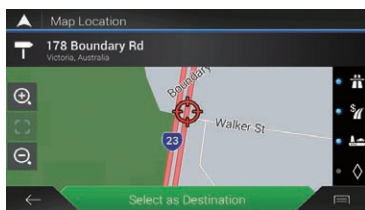
Registering and editing locations and routes

Storing a location in “Saved Location”

Storing your favourite 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, favourite places, destinations you have already registered and any location on the map.

1 Search for a location.

The cursor appears at the selected point.



➔ For details, refer to Chapter 5.

2 Touch the following key.



Displays the list of additional features on the certain screen.

3 Touch [Save Location].

The “**Save Location**” screen appears.

4 Touch the following key.



Saves the location as a new “**Saved Location**”.

- To change the name, use the keyboard.

Storing a route in “Saved Routes”

Storing your favourite 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.

➔ For details, refer to Chapter 5.

2 Press the MAP button.

The Map screen appears.

3 Touch the following key.



Displays the navigation menu on the Map screen.

4 Touch [Route Summary].

The “**Route Summary**” screen appears.

5 Touch the following key.



Displays the list of additional features on the certain screen.

6 Touch [Save Route].

The “**Save Route**” screen appears.

7 Touch the following key.



Saves the route as a new route under “**Saved Routes**”.

A confirmation message appears.

- To change the name, use the keyboard.

Saving a location as an alert point

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

Alert points are preloaded in your navigation system.

- To use this function, activate the warnings beforehand and set the alert types.
- This feature can warn you when you approach one of these points. The following alert types are available:
 - **Audio and Visual:** A sound beeps or announces the type of the alert.
 - **Visual:** The type of the alert point, its distance and the related speed limit appear on the map.

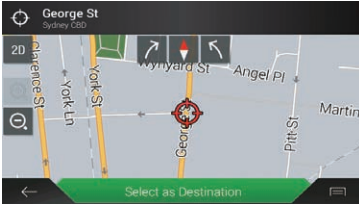
➔ For details, refer to “*Warnings*” settings on page 50.

1 Press the MAP button.

The Map screen appears.

2 Scroll the map and select a location.

The cursor appears at the selected point.



3 Touch the following key.



Displays the list of additional features on the certain screen.

- To edit a previously saved alert point, touch



4 Touch [Add Alert Points].

The “Add New Alert Point” screen appears.

5 Set the necessary parameters.

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

6 Touch [Save].

The location is saved as a new alert point.

- ➔ For details, refer to “Warnings” settings on page 50.
- ☐ The warning for road safety cameras (like speed cameras) is disabled when you are in certain countries where road safety camera warning is prohibited. However, you are fully responsible for ensuring that this feature is legal in the country where you intend to use it.

Using traffic information

Receiving real-time traffic information (TMC)

The Traffic Message Channel (TMC) provides real-time traffic reports. Your device is equipped with the required TMC receiver needed for receiving reports on traffic incidents. To enable the TMC receiver, complete the below steps.

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

- This screen has several options. Touch to see the full list.

3 Touch [Settings].

The “**Settings**” screen appears.

4 Touch [Traffic].

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

5 Touch [Traffic] to turn the switch on.

The feature is enabled.

- ➔ For details, refer to “*Traffic*” settings on page 53.
- When traffic information that may affect your route is received, this system will warn you that it is recalculating the route, and navigation will continue with a new route that is optimal considering the most up-to-date traffic conditions.
- TMC is not a global service. It may not be available in your country or region. Ask your local dealer for coverage details.

To fine-tune this calculation, you can set the minimum delay that can trigger a route recalculation, or you can instruct the software to have you confirm the new recommended route before it takes effect.

Checking the traffic incidents on the map

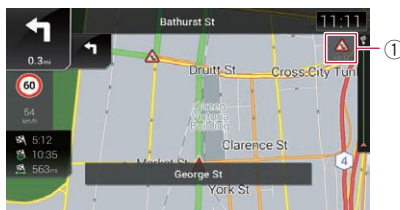
You can check the details of traffic incidents on the map.

- Road segments affected by traffic incidents are displayed with an alternate colour on the map, and small symbols above the road show the nature of the incident.
- A special icon appears on the Map screen to show you whether traffic incidents are being received. The icon shows the status of the traffic receiver when there are no traffic incidents on your route; otherwise when there is an event on your route, the traffic icon displayed on the Map screen shows the type of the next traffic event on your route.

1 Press the MAP button.

The Map screen appears.

2 Touch the relevant traffic event icon.



- ① Traffic event icon

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

3 Touch [Traffic Events].

The list of all events appears.

- To check real-time traffic information on the map, touch **[Traffic Map]**.

4 Touch any of the items to see its details.

Checking useful information

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

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [Useful Information].

The **"Useful Information"** screen appears.

4 Touch the desired menu item.

- **Parking:**
Checks car parks near your destination.
- **Traffic:**
Displays **"Traffic Summary"** screen where you can check the traffic events that affect your route.
- **Weather:**
Checks the weather forecast for your current location, along your route, around your destination, as well as for your saved locations.
- **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.
 - If the current street is displayed below the current position marker on the map, touch it to open the **"Where Am I?"** screen. When you are driving without a planned route, touch the current street or the arrows at the top section of the Map screen to open the **"Where Am I?"** screen.
The screen provides the following information:
 - Latitude and longitude (coordinate of the current position in WGS84 format)
 - Address details of the current position (when available)

- The nearest city
- Next crossing road/street
- Previous crossing road/street
- To save the current position as a **"Saved Location"** destination, touch .
 - ➔ For details, refer to *Storing a location in "Saved Location"* on page 43.

• Help Nearby:

Checks POIs in your surroundings.

The preset search categories are as follows.

— **Car Repair:**

— **Health:**

— **Police:**

— **Petrol Stations:**

• Trip Monitor:

Checks the statistical data of your trips (for example, start time, end time, average speed, etc.). Touch **[Start New Recording]** to start a new recording or turn on automatic recording in **"Settings"**.

➔ For details, refer to *"Trip Monitor" settings* on page 53.

• GPS Information:

Displays the GPS information screen with satellite position and signal strength information.

Customising preferences of the navigation

Customising the navigation settings

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


1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

- This screen has several options. Touch  to see the full list.

3 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.
➤ For details, refer to “*Route Preferences*” settings on page 48.
- **Sound:**
Adjusts the different sound volumes and changes the voice guidance profile.
➤ For details, refer to “*Sound*” settings on page 49.
- **Warnings:**
Enables or disables warnings and sets up the warning function.
➤ For details, refer to “*Warnings*” settings on page 50.
- **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.
➤ For details, refer to “*Navigation Map*” settings on page 51.
- **Regional:**
Changes the voice guidance language, the application language, and measurement units.
➤ For details, refer to “*Regional*” settings on page 53.
- **Display:**
Sets separate themes for daytime and nighttime use, adjusts the display backlight, and enables or disables menu animations.
➤ For details, refer to “*Display*” settings on page 53.
- **Traffic:**
Enables or disables the TMC receiver and sets up the traffic function.
➤ For details, refer to “*Traffic*” settings on page 53.
- **Weather:**
Enables or disables the online weather forecast option and the automatic download of weather information.
➤ For details, refer to “*Weather*” settings on page 53.
- **Trip Monitor:**
Turns automatic trip log saving on or off and checks the current size of the trip database.
➤ For details, refer to “*Trip Monitor*” settings on page 53.
- **Connected Services:**
Enables or disables the connected services.
 You will need to install the **AVICSYNC App** on your iPhone or smartphone first in order to be able to use online services, which require a subscription. The service coverage for each online service may vary depending on the content provider providing the service.
➤ For details, refer to “*Connected Services*” settings on page 53.
- **Usage Reports:**
Enables or disables the collection of usage information and GPS logs that may be used for improving the application and the quality and coverage of maps.
➤ For details, refer to “*Usage Reports*” settings on page 54.
- **Start Configuration Wizard:**
Modifies the basic software parameters used during the initial setup process.
➤ For details, refer to “*Start Configuration Wizard*” settings on page 54.

Restoring the default settings

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


1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

▪ This screen has several options. Touch  to see the full list.

3 Touch [Settings].

The “Settings” screen appears.

4 Touch the following key.



Displays the list of additional features on the certain screen.

5 Touch [Clear User Data].

A confirmation message appears.

6 Touch [Clear User Data].

The recorded contents are cleared. 

Information on each option of “Settings”

“Route Preferences” settings

Vehicle

You can set the type of vehicle you will use to navigate the route. When you first touch this key, you see the list of default vehicle profiles. When creating a new vehicle profile, select one of the vehicle types.

• Car:

- Manoeuvre 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 manoeuvres 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 low speeds.
- Only private roads that need to be used to access the destination are included.
- Walkways are excluded from routes.

• Bus:

- Manoeuvre 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:

- Manoeuvre 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:

- Manoeuvre 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).
- Route planning can also be configured to incorporate dimension, weight, and freight hazard restrictions for maps that contain such data.

Customising preferences of the navigation

- To edit the parameters 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 parameters (some of them may not exist for the selected vehicle type).

Route Planning Method

You can change the route planning method. The route calculation can be optimised 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 manoeuvres. With this option, you can make this system to take, for example, the motorway instead of a series of smaller roads or streets.
- **Short**
Calculates the route with the shortest distance to the destination as the 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 quick and save fuel.

Off-road Navigation

You can enable or disable off-road navigation which navigates between destinations in a straight line.

Motorways

You can decide whether to avoid motorways when you are driving a slow car or you are towing another vehicle.

Period Charge

You can select whether to include toll roads with restricted time access that allow 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 toll road usage option.

Per-use Toll

You can decide whether to include toll roads where there is a per-use charge. The navigation system includes toll roads by default.

Ferries

You can decide whether to include ferries. The navigation system includes ferries by default.

Car Shuttle Trains

You can decide whether to include 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.

Unsealed Roads

You can decide whether to include unpaved roads. The navigation system excludes unpaved roads by default.

“Sound” settings

Master

You can adjust the volume of all sound types.

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 : Numbers and Names

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

Announce Streets and Roads in Foreign Language Area : Numbers and Names

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

Early Indication of Manoeuvres

You can decide whether you want an immediate announcement for the next manoeuvre or to receive the information when the turn 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 manoeuvre.
- **Medium:** Voice instructions are given once as the vehicle approaches the next manoeuvre and it is repeated right before the manoeuvre.
- **Verbose:** Voice instructions are given once relatively far from the next manoeuvre, it is repeated as the vehicle approaches the next turn, and it is repeated again right before the actual manoeuvre.

Announce Route Summary

Whenever a route is calculated, this navigation system can read out the quick summary of the route.

Announce Traffic Info

When a traffic message is received, this navigation system can read out the message.

Announce System Messages

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

“Warnings” settings

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

Speed Warning

• Warn When Speeding

You can decide whether you want to receive visible and/or audible warnings. Adjust the slider to set the relative speed above which the application initiates the warning.

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.

• Speed limit always visible

You can decide whether you want to see the speed limit sign on the map all the time. If you exceed the speed limit, the sign colour is changed.

• Warn at 100 of the Speed Limit (Outside Towns)

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

• Warn at 100 of the Speed Limit (Within Towns)

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

Alert Points

This setting allows you to receive a warning when approaching the alert points like school zones or railroad crossings. You can set an alert for the different alert point categories individually.

The following alert types are available:

Customising preferences of the navigation

- **Audio and Visual:** You receive audible and visible warnings while you are approaching one of these points.

- **Visual:** You receive a visible warning while you are approaching one of these points.

For some of the alert points, the enforced or expected speed limit is available. For these points, the audio alert can be different if you are below or above the given speed limit.

- **Only When Speeding:** The audio alert is only played when you exceed the given speed limit.
- **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.

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.

“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. Three levels are available.
- **Colour Mode**
You can switch between daytime and nighttime colour modes or let the software switch between the two modes automatically a few minutes before sunrise and a few minutes after sunset.
- **Landmarks**
This setting shows or hides 3D landmarks which are 3D artistic or block representations of prominent or well-known objects.
- **Buildings**
This setting shows or hides 3D city models which are 3D artistic or block representa-

tions of full city building data containing actual building sizes and actual positions on the map.

- **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 places to show on the map while navigating. Too many places make the map crowded so it is a good idea to keep as few of them on the map as possible. For this, you have the possibility to save different place visibility settings. You have the following possibilities:

- Touch the name of the place category to open the list of its subcategories.
- Touch  to save the current place visibility settings or to load settings previously saved. Here you can also revert to the default visibility settings.

Data Fields

Touch and hold down this key and then select the values that you wish to have displayed to customise the data fields in the corner of the Map screen. 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 in mind. You can select such options to display as general trip data including the current speed or altitude, route data related to the final destination, and route data related to the next waypoint along the selected route.

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. Waypoints and traffic event markers also display on the line.

Offer Motorway Services

You may need a petrol station or a restaurant during your journey. This feature displays a new key on the map when you are driving on motorways. Touch this key to open a panel with the details of the next few exits or service stations. Touch any of them to display it on the map and add it as a waypoint to your route if needed.

Automatic Overview

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

Facility Types

You can select the service types displayed for the motorway exits. Choose from the POI categories.

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 motorway exit or a complex intersection and the necessary information exists, 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 motorway, there is a chance it is due to traffic jam, so this navigation system offers you a detour using the next exit. The message shows you distance of the exit and the difference in dis-

tance 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 the overview of the original route and the detour to make the decision. You can accept the detour as offered or increase the bypassed motorway segment before accepting.
- Turn to the suggested new direction and the route will be automatically recalculated.

Offer Real-time Route Alternatives

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. But you cannot modify the offered detour.

Offer Parking Around Destination

Parking at the destination may not be easy in city areas. As you approach the destination, this navigation system can offer parking category places near your destination. Touch **P** to open a top-down map with the destination and the offered parking places. Select one and modify the route accordingly.

Offer Hints Upon Detour

If you leave the recommended route and suddenly exit the motorway, this navigation system offers different alternatives near the exit like petrol stations or restaurants. Also, if there are avoidable 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.

Customising preferences of the navigation

“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 shows the current voice guidance profile. By touching the key, you can select a new profile 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 distance units to be used by this system. This system may not support all the listed units in some voice guidance languages. You can also set other country specific units used to display different values in this system.

“Display” settings

Menu Animations

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

“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. This is available only if the receiver is enabled.

Offer Detour if it Saves at Least:

You can set how this navigation system uses the received real-time traffic information in route calculation. When calculating a new route, or when recalculation becomes neces-

sary based on the received traffic events, the system avoids traffic events if it makes sense. You can also set the minimum delay that triggers route recalculation.

Confirm Detours Manually

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

“Weather” settings

Online Weather

You can enable or disable the online weather forecast option.

Auto Download Weather

You can enable or disable the automatic download of the weather forecast.

“Trip Monitor” settings

- “Trip Database Size” shows the current size of the trip database, the sum of all trip logs saved.

Enable Auto-Saving

You can set to enable or disable the automatic recording of statistical data of your trips.

Save Track Log

You can decide whether you want to save track logs, the sequence of the positions given by the GPS receiver. Track logs can be saved together with trip logs and they can later be displayed on the map.

“Connected Services” settings

You can use the “Connected Services” settings to enable or disable connected online features.

- You will need to install the **AVICSYNC App** on your iPhone or smartphone first in order to be able to use online services, which require a subscription. The service coverage for each online service may vary depending on the content provider providing the service.

“Usage Reports” settings

Application Usage Information

You can enable or disable the collection of anonymous statistical information on using this navigation system for later development purposes.

- The collected data is used for improving the user interface and the programme workflow. The data is processed anonymously, and no one will be able to track any personal information.

GPS Tracks

You can set to enable or disable collecting anonymous track logs for later development purposes.

- The collected data is used for improving the quality and coverage of maps. The data is processed anonymously, and no one will be able to track any personal information.

“Start Configuration Wizard” settings

You can use the “**Start Configuration Wizard**” settings to modify the basic software parameters that are to be used during the initial setup process.

Registering and connecting a Bluetooth device

If your devices feature Bluetooth® technology, this product can be connected to your devices wirelessly. This section describes how to set up a Bluetooth connection.

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

Preparing communication devices

This product has a built-in function that enables using devices featuring Bluetooth wireless technology.

➔ For details, refer to *Notes for hands-free phoning* on page 67.

You can register and use devices that feature the following profiles with this product.

- HFP (Hands-Free Profile)
 - A2DP (Advanced Audio Distribution Profile)
 - SPP (Serial Port Profile)
- ❑ When this product is turned off, the Bluetooth connection is also disconnected. When the system restarts, the system automatically attempts to reconnect the previously-connected device. Even when the connection is severed for some reason, the system automatically reconnects the specified device (except when the connection is severed due to device operation).❑

Registering your Bluetooth devices

You need to register your devices featuring Bluetooth wireless technology when you connect it to this product for the first time. A total of three devices can be registered. Two registration methods are available:

- Searching for nearby Bluetooth devices
- Pairing from your Bluetooth devices

- ❑ If three devices are already paired, “**Memory Full**” is displayed and pairing cannot be performed. In such cases, delete a paired device first.
- ➔ For details, refer to *Deleting a registered device* on page 57.

Searching for nearby Bluetooth devices

The system searches for available Bluetooth devices near this product, displays them in a list, and registers them for connection.

- ❑ When the device is already connected, this function is inactive.

1 Activate the Bluetooth wireless technology on your devices.

- ❑ For some Bluetooth devices, no specific action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your devices.

2 Press the HOME button to display the Top menu screen.

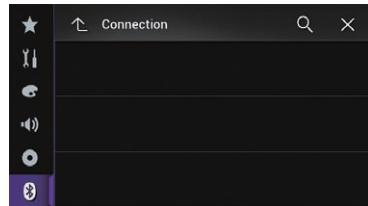
3 Touch the following keys in the following order.



The “Bluetooth” screen appears.

4 Touch [Connection].

The following screen appears.

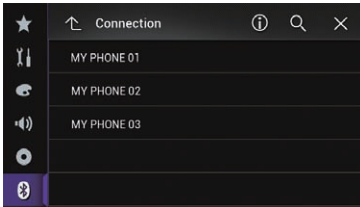


5 Touch the following key.



Starts searching.

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



- Up to 30 devices will be listed in the order that the devices are found.

6 Wait until your Bluetooth device appears in the list.

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

7 Touch the Bluetooth device name you want to register.

While connecting, “**Pairing... Please wait.**” is displayed. If the connection is established, “**Paired.**” is displayed.

- If your device supports SSP (Secure Simple Pairing), a six-digit number appears on the display of this product. Touch [**Yes**] to pairing the device.
- If the connection fails, “**Error**” is displayed. In such cases, try again from the beginning.
- The PIN code is set to “0000” as the default, but can be changed.
 - ➔ For details, refer to *Entering the PIN code for Bluetooth wireless connection* on page 59.
- Once the connection is established, the device name is displayed. Touch the device name to disconnect.

After the device is successfully registered, a Bluetooth connection is established from the system.

The profile icons in the registered device list screen are displayed and illuminated as follows.



Illuminates when your mobile device is successfully connected with the HFP (Hands-Free Profile).



Illuminates when your audio device is successfully connected with the A2DP (Advanced Audio Distribution Profile)/AVRCP (Audio/Video Remote Control Profile).



Illuminates when the Bluetooth connection is established with the SPP (Serial Port Profile).

- After pairing, the phone book registered in the device may be automatically transmitted to this product.
 - If you touch the following key, you can switch the display between the device names and Bluetooth device addresses.



Switches between the device names and Bluetooth device addresses.

Pairing from your Bluetooth devices

You can register a Bluetooth device by setting this product to standby mode and requesting a connection from the Bluetooth device.

- Before registration, make sure that “**Visibility**” in the “**Bluetooth**” menu is set to “**On**”.
- ➔ For details, refer to *Switching visibility* on page 58.

Registering and connecting a Bluetooth device

1 Activate the Bluetooth wireless technology on your devices.

- ❑ For some Bluetooth devices, no specific action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your devices.

2 Use the Bluetooth setting in the device to pair this product with the device.

- ❑ If a PIN code input is required, enter a PIN code. (The default PIN code is "0000".) When the device is successfully registered, the connection settings are made from the device.
- ❑ If registration fails, repeat the procedure from the beginning.

Connecting to a Bluetooth device automatically

If this function is set to on, a connection between your Bluetooth device and this product will take place automatically as soon as the two devices are less than a few metres apart. Initially, this function is set to on.

- ❑ If this function is set to on, a connection with the last connected Bluetooth device will be established automatically when the ignition switch is turned on.

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The "Bluetooth" screen appears.

3 Touch [Auto Connect] repeatedly until the desired setting appears.

- **On** (default):
Turns the automatic connection on.
- **Off**:
Turns the automatic connection off.

If your Bluetooth device is ready for a Bluetooth wireless connection, a connection to this product will automatically be established.

If connection fails, "Auto connection failed. Retry?" appears.

Touch [Yes] to reconnect.

■ To turn automatic connection off, touch [Auto Connect] again.

- ❑ Once the connection is established for the first time, the connection with the device will be established automatically when the ignition switch is turned on from the next time.

Deleting a registered device

When you have already registered three Bluetooth devices and you want to add another one, you must first delete one of the registered devices.

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

CAUTION

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

1 Press the HOME button to display the Top menu screen.

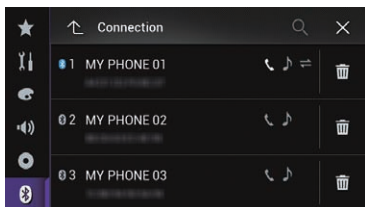
2 Touch the following keys in the following order.



The "Bluetooth" screen appears.

3 Touch [Connection].

The following screen appears.



4 Touch the following key.



Deletes a paired device.

A message prompting you to delete a registered device appears.

5 Touch [Yes].

The device is deleted.

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.

If you wish to start the connection manually, carry out the following procedure.

1 Activate the Bluetooth wireless technology on your devices.

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

2 Press the HOME button to display the Top menu screen.

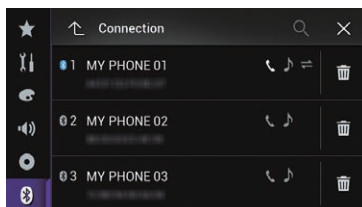
3 Touch the following keys in the following order.



The “Bluetooth” screen appears.

4 Touch [Connection].

The following screen appears.



5 Touch the name of the device that you want to connect.

Switching visibility

This function sets whether or not to make this product visible to the other device. Initially, this function is set to on.

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The “Bluetooth” screen appears.

3 Touch [Visibility] repeatedly until the desired setting appears.

- **On** (default): Turns the visibility on.
- **Off**: Turns the visibility off.

Registering and connecting a Bluetooth device

Entering the PIN code for Bluetooth wireless connection

To connect your Bluetooth device to this product via Bluetooth wireless technology, you need to enter a PIN code on your Bluetooth device to verify the connection. The default code is "0000", but you can change it with this function.

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The "Bluetooth" screen appears.

3 Touch [PIN Code Input].

The "PIN Code" screen appears.

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

5 Touch the following key.



Stores the PIN code in this product.



Displaying the Bluetooth device address

This product can display its Bluetooth device address.


1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The "Bluetooth" screen appears.

3 Touch [Device Information].

The Bluetooth device address is displayed. 

Clearing the Bluetooth memory

This setting is available only when you stop your vehicle in a safe place and apply the handbrake.

CAUTION

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

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The "Bluetooth" screen appears.


3 Touch [Bluetooth Memory Clear].

4 Touch [Clear].

The confirmation screen appears.

5 Touch [OK].

The Bluetooth memory is cleared.

If you do not want to clear the memory, touch [Cancel]. 

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.

- ❑ The source is turned off and the Bluetooth connection is disconnected before the process starts.
- ❑ This setting is available only when you stop your vehicle in a safe place and apply the handbrake.

CAUTION

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

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.




The “Bluetooth” screen appears.

3 Touch [BT Software Update].

4 Touch [Start].

The data transfer screen is displayed.

- ❑ 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, you may be asked to specify the software version. Perform the following procedure to check the version on this unit.

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The “Bluetooth” screen appears.

3 Touch [Bluetooth Version Information].

The version of this product’s Bluetooth module appears. 

Using hands-free phoning

CAUTION

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

If your mobile phone features Bluetooth technology, this product can be connected to your mobile phone wirelessly. Using this hands-free function, you can operate this product to make or receive phone calls. This section describes how to set up a Bluetooth connection and how to operate a mobile phone featuring Bluetooth technology on this product.

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

Displaying the phone menu

Use the Phone icon if you wish to connect a mobile phone to this product for utilisation.

- ➔ For details, refer to Chapter 11.
- ☐ The Phone icon is displayed on the following screens.
 - Top menu screen
 - AV operation screen
 - On the App control side bar on the **AppRadio Mode** and **MirrorLink** screens

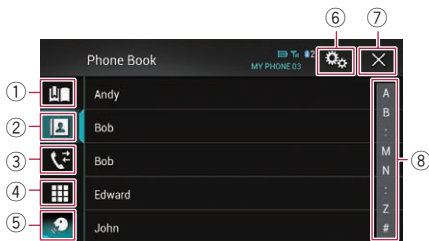
● Touch the following key.



Displays the Phone menu screen.

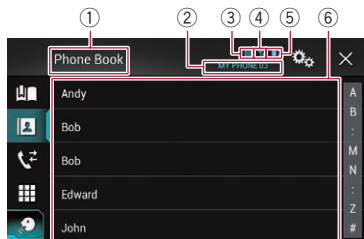
- ☐ The **"Phone Book"** screen appears when using this function for the first time. The screen of the last-used function appears from the next time.

Touch panel keys



- ① Displays the preset dial screen.
- ② Switches to the phone book list.
- ③ Switches to the missed, received and dialled call lists.
- ④ Switches the mode to enter the phone number directly.
- ⑤ Switches to the voice recognition function (for iPhone).
- ⑥ Displays the Setting menu screen.
- ⑦ Closes the screen.
- ⑧ Displays the alphabet search screen.

Reading the screen



- ① Menu title
- ② Name of the connected mobile phone
- ③ Battery status of the mobile phone
- ④ Reception status of the mobile phone
- ⑤ Indicates that a Bluetooth telephone is connected.

The device number of the connected device is displayed.

- ⑥ List display area ☐

Making a phone call

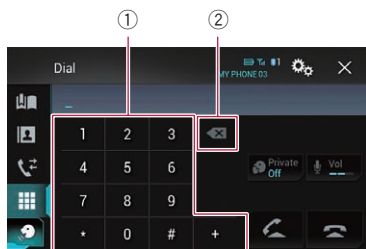
You can make a phone call in many different ways.

Direct dialling

- 1 Press the **HOME** button to display the **Top menu screen**.
- 2 Touch the following keys in the following order.



The "Dial" screen appears.



- ① Dial pad
- ② Deletes one digit. Touch and hold to delete all digits.

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

- 4 Touch the following key.



Makes a call.

- 5 Touch the following key.



Ends the call.

The call ends.

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

Calling a number in the phone book

After finding the number you want to call in the phone book, you can select the entry and make the call.

- The contacts on your phone will normally be transferred to this product automatically when the phone is connected. If it is not, use your phone menu to transfer the contacts. The visibility of this product should be on when you use the "Bluetooth" menu.
 - ➔ For details, refer to *Switching visibility* on page 58.

- 1 Press the **HOME** button to display the **Top menu screen**.

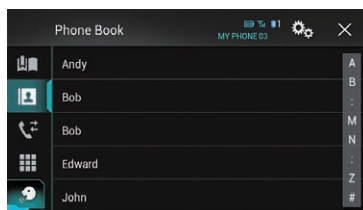
- 2 Touch the following keys in the following order.



The "Phone Book" screen appears.

- 3 Touch the desired name on the list.

The details screen of the phone book appears.



- 4 Touch the phone number you want to dial.

The dial screen appears.

- 5 **Dialling starts.**

- To cancel the call, touch 

- 6 Touch the following key.



Ends the call.

Using hands-free phoning

The call ends.

Selecting a number by alphabet search mode

If a lot of numbers are registered in the phone book, you can search for the phone number by alphabet search mode.

- 1 Press the HOME button to display the Top menu screen.
- 2 Touch the following keys in the following order.



The "Phone Book" screen appears.

- 3 Touch the Initial Search Bar to display the alphabet search screen.

- 4 Touch the first letter of the entry you are looking for.

The "Phone Book" entries starting with that letter (e.g. "Ben", "Brian" and "Burt" when "B" is selected) will be displayed.

- When the system language is set to Russian, the following key appears. If you want to change the character, touch the following key until the desired character repeatedly.



Changes the character.

- 5 Touch the list to display the phone number list of the selected entry.

The details screen of the phone book appears.

- If several phone numbers are included in an entry, select one by touching the list.

- 6 Touch the phone number you want to dial.

The dial screen appears.

- 7 Dialling starts.

- To cancel the call, touch

- 8 Touch the following key.



Ends the call.

The call ends.

Dialling from the history

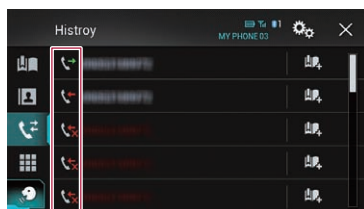
The most recent calls made (dialled, received and missed) are stored in the call history list. You can browse the call history list and call numbers from it.

- 1 Press the HOME button to display the Top menu screen.
- 2 Touch the following keys in the following order.



The "History" screen appears.

- Depending on the type of mobile phone, some calls may not be displayed in the call history.



①

- ① Type of call history



Received calls.



Dialled calls.



Missed calls.

Using hands-free phoning

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

The dial screen appears.

4 Dialling starts.

- To cancel the call, touch 

5 Touch the following key.



Ends the call.

The call ends.

Using the preset dial lists

You can dial a number from the preset dial list.

Registering a phone number

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

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The "Phone Book" or "History" screen appears.

3 Touch the following key.



Registers the phone number to the "Preset Dial" list.

Dialling from the preset dial list

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The "Preset Dial" screen appears.

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

The dial screen appears.

4 Dialling starts.

- To cancel the call, touch 

5 Touch the following key.



Ends the call.

The call ends.

Deleting a phone number

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The "Preset Dial" screen appears.

3 Touch the following key.



Deletes the phone number.



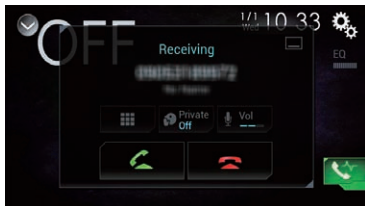
Receiving a phone call

You can perform hands-free answering by using this product.

Using hands-free phoning

Answering an incoming call

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



- ❑ You can set the system to automatically answer incoming calls. If this product is not set to automatically answer incoming calls, you will have to answer the calls manually.
 - ➔ For details, refer to *Answering a call automatically* on page 66.
- ❑ The registered name appears if the phone number of the received call is already registered in “**Phone Book**”.

1 Touch the following key.



Answers an incoming call.



Rejects an incoming call.

The rejected call is recorded in the missed call history list.

- ➔ For details, refer to *Dialling from the history* on page 63.

2 Touch the following key.



Ends the call.

The call ends. ■

Minimising the dial confirmation screen

- ❑ The dial confirmation screen cannot be minimised on the AV operation screen.
- ❑ AV sources cannot be selected even if the dial confirm screen is minimised while talking on the phone.

1 Touch the following key.



The dial confirmation screen is minimised.



2 Touch the following key.



Displays the dial confirmation screen again.



Changing the phone settings

Answering a call automatically

This product automatically answers incoming calls to the connected mobile phone, so you can answer calls while driving without taking your hands off the steering wheel.

When “**Auto Answer**” is set to “**On**”, an incoming call will be automatically answered in 5 seconds.

- 1 Press the **HOME** button to display the **Top menu screen**.
- 2 Touch the following keys in the following order.



The “**Bluetooth**” screen appears.

- 3 Touch [**Auto Answer**] repeatedly until the desired setting appears.

- **Off** (default):
Turns the automatic answering off.
- **On**:
Turns the automatic answering on.

Switching the ring tone

You can select whether or not to use this product’s ring tone. If this function is set to on, the ring tone for this product will sound.

- 1 Press the **HOME** button to display the **Top menu screen**.
- 2 Touch the following keys in the following order.



The “**Bluetooth**” screen appears.

- 3 Touch [**Ring Tone**] repeatedly until the desired setting appears.

- **On** (default):
Turns the ring tone on.
- **Off**:
Turns the ring tone off.

Inverting names in the phone book

When your device is connected to this product, the first and last names of your contacts may be registered to the phone book in reverse order.

You can use this function to change the order back. (Inverting the names in the phone book)

- 1 Press the **HOME** button to display the **Top menu screen**.
- 2 Touch the following keys in the following order.



The “**Bluetooth**” screen appears.

- 3 Touch [**Invert Name**].
The confirmation screen appears.

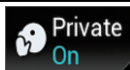
- 4 Touch [**Yes**].
 - If the inversion fails, “**Invert Name Error**” appears. In such cases, try again from the beginning.
 - Inverting the names of your contacts from this product does not affect the data on your Bluetooth device.

Setting the private mode

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

Using hands-free phoning

- Touch the following keys to turn private mode on or off.



Talk directly on your mobile device



Hands-free phoning


Adjusting the other party's listening volume

To maintain good sound quality, this product can adjust the other party's listening volume. If the volume is not loud enough for the other party, use this function.

- Touch the following key.



Switches between the three volume levels.

- This function can be performed even while talking on the phone.
- Settings can be stored for each device. 

Using the voice recognition function (for iPhone)

You can use the voice recognition function of iPhone.

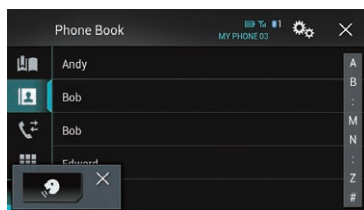
- When an iPhone running iOS 6.1 or higher is used, Siri Eyes Free Mode is available with this product.

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys to start voice control.



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



You can use the voice recognition function in the same way as using it on the iPhone.

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



Indicates that this product is on standby for your voice commands.



Cancels the voice recognition function.

Notes for hands-free phoning

General notes

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

Registration and connection

- Mobile phone operations vary depending on the type of mobile phone. Refer to the instruction manual that came with your mobile phone for detailed instructions.
- With mobile phones, phone book transfer may not work even though your phone is paired with this product. In that case, 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. This may reduce the echo.
- With some mobile phones, even if you press the accept button on the mobile phone when a call comes in, hands-free phoning may not be performed.
- The registered name appears if the phone number of the received call is already registered in the phone book. When one phone number is registered under different names, only the phone number is displayed.
- If the phone number of the received call is not registered in the phone book, the phone number of the received call appears.

The received call and the dialled 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 mobile phone, no history data will be recorded in this product.

Phone book transfers

- If there are more than 800 phone book entries on your mobile phone, not all entries may download completely.
- With some mobile phones, it may not be possible to transfer all items in the phone book at one time. In this case, transfer items one by one from your mobile phone.
- Depending on the mobile phone, this product may not display the phone book correctly. (Some characters may be garbled, or the order of first and last names may be reversed.)
- If the phone book in the mobile phone contains image data, the phone book may not be transferred correctly. (Image data cannot be transferred from the mobile phone.)
- Depending on the mobile phone, phone book transfer may not be available. 

iPod / iPhone or smartphone setup operation

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 described the settings required for each device.

The basic flow of iPod / iPhone or smartphone setup

- ① Select the method for connecting your device.
 - For details, refer to *Setting the device connection method* on page 69.
- ② Connect your device to this product.
 - For details of the connections, refer to the Installation Manual.
- ③ If necessary, connect your device to this product via Bluetooth connection.
 - For details of the Bluetooth connection, refer to Chapter 11.



4 Touch [Smartphone Setup].

The “Smartphone Setup” screen appears.

5 Touch the following settings.

- **Device:** Select the device to be connected.
 - **Connection:** Select the connection method.
 - ☐ Configure the settings correctly according to the device to be connected and the connection method to be used.
 - For details, refer to *Information on the connections and functions for each device* on page 71.
 - ☐ If you change the setting, the confirmation screen appears. Touch **[OK]**.
 - The setting will change after the following processes are automatically executed.
 - The source is turned off.
 - **AppRadio Mode** and **MirrorLink** mode are exited.
 - The smartphone connection (USB and Bluetooth) is disconnected.
- To cancel, touch **[Cancel]**.

Setting the device connection method

If you want to use the application for iPhone or smartphone on this product, you must select the method for connecting your device. Settings are required according to the connected device.

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The “System” screen appears.

3 Touch [Input/Output settings].

iPod compatibility

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

Made for

- iPhone 5s: iOS 7.0.3
- iPhone 5c: iOS 7.0.3
- iPhone 5: iOS 7.0.3
- iPhone 4s: iOS 7.0.3
- iPhone 4: iOS 7.0.3
- iPhone 3GS: iOS 6.0.1
- iPod touch (5th generation): iOS 6.0.1
- iPod touch (4th 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 compatible with this product by using separately sold connector cables.
- Operation methods may vary depending on the iPod model and the software version of the iPod.
- Depending on the software version of the iPod, it may not be compatible with this product.
For details about iPod compatibility with this product, refer to the information on our website.

This manual applies to the following iPod models.

iPod with 30-pin connector

- iPhone 4s
- iPhone 4
- iPhone 3GS
- iPod touch 4th generation
- iPod touch 3rd generation
- iPod touch 2nd generation
- iPod classic 160GB
- iPod classic 80GB
- iPod nano 6th generation
- iPod nano 5th generation
- iPod nano 4th generation
- iPod nano 3rd generation

iPod with Lightning connector

- iPhone 5s
- iPhone 5c
- 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.

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

MirrorLink device compatibility

- This product is compatible with **MirrorLink** version 1.0.
- Compatibility with all **MirrorLink** devices is not guaranteed.

For details about **MirrorLink** device compatibility with this product, refer to the information on our website.

iPod / iPhone or smartphone setup operation

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				
Required cable (sold separately)		Cable connection is not required.	CD-IU201V	CD-IU201S
Smartphone Setup	Device	iPhone/iPod	iPhone/iPod	iPhone/iPod
	Connection	Wireless via BT	USB	USB
Bluetooth connection		Bluetooth connection is required for using aha or Pandora .	—	—
Connection requirement		—	Connect to USB port 1 for using aha or Pandora .	Connect to USB port 1 for using AppRadio Mode .
Available source	iPod (audio)	—	✓	✓
	iPod (video)	—	✓	✓
	aha	✓	✓	✓
	Pandora	✓	✓	✓
	AppRadio Mode	—	—	✓

iPod / iPhone with a Lightning connector				
Required cable (sold separately)		Cable connection is not required.	CD-IU52	<ul style="list-style-type: none"> • CD-IH202 • CD-IU52 • Lightning Digital AV Adapter
Smartphone Setup	Device	iPhone/iPod	iPhone/iPod	iPhone/iPod
	Connection	Wireless via BT	USB	Digital AV adapter
Bluetooth connection		Bluetooth connection is required for using aha or Pandora .	Bluetooth connection is required for using aha or Pandora .	Bluetooth connection is required.
Connection requirement		—	—	Connect to USB port 1 for using AppRadio Mode .
Available source	iPod (audio)	—	✓	—
	iPod (video)	—	—	—
	aha	✓	✓	✓
	Pandora	✓	✓	✓
	AppRadio Mode	—	—	✓
Remarks		—	—	iPod is not available. Please use the CarMediaPlayer to play music or videos in AppRadio Mode . (*1)
(*1) Install the CarMediaPlayer app on your iPod or iPhone. ➤ For details about the CarMediaPlayer , refer to the information on our website. ➤ Refer to the CarMediaPlayer manual for more information.				

iPod / iPhone or smartphone setup operation

Android, MirrorLink device				
Required cable (sold separately)		Cable connection is not required.	CD-AH200	CD-MU200
Smartphone Setup	Device	Others	Others	Others
	Connection	Wireless via BT	HDMI	USB
Bluetooth connection		Bluetooth connection is required for using aha or Pandora .	Bluetooth connection is required.	Bluetooth connection is required for using aha or Pandora .
Connection requirement		—	Connect to USB port 2.	Connect to USB port 2.
Available source	aha	✓	✓	✓
	Pandora	✓	✓	✓
	AppRadio Mode	—	✓	—
	MirrorLink	—	—	✓



You can listen to the radio using this product. This section describes operations for the radio.

Using the touch panel keys



- ① **Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Selects a band.**
 - ➔ For details, refer to *Selecting a band* on page 75.
- ③ **Displays the Time and date setting screen.**
 - ➔ For details, refer to *Setting the time and date* on page 181.
- ④ **Displays the Setting menu screen.**
- ⑤ **Recalls equaliser curves.**
 - ➔ For details, refer to *Using the equaliser* on page 160.
- ⑥ **Searches for an RDS station using PTY information.**
 - ➔ For details, refer to *Searching for an RDS station using PTY information* on page 77.
- ⑦ **Displays the Phone menu screen.**
 - ➔ For details, refer to *Displaying the phone menu* on page 61.
- ⑧ **Searches manual tuning or seek tuning.**
 - ➔ For details, refer to *Manual tuning* on page 75.
 - ➔ For details, refer to *Seek tuning* on page 75.
- ⑨ **Displays the preset channels.**

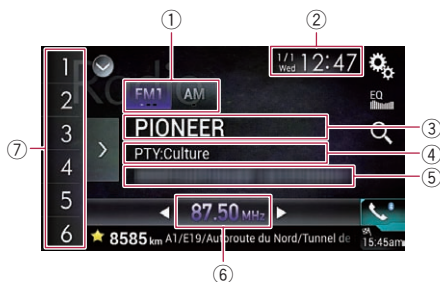
➔ For details, refer to *Selecting a preset channel from the preset channel list* on page 75.

- ⑩ **Recalls the preset channel stored to a key from memory with a single touch of the key.**

Stores the current broadcast frequency to a key for later recall by continuing to touch the key.

➔ For details, refer to *Storing broadcast frequencies* on page 76. ■

Reading the screen



- ① **Band indicator**
Shows the tuned band: FM1, FM2, FM3 or AM.
- ② **Current time and date**
- ③ **Programme service name indicator**
Shows the programme service name (station name) of the current station.
 When "AM" is selected, nothing is displayed.
- ④ **Programme type indicator**
Shows the programme type of the current station (when available).
 When "AM" is selected, nothing is displayed.
- ⑤ **Radio text display area**
Displays the radio text currently being received.
 When "AM" is selected, nothing is displayed.
- ⑥ **Frequency indicator**
- ⑦ **Preset number indicator**
Highlights the selected preset item. ■

Using the radio

Starting procedure

1 Display the AV source selection screen.

- For details of the operations, refer to *Displaying the AV operation screen* on page 20.

2 Touch [Radio] on the AV source selection screen.

The "Radio" screen appears.

3 Use the touch panel keys on the screen to control the radio.


- For details, refer to *Using the touch panel keys* on page 74. 

Selecting a band

- Touch the following key repeatedly until the desired band appears.


FM1 Switches between the following FM bands: FM1, FM2 and FM3.

AM Switches to AM band.


- This function is convenient for preparing different preset lists for each band. 

Manual tuning

- Touch the following keys to tune manually.


 Moves down one step at a time.


 Moves up one step at a time.

- This function is convenient for preparing different preset lists for each band. 

Seek tuning

- Touch and hold one of the following keys for about one second and then release.

 Scans frequencies until it finds a broadcast strong enough for good reception. You can cancel seek tuning by touching either key briefly.

 If you keep holding either key, you can skip broadcasting frequencies. Seek tuning will start when you release the key.

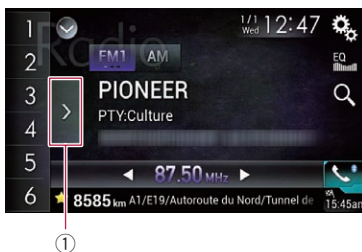


Selecting a preset channel from the preset channel list

Once you have stored broadcast channels, you can easily recall preset channels from memory with a single touch of a key.


- For details, refer to *Storing broadcast frequencies* on page 76.

1 Touch the preset channel list display key.



- ① Preset channel list display key

2 Touch the item on the list ("1" to "6") to switch to a channel registered as a preset channel.

- If you touch the preset channel list display key while the preset channel list is displayed, the list disappears and the preset tuning keys are displayed. 

Storing broadcast frequencies

With a touch of any of the preset tuning keys (“1” to “6”), you can easily store up to six broadcast channels for later recall (also with the touch of a key).

1 Select a frequency that you want to store in memory.

2 Touch and hold a preset tuning key [1] to [6].

The selected radio station is stored in memory. The next time you touch the same preset tuning key “1” to “6”, the service component is recalled from memory.

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

Storing the strongest broadcast frequencies

BSM (best stations memory) function automatically stores the six strongest broadcast frequencies under the preset tuning keys “1” to “6” and, once stored there, you can tune into them with the touch of a key.

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

1 Touch the preset channel list display key.

The preset channel list appears.

2 Touch [BSM] to begin a search.

A message appears. While the message is displayed, the six strongest broadcast frequencies will be stored under the preset tuning keys “1” to “6” in order of their signal strength. When this is complete, the message disappears.

- If you touch [Cancel], the storage process is cancelled. □

Tuning into strong frequencies

- This setting is available only when “Radio” is selected as the source.

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

1 Press the HOME button to display the Top menu screen.

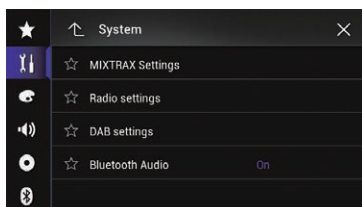
2 Touch the following keys in the following order.



The “System” screen appears.

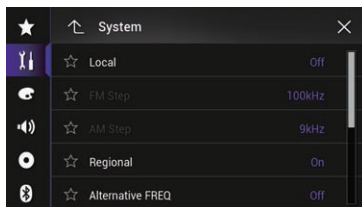
3 Touch [AV Source Settings].

The following screen appears.



4 Touch [Radio settings].

The following screen appears.



5 Touch [Local].

The pop-up menu appears.

6 Touch the item you want to set. FM

- **Off** (default): Turns the seek tuning setting off.
- **Level1**: Sets the level of sensitivity for FM to level 1.

Using the radio

- **Level2:**
Sets the level of sensitivity for FM to level 2.
- **Level3:**
Sets the level of sensitivity for FM to level 3.
- **Level4:**
Sets the level of sensitivity for FM to level 4.

AM

- **Off (default):**
Turns the seek tuning setting off.
 - **Level1:**
Sets the level of sensitivity for AM to level 1.
 - **Level2:**
Sets the level of sensitivity for AM to level 2.
- The FM "**Level4**" (AM "**Level2**") setting allows reception of only stations with the strongest signals, while lower settings allow reception of those with weaker signals.

Searching for an RDS station using PTY information

- This function can only be used on the FM band.

You can search for general types of broadcasting programmes.

1 Touch the following key.



Displays the screen to search for general types of broadcasting programmes.

2 Touch the following keys to select a programme type.



Displays the previous programme type.



Displays the next programme type.

There are four programme types:

News&Info — **Popular** — **Classics** — **Others**

3 Touch the following key.



Begins a search.

The tuner searches for a station broadcasting that programme type.

- If you touch [**Cancel**], the search is cancelled.
 - The programmes of some stations may differ from that indicated by the transmitted PTY.
 - If no station is broadcasting the type of programme you searched for, "**Not Found**" is displayed for about two seconds and then the tuner returns to the original station.

Receiving traffic announcements

- This function can only be used on the FM band.

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

1 Press the HOME button to display the Top menu screen.

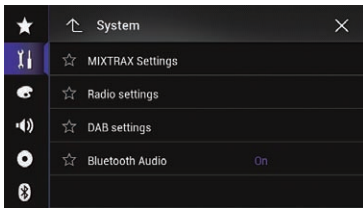
2 Touch the following keys in the following order.



The "**System**" screen appears.

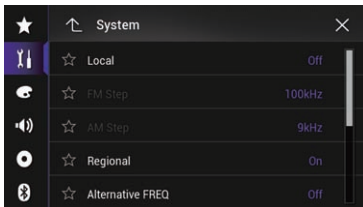
3 Touch [AV Source Settings].

The following screen appears.



4 Touch [Radio settings].

The following screen appears.



5 Touch [TA Interrupt] repeatedly until the desired setting appears.

- **Off** (default):
Does not receive traffic announcements automatically.
- **On**:
Receives traffic announcements automatically.

6 Tune into a TP station or another enhanced network's TP station.

7 Use the VOL (+/-) button to adjust the TA volume when a traffic announcement begins.

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

- You can cancel the news programme by changing the source.
- The system switches back to the original source following traffic announcement reception.
- Only TP stations and other enhanced networks' TP stations are tuned in during seek tuning or BSM when the TA function is on.

Using news programme interruption

- This function can only be used on the FM band.

When a news programme is broadcast from a PTY code news station, this product can switch from any station to the news broadcast station. When the news programme ends, reception of the previous programme resumes.

1 Press the HOME button to display the Top menu screen.

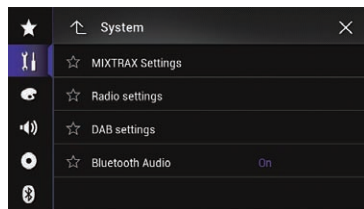
2 Touch the following keys in the following order.



The "System" screen appears.

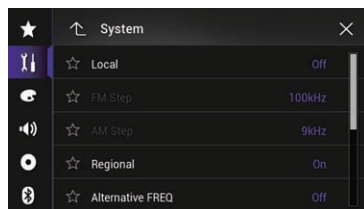
3 Touch [AV Source Settings].

The following screen appears.



4 Touch [Radio settings].

The following screen appears.



5 Touch [News Interrupt] repeatedly until the desired setting appears.

- **Off** (default):
Deactivates the news programme interruption function.

Using the radio

- **On:**
Activates the news programme interruption function.
- You can cancel the news programme by changing the source.

Tuning into alternative frequencies

- This function can only be used on the FM band.

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

1 Press the HOME button to display the Top menu screen.

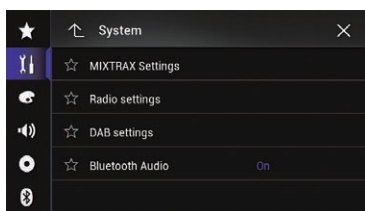
2 Touch the following keys in the following order.



The “**System**” screen appears.

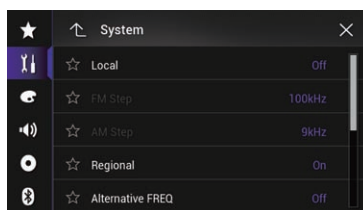
3 Touch [AV Source Settings].

The following screen appears.



4 Touch [Radio settings].

The following screen appears.



5 Touch [Alternative FREQ] repeatedly until the desired setting appears.

- **Off** (default):
Turns the alternative frequencies function off.
- **On:**
Turns the alternative frequencies function on.
 - Only RDS stations are tuned in during seek tuning or BSM when AF is on.
 - When you recall a preset station, the tuner may update the preset station with a new frequency from the station's AF list. No preset number appears on the display if the RDS data for the station received differs from that for the originally stored station.
 - Sound may be temporarily interrupted by another programme during an AF frequency search.
 - AF can be turned on or off independently for each FM band.

Limiting stations to regional programming

- ❑ This function can only be used on the FM band.

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

1 Press the HOME button to display the Top menu screen.

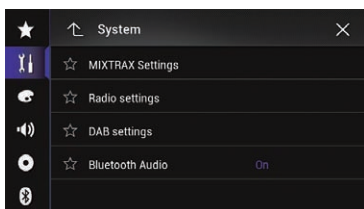
2 Touch the following keys in the following order.



The “System” screen appears.

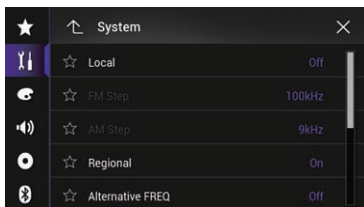
3 Touch [AV Source Settings].

The following screen appears.



4 Touch [Radio settings].

The following screen appears.



5 Touch [Regional] repeatedly until the desired setting appears.

- **On** (default):
Turns the regional function on.
- **Off**:
Turns the regional function off.

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

Switching Auto PI seek

If this product fails to find a suitable alternative frequency, or if you are listening to a broadcast and the reception becomes weak, this product will automatically search for a different station with the same programming. During the search, “PI Seek” is displayed and the output is muted. Muting is discontinued after completion of the PI Seek, whether or not a different station is found.

Activating the Auto PI seek for preset stations

This product can automatically search for a different station with the same programming, even during preset recall.

- ❑ “Auto PI” can be set only when the source is selected to “OFF”.

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.

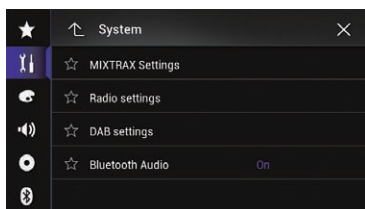


The “System” screen appears.

3 Touch [AV Source Settings].

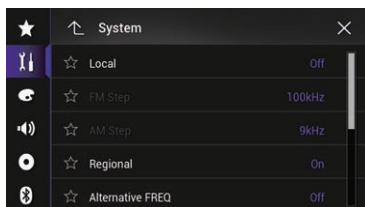
The following screen appears.

Using the radio



4 Touch [Radio settings].

The following screen appears.



5 Touch [Auto PI] repeatedly until the desired setting appears.

- **Off** (default):
Deactivates the Auto PI seek function.
- **On**:
Activates the Auto PI seek function.

Operating with the hardware buttons

Press the TRK button

You can move the preset channels up or down.

Press and hold the TRK button

You can perform seek tuning.

You can listen to the Digital Audio Broadcasting using this product. This section describes operations for Digital Audio Broadcasting.

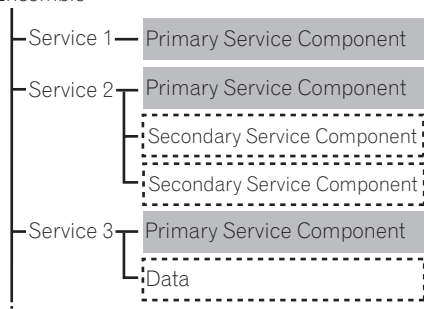
To receive DAB signals, connect a DAB aerial (AN-DAB1) sold separately to this product.

Digital Radio (**Digital Radio**) features the following:

- High sound quality (nearly as high as for CDs, although it may be reduced in some cases in order to allow more services to be broadcast)
- Interference-free reception

Some individual services in an ensemble may be further subdivided into Service Components. The main Service Component is called the Primary Service Component, and all auxiliary Service Components are called Secondary Service Components.

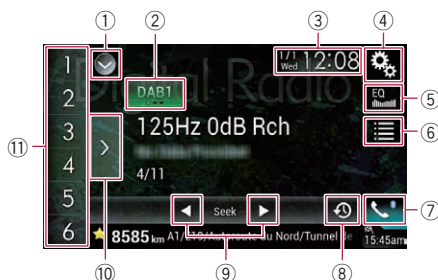
Ensemble



■ : Primary data

▤ : Secondary data

Using the touch panel keys




- Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- Selects a band.**
 - ➔ For details, refer to *Selecting a band* on page 84.
- Displays the Time and date setting screen.**
 - ➔ For details, refer to *Setting the time and date* on page 181.
- Displays the Setting menu screen.**
- Recalls equaliser curves.**
 - ➔ For details, refer to *Using the equaliser* on page 160.
- Selects a channel from the list.**
 - ➔ For details, refer to *Selecting a channel from the list* on page 84.
- Displays the Phone menu screen.**
 - ➔ For details, refer to *Displaying the phone menu* on page 61.
- Enables listening to recent broadcast.**
 - ➔ For details, refer to *Listening to a recent broadcast* on page 84.
- Performs manual tuning or seek tuning.**
 - ➔ For details, refer to *Manual tuning* on page 84.
 - ➔ For details, refer to *Seek tuning* on page 85.
- Displays the preset channels.**
 - ➔ For details, refer to *Selecting a preset channel from the preset channel list* on page 85.

Using the Digital Radio (DAB)

- ⑪ **Recalls the preset channel stored to a key from memory with a single touch of the key.**

Stores the current broadcast frequency to a key for later recall by continuing to touch the key.

➤ For details, refer to *Storing broadcast frequencies* on page 85. 

- 2 **Press the HOME button to display the Top menu screen.**

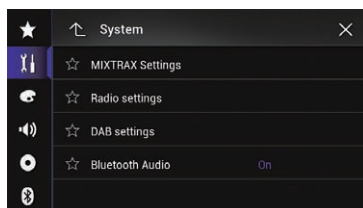
- 3 **Touch the following keys in the following order.**



The “System” screen appears.

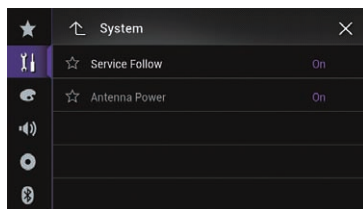
- 4 **Touch [AV Source Settings].**

The following screen appears.



- 5 **Touch [DAB settings].**

The following screen appears.



- 6 **Confirm that “Antenna Power” is turned on.**

The default setting is “On”.


- 7 **Display the AV source selection screen.**

➤ For details of the operations, refer to *Displaying the AV operation screen* on page 20.

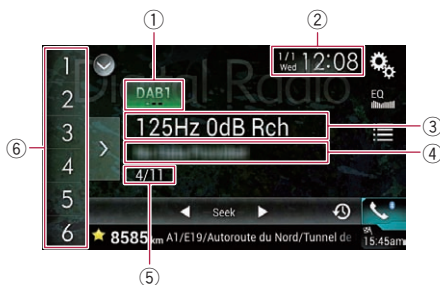
- 8 **Touch [Digital Radio] on the AV source selection screen.**

The “Digital Radio” screen appears.

- 9 **Use the touch panel keys on the screen to control the radio.**

➤ For details, refer to *Using the touch panel keys* on page 82. 

Reading the screen



- ① **Band indicator**

Shows the tuned band: DAB1, DAB2 or DAB3.

- ② **Current time and date**

- ③ **Current broadcast information**

- Ensemble label
- Service label
- Service Component Label
- “No Service” is displayed if there is no service broadcasting, and “No Signal” is displayed if no signal has been received.

- ④ **Dynamic label display area**

“No Data Provided” is displayed if there is no data provided.

- ⑤ **Service component number**

- ⑥ **Preset number indicator**

Highlights the selected preset item. 

Starting procedure

- 1 **Turn the source off.**

➤ For details, refer to *Turning off the AV source* on page 21.

Selecting a band

- Touch the following key repeatedly until the desired band appears.

DAB1

Switches between the following bands: DAB1, DAB2 or DAB3.

- This function is convenient for preparing different preset lists for each band. □

Selecting a channel from the list

You can select a channel by searching channel list.

1 Touch the following key.



Displays the list screen.

2 Touch the category you want.

You can select a channel from the following categories.

- **Service:**
You can select a Service Component from the list of all components.
- **Program Type:**
You can select a Service Component from PTY information.
 - The PTY can be selected are [News&Info], [Popular], [Classics] or [Others].
- **Ensemble:**
You can select a Service Component from the relevant ensemble.

3 Touch the item you want.

The item changes to the selected channel.

- If you touch **List Update**, you can update the channel list.
- The Initial Search Bar may appear on the right side of the screen depending on the list. If you touch the bar, you can search by alphabet. □

Listening to a recent broadcast

You can listen to the Service Component that has been broadcasted (time shift function).

- Touch the following key.



Switches to time shift function mode.

The following screen appears.



① ② ③

① Playback and pause

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

② Fast reverse or forward

↻ For details, refer to *Operating the time bar* on page 23.

③ Returns to live broadcast □

Manual tuning

- Touch the following keys to tune manually.



Moves down one step at a time.



Moves up one step at a time.

- This function is convenient for preparing different preset lists for each band. □

Using the Digital Radio (DAB)

Seek tuning

● **Touch and hold one of the following keys for about one second and then release.**



Scans frequencies until it finds a broadcast strong enough for good reception. You can cancel seek tuning by touching either key briefly.



If you keep holding either key, you can skip broadcasting frequencies. Seek tuning will start when you release the key.

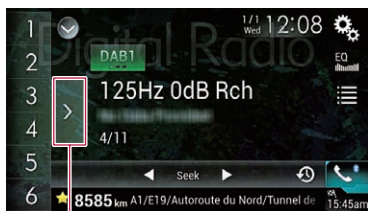


Selecting a preset channel from the preset channel list

Once you have stored broadcast channels, you can easily recall preset channels from memory with a single touch of a key.

➔ For details, refer to *Storing broadcast frequencies* on page 85.

1 Touch the preset channel list display key.



①

① Preset channel list display key

2 Touch the item on the list ("1" to "6") to switch to a channel registered as a preset channel.

- If you touch the preset channel list display key while the preset channel list is displayed, the list disappears and the preset tuning keys are displayed. □

Storing broadcast frequencies

With a touch of any of the preset tuning keys ("1" to "6"), you can easily store up to six broadcast channels for later recall (also with the touch of a key).

1 Select a frequency that you want to store in memory.

2 Touch and hold a preset tuning key [1] to [6].

The selected radio station is stored in memory. The next time you touch the same preset tuning key "1" to "6", the service component is recalled from memory.

- Up to 18 stations, six for each of the three bands can be stored in memory. □

Switching to a channel with good receiving sensitivity automatically

□ This setting is available only when "Digital Radio" is selected as the source.

If the tuner cannot get good reception, this product will automatically search for another ensemble that supports the same service component. If no alternative service component can be found or reception remains poor, this function will automatically switch to an identical FM broadcast.

- After the channel is switched, if the originally channel regains good receiving sensitivity, the system switches back to the original channel automatically.

1 Press the HOME button to display the Top menu screen.

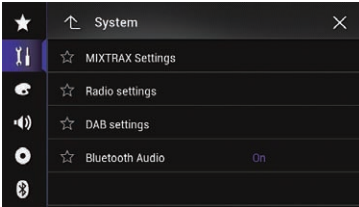
2 Touch the following keys in the following order.



The "System" screen appears.

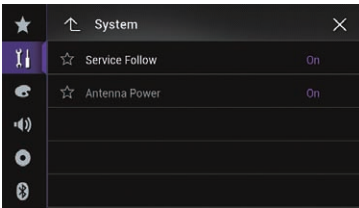
3 Touch [AV Source Settings].

The following screen appears.



4 Touch [DAB settings].

The following screen appears.



5 Touch [Service Follow] repeatedly until the desired setting appears.

- **On** (default):
Enables automatic channel switching.
- **Off**:
Disables automatic channel switching.

Operating with the hardware buttons

Press the TRK button

You can move the preset channels up or down.

Press and hold the TRK button

You can perform seek tuning.

Playing a disc

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

CAUTION

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

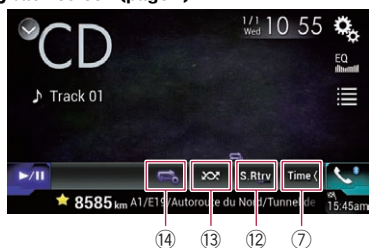
Using the touch panel keys (for audio)

Example: CD

Playback screen (page 1)



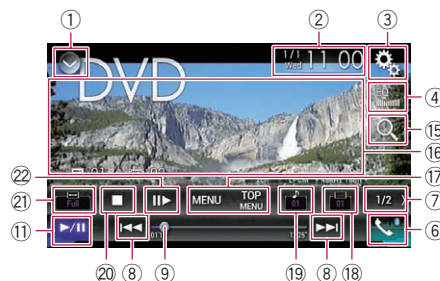
Playback screen (page 2)



Using the touch panel keys (for video)

Example: DVD

Playback screen (page 1)



Playback screen (page 2)



- ① **Displays the source list.**
➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the Time and date setting screen.**
➔ For details, refer to *Setting the time and date* on page 181.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
➔ For details, refer to *Using the equaliser* on page 160.
- ⑤ **Selects a track from the list.**
➔ For details, refer to *Selecting files from the file name list* on page 90.
- ⑥ **Displays the Phone menu screen.**
➔ For details, refer to *Displaying the phone menu* on page 61.
- ⑦ **Switches to the next or previous page of touch panel keys.**
- ⑧ **Skips files forward or backward.**

- ⑨ **Changes the playback point by dragging the key.**
 - ➔ For details, refer to *Operating the time bar* on page 23.
- ⑩ **Switches the media file type.**
 - ➔ For details, refer to *Switching the media file type* on page 91.
- ⑪ **Switches between playback and pause.**
- ⑫ **Uses “Sound Retriever” function.**
 - ➔ For details, refer to *Setting the “Sound Retriever” function* on page 181.
- ⑬ **Plays files in random order.**
 - ➔ For details, refer to *Playing tracks in random order* on page 90.
- ⑭ **Sets a repeat play range.**
 - ➔ For details, refer to *Setting a repeat play range* on page 90.
- ⑮ **Searches for the part you want to play.**
 - ➔ For details, refer to *Searching for the part you want to play* on page 91.
- ⑯ **Hides the touch panel keys.**

Touching this area hides the touch panel keys.

 - Touch anywhere on the LCD screen to display the touch panel keys again.
- ⑰ **Displays the DVD menu.**
 - ➔ For details, refer to *Operating the DVD menu* on page 91.
- ⑱ **Switches the subtitle language.**
 - ➔ For details, refer to *Switching the subtitle language* on page 92.
- ⑲ **Switches the audio language.**
 - ➔ For details, refer to *Switching the audio language* on page 92.
- ⑳ **Stops playback.**
- ㉑ **Changes the wide screen mode.**
 - ➔ For details, refer to *Changing the wide screen mode* on page 181.
- ㉒ **Moves ahead one frame (frame-by-frame playback) or slows down playback speed (slow-motion playback).**
 - ➔ For details, refer to *Frame-by-frame playback* on page 92.
 - ➔ For details, refer to *Slow motion playback* on page 92.
- ㉓ **Performs an operation (such as resuming) that is stored on the disc.**
 - ➔ For details, refer to *Returning to a specified scene* on page 92.
- ㉔ **Resumes playback (Bookmark).**
 - ➔ For details, refer to *Resuming playback (Bookmark)* on page 93.
- ㉕ **Displays the DVD menu keypad.**
 - ➔ For details, refer to *Operating the DVD menu using touch panel keys* on page 93.
- ㉖ **Changes the viewing angle (Multi-angle).**
 - ➔ For details, refer to *Switching the multi-angle DVD display* on page 93.
- ㉗ **Selects the audio output.**
 - ➔ For details, refer to *Selecting the audio output* on page 93.

Playing a disc

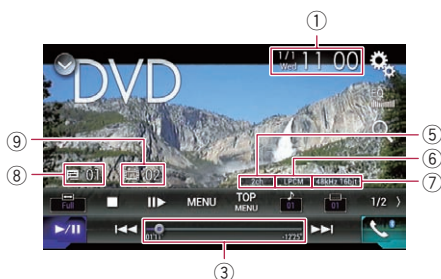
Reading the screen (for audio)

Example: CD

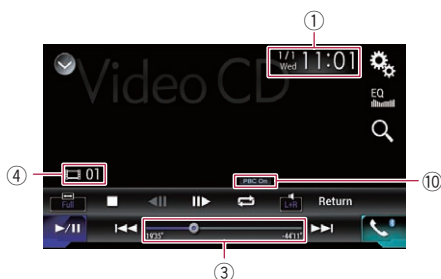


Reading the screen (for video)

Example: DVD





Example: Video CD






- ① **Current time and date**
- ② **Playback condition indicator**
Indicates the current playback condition.

Playing tracks in random order

Indicator	Meaning
	Does not play tracks in random order.
	Plays all tracks in the current disc in random order.

Setting a repeat play range

Indicator	Meaning
	Repeats just the current track.
	Repeats the current disc.

- ③ **Play time indicator**
Shows the elapsed playing time within the current file.
- ④ **Track number indicator**
Shows the number of the track currently playing (when available).
- ⑤ **Audio channel indicator**
Shows the current audio channel type, such as "Mch" (Multi-channel).
- ⑥ **Digital sound format indicator**
Shows which digital sound format (surround sound format) has been selected.
- ⑦ **Sampling frequency indicator**
Shows the sampling frequency currently playing.
- ⑧ **Title number indicator**
Shows the title number currently playing.
- ⑨ **Chapter number indicator**
Shows the chapter number currently playing.
- ⑩ **PBC ON indicator**
Indicates that a disc with PBC On is being played. 

Starting procedure

- 1 **Display the AV source selection screen.**
 - For details of the operations, refer to *Displaying the AV operation screen* on page 20.

2 Insert the disc you want to play into the disc-loading slot.

The source changes and then playback will start.

- ➔ For details, refer to *Inserting and ejecting a disc* on page 14.
- ☐ If the disc is already set, touch **[Disc]** on the source list or on the AV source selection screen.
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
 - ➔ For details, refer to *Selecting a front source on the AV source selection screen* on page 20.

3 Use the touch panel keys on the screen to control the disc.

- ➔ For details, refer to *Using the touch panel keys (for audio)* on page 87.
- ➔ For details, refer to *Using the touch panel keys (for video)* on page 87. ☐

Selecting files from the file name list

You can select tracks to play back using the track title list which is a list of the tracks recorded on a disc.

1 Touch the following key.



Displays a list of the tracks recorded on the disc.

2 Touch a track on the list to play back. ☐



Playing tracks in random order

All tracks on the disc can be played at random by only touching a single key.

● Touch the following key repeatedly until the desired setting appears.



Turns random play on or off.

-  (default): Does not play tracks in random order.
- : Plays all tracks in the current repeat play range in random order.
 - ☐ If you turn random play on when the repeat play range is set to the current track, the repeat play range changes to the whole of the current disc automatically. ☐

Setting a repeat play range



The repeat play range can be changed by only touching a single key.

● Touch the following key repeatedly until the desired setting appears.






Changes the repeat play range.

Audio

-  (default): Repeats the current disc.
- : Repeats just the current track.
 - ☐ If you turn random play on when the repeat play range is set to the whole of the current disc, the repeat play range changes to the current track automatically.
 - ☐ If you turn random play on when the repeat play range is set to the current track, the repeat play range changes to the whole of the current disc automatically.
 - ☐ When random play is turned on, you can change the repeat play range from the whole of the current disc to the current track.

Video

-  (default): Repeats all files.
- : Repeats just the current chapter.
- : Repeats just the current title. ☐

Playing a disc

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 the following key.



Displays the pop-up menu for selecting a media file type to play on the disc.

2 Touch the item you want to set.

- **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)).

Searching for the part you want to play

You can use the search function to find the part you want to play.

- For DVD-Videos, you can select **Title** (title), **Chapter** (chapter) or **10Key** (numeric keypad).
- For Video-CDs, you can select **Track** (track) or **10Key** (numeric keypad) is available for Video-CDs featuring PBC (playback control) only.
- Chapter search and time search are not available when disc playback has been stopped.

1 Touch the following key.



Displays the screen for direct number search.

2 Touch [Title] (title), [Chapter] (chapter) or [10Key] (numeric keypad).

3 Touch [0] to [9] to input the desired number.

- To cancel an input number, touch [C]. To cancel the input numbers, touch and hold [C].

4 Touch the following key.



Registers the numbers and starts playback.

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 the screen to display the touch panel keys.

2 Touch the following key.



Displays the touch panel keys to operate the DVD menu.



3 Touch the desired menu item.

Switching the subtitle language

You can switch the subtitle language while a disc is playing when the disc has multilingual data (multi-subtitle).

- **Touch the following key repeatedly until the desired setting appears.**



Changes the subtitle language. You can also switch between subtitle languages using the “DVD/DivX Setup” menu.

➔ For details, refer to *Setting the top-priority languages* on page 171.



Switching the audio language

You can switch the audio language while a disc is playing when the disc has multilingual data (multi-audio).

- **Touch the following key repeatedly until the desired setting appears.**



Changes the audio language. You can also switch between audio languages using the “DVD/DivX Setup” menu.

➔ For details, refer to *Setting the top-priority languages* on page 171.




Frame-by-frame playback

This lets you move ahead one frame at a time during pause.

- **Touch [II▶] during pause.**

Each time you touch [II▶], you move ahead one frame.

- To return to normal playback, touch [▶/II].
- With some discs, images may be unclear during frame-by-frame playback. 

Slow motion playback

This lets you slow down the playback speed.

- 1 Touch and hold [II▶] until an arrow icon is displayed during playback.**


The arrow icon is displayed, and forward slow motion playback begins.

- To return to normal playback, touch [▶/II].

- 2 Touch [II▶] to adjust playback speed during slow motion playback.**

Each time you touch [II▶] it changes the speed in four steps in the following order:

1/16 → 1/8 → 1/4 → 1/2

- There is no sound during slow motion playback.
- With some discs, images may be unclear during slow motion playback.
- Reversed slow motion playback is not possible. 

Returning to a specified scene

When using a disc that has a point recorded that indicates where to return to, the disc returns to the specified point and begins playback from there.

This function cannot be used if a specified scene has not been preprogrammed on the disc.

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

- **Touch the following key.**

Return

Returns to the specified point and begins playback from there.

- The specified point differs depending on the disc. 

Playing a disc

Resuming playback (Bookmark)

The Bookmark function lets you resume playback from a selected scene the next time the disc is loaded.

● Touch the following key.



Bookmarks one point for each of up to five discs.

- If you try to memorise another point for the same disc, the older bookmark will be overwritten by the newer one.
- To clear the bookmark on a disc, touch and hold this key.
- The oldest bookmark is replaced by the new one.

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 the following keys to select the desired menu item.



Selects the left menu item.



Selects the right menu item.



Selects the upper menu item.



Selects the lower menu item.

- If the touch panel keys for DVD menu selection disappear, touch anywhere on the screen, and then touch . The touch panel keys are displayed again.

2 Touch the following key.



Starts playback from the selected menu item.

- The way to display the menu differs depending on the disc.
- If you touch , the touch panel keys disappear and the icon is displayed. You can select a menu item by touching it.

Switching the multi-angle DVD display

With DVDs featuring multi-angle recordings (scenes shot from multiple angles), you can switch among viewing angles during playback.

● Touch the following key repeatedly until the desired setting appears.



Switches between viewing angles. During the playback of a scene shot from multiple angles, the angle icon is displayed. Turn the angle icon display on or off using the "DVD/DivX Setup" menu.

➔ For details, refer to *Setting the angle icon display* on page 172.

Selecting the audio output


When playing DVDs recorded with LPCM audio, you can switch the audio output.

● Touch the following key repeatedly until the desired setting appears.



Changes the audio output setting.

- **L+R:** Left and right
- **Left:** Left


- **Right:** Right
- **Mix:** Mixing left and right
- This function is not available when disc playback has been stopped.
- The appearance of this key changes according to the current setting. 

Operating with the hardware buttons

Press the TRK button

You can skip tracks or chapters forward or backward.

Press and hold the TRK button

You can perform fast reverse or fast forward. 

Playing compressed audio files

You can play compressed audio files stored in a disc or an external device (USB, SD) using the built-in drive of this product. This section describes how.

➤ For details, refer to *Media compatibility chart* on page 202.

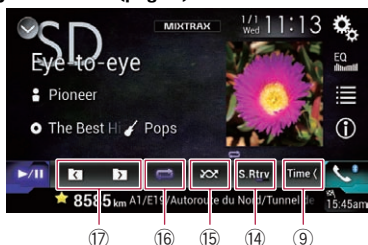
Using the touch panel keys

Example: SD

Playback screen (page 1)



Playback screen (page 2)



- ① **Displays the source list.**
 - For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the MIXTRAX screen.**
 - For details, refer to Chapter 28.
- ③ **Displays the Time and date setting screen.**
 - For details, refer to *Setting the time and date* on page 181.
- ④ **Displays the Setting menu screen.**
- ⑤ **Recalls equaliser curves.**
 - For details, refer to *Using the equaliser* on page 160.

- ⑥ **Selects a file from the list.**
 - For details, refer to *Selecting files from the file name list* on page 98.
- Displays a list related to the song currently playing (link search).**
 - For details, refer to *Selecting a file from the list related to the song currently playing (link search)* on page 98.
- ⑦ **Switches the text display between tag information and file/folder information.**
 - For details, refer to *Reading the screen* on page 96.
 - For details, refer to *Switching the browse mode* on page 97.
- ⑧ **Displays the Phone menu screen.**
 - For details, refer to *Displaying the phone menu* on page 61.
- ⑨ **Switches to the next or previous page of touch panel keys.**
- ⑩ **Skips files forward or backward.**
- ⑪ **Changes the playback point by dragging the key.**
 - For details, refer to *Operating the time bar* on page 23.
- ⑫ **Switches the media file type.**
 - For details, refer to *Switching the media file type* on page 99.
- ⑬ **Switches between playback and pause.**
- ⑭ **Uses “Sound Retriever” function.**
 - For details, refer to *Setting the “Sound Retriever” function* on page 181.
- ⑮ **Plays files in random order.**
 - For details, refer to *Playing files in random order* on page 98.
- ⑯ **Sets a repeat play range.**
 - For details, refer to *Setting a repeat play range* on page 98.
- ⑰ **Selects the previous folder or the next folder. ▢**

Reading the screen

Example: SD



① Current file information

Music Browse mode

• Song title/File name

Shows the title of the song currently playing (when available). If the title of a song is not available, the file name appears.

• Artist name

Shows the artist name for the song currently playing (when available). “No Name” is displayed if there is no corresponding information.

• Album title/Folder name

Shows the title of the album of the current file (when available). If the title of the album is not available, the folder name appears.

• Genre

Shows the genre of the current file (when available). “No Genre” is displayed if there is no corresponding information.

□ Nothing is displayed if the song currently playing is in a format which does not support these functions.

Folder Browse mode

• File name

Shows the name of the file currently playing.

• Folder name

Shows the name of the folder containing the file currently playing.

② Current time and date

③ Album artwork

Album art of the current song is displayed if it is available.

④ Playback condition indicator

Indicates the current playback condition.

Playing files in random order

Indicator	Meaning
	Does not play files in random order.
	Plays all files within the repeat range in random order.



Does not play files in random order.



Plays all files within the repeat range in random order.

Setting a repeat play range (for Disc)

Indicator	Meaning
	Repeats just the current file.
	Repeats just the current folder.
	Repeats all compressed audio files.



Repeats just the current file.



Repeats just the current folder.



Repeats all compressed audio files.

Setting a repeat play range (for Music Browse mode)

Indicator	Meaning
	Repeats just the current file.
	Repeats all compressed audio files.



Repeats just the current file.



Repeats all compressed audio files.

Setting a repeat play range (for Folder Browse mode)

Indicator	Meaning
	Repeats just the current file.
	Repeats just the current folder.
	Repeats all compressed audio files.



Repeats just the current file.




Repeats just the current folder.



Repeats all compressed audio files.

⑤ Play time indicator

Shows the elapsed playing time within the current file. 

Playing compressed audio files

Starting procedure (for Disc)

1 Display the AV source selection screen.


- For details of the operations, refer to *Displaying the AV operation screen* on page 20.

2 Insert the disc you want to play into the disc-loading slot.

The source changes and then playback will start.

- For details, refer to *Inserting and ejecting a disc* on page 14.
- If the disc is already set, touch [Disc] on the source list or on the AV source selection screen.
 - For details, refer to *Selecting a front source on the source list* on page 21.
 - For details, refer to *Selecting a front source on the AV source selection screen* on page 20.

3 Use the touch panel keys on the screen to control the disc.

- For details, refer to *Using the touch panel keys* on page 95. 

Starting procedure (for USB/SD)

1 Display the AV source selection screen.

- For details of the operations, refer to *Displaying the AV operation screen* on page 20.


2 Insert the SD memory card into the SD card slot or plug the USB storage device into the USB connector.

- For details, refer to *Plugging in a USB storage device* on page 16.
- For details, refer to *Inserting and ejecting an SD memory card* on page 15.

3 Touch [USB] or [SD] on the AV source selection screen.

The image is displayed on the screen.

4 Use the touch panel keys on the screen to control the external storage device (USB, SD).

- For details, refer to *Using the touch panel keys* on page 95.
- Playback is performed in order of folder numbers. Folders are skipped if they contain no playable files. If there are no playable files in folder 01 (root folder), playback starts from folder 02. 

Switching the browse mode

This product supports two types of browse modes: Folder Browse mode and Music Browse mode.

- The browse modes are available only for the external storage device (USB, SD).

Music Browse mode

Displays a song title, artist name, album name and genre in the current file information display area on the AV operation screen. Select when you want to play music files narrowed down by a category of song title, artist name, album name or genre.

If connecting an external device (USB, SD), this product accesses the database of music files with tag information and switches to the Music Browse mode automatically.

Folder Browse mode

Displays a folder name and file name in the current file information display area on the AV operation screen. Select when you want to search for music files in the list screen or folders on the list screen.

- You can switch between the browse modes for file search by touching the tabs on the list screen.

● Touch the following key repeatedly until the desired setting appears.



Switches the display between Music Browse mode and Folder Browse mode.



Selecting files from the file name list

You can find files or folders to play back using the file name or folder name list which is a list of the files or folders stored on a disc or in the external storage device (USB, SD).

1 Touch the following key.



Displays the list of the files or folders stored on a disc or in the external storage device (USB, SD).

2 Touch a file on the list to play back.

- Files are played back in file number order.
- Touching a folder on the list shows its contents. You can play a file on the list by touching it.

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

You can select files to play back using the file list which is a list of the files recorded in the external storage device (USB, SD).

- This function is available for the external storage device (USB, SD) only.

1 Display the Music Browse mode.

- ➔ For details, refer to *Switching the browse mode* on page 97.

2 Touch the following key.



Displays the list of the files or folders stored in the external storage device (USB, SD).

3 Touch the desired category to display the file list.

The list screen appears.

4 Touch the item that you want to refine.

Refine the item until the desired song title or file name is displayed on the list.

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

5 Touch the desired song title or file name to play back.



Playing files in random order

All files on the disc or in the external storage device (USB, SD) can be played at random by only touching a single key.

● Touch the following key repeatedly until the desired setting appears.



Turns random play on or off.

-  (default): Does not play files in random order.
- : Plays all audio files in the current repeat play range in random order.
 - If you turn random play on when the repeat play range is set to the current file, the repeat play range changes to the whole of the current disc or external storage device (USB, SD) automatically.

Setting a repeat play range

The repeat play range can be changed by only touching a single key.



● Touch the following key repeatedly until the desired setting appears.







Changes the repeat play range.

Playing compressed audio files


Music Browse mode

-  (default): Repeats all files.
- : Repeats just the current file.

Folder Browse mode

-  (default): Repeats all files.
- : Repeats the current folder.
- : Repeats just the current file. 

Press and hold the TRK button

You can perform fast reverse or fast forward. 

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 the following key.



Displays the pop-up menu for selecting a media file type to play on the disc or in the external storage device (USB, SD).

2 Touch the item you want to set.

- **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). 

Operating with the hardware buttons

Press the TRK button

You can skip files forward or backward.

You can play compressed video files stored on a disc or in an external device (USB, SD) using the built-in drive of this product. This section describes how.

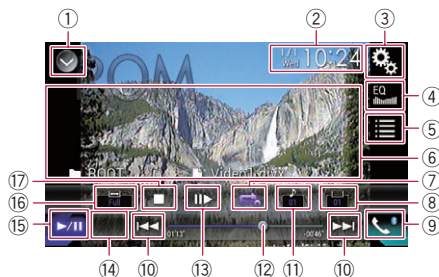
➔ For details, refer to *Media compatibility chart* on page 202.

CAUTION

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

Using the touch panel keys

Example: Disc



- ① **Displays the source list.**
➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the Time and date setting screen.**
➔ For details, refer to *Setting the time and date* on page 181.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
➔ For details, refer to *Using the equaliser* on page 160.
- ⑤ **Selects a file from the list.**
➔ For details, refer to *Selecting files from the file name list* on page 101.
- ⑥ **Hides the touch panel keys.**
Touching this area hides the touch panel keys.
 Touch anywhere on the LCD screen to display the touch panel keys again.
- ⑦ **Sets a repeat play range.**

- ➔ For details, refer to *Setting a repeat play range* on page 102.
- ⑧ **Switches the subtitle language.**
With DivX featuring multi-subtitle recordings, you can switch between subtitle languages during playback.
- ⑨ **Displays the Phone menu screen.**
➔ For details, refer to *Displaying the phone menu* on page 61.
- ⑩ **Skips files forward or backward.**
- ⑪ **Switches the audio language.**
With DivX files that provide audio playback in different languages and different audio systems (Dolby Digital, DTS, etc.), you can switch between languages or audio systems during playback.
- ⑫ **Changes the playback point by dragging the key.**
➔ For details, refer to *Operating the time bar* on page 23.
- ⑬ **Moves ahead one frame (frame-by-frame playback) or slows down playback speed (slow-motion playback).**
➔ For details, refer to *Frame-by-frame playback* on page 102.
➔ For details, refer to *Slow motion playback* on page 102.
- ⑭ **Switches the media file type.**
➔ For details, refer to *Switching the media file type* on page 102.
- ⑮ **Switches between playback and pause.**
- ⑯ **Changes the wide screen mode.**
➔ For details, refer to *Changing the wide screen mode* on page 181.
- ⑰ **Stops playback.**

Playing compressed video files

Reading the screen

Example: Disc



- ① **Current time and date**
- ② **Play time indicator**
Shows the elapsed playing time within the current file.
- ③ **Current file information**
 - **File name**
Shows the name of the file currently playing.
 - **Folder name**
Shows the name of the folder containing the file currently playing.

Starting procedure (for Disc)

- 1 **Display the AV source selection screen.**
➤ For details of the operations, refer to *Displaying the AV operation screen* on page 20.

2 Insert the disc you want to play into the disc-loading slot.

The source changes and then playback will start.

- For details, refer to *Inserting and ejecting a disc* on page 14.
- ❑ If the disc is already set, touch [Disc] on the source list or on the AV source selection screen.
 - For details, refer to *Selecting a front source on the source list* on page 21.
 - For details, refer to *Selecting a front source on the AV source selection screen* on page 20.

3 Use the touch panel keys on the screen to control the disc.

- For details, refer to *Using the touch panel keys* on page 100.

Starting procedure (for USB/SD)

1 Display the AV source selection screen.

- For details of the operations, refer to *Displaying the AV operation screen* on page 20.

2 Insert the SD memory card into the SD card slot or plug the USB storage device into the USB connector.

- For details, refer to *Plugging in a USB storage device* on page 16.
- For details, refer to *Inserting and ejecting an SD memory card* on page 15.

3 Touch [USB] or [SD] on the AV source selection screen.

The image is displayed on the screen.

4 Use the touch panel keys on the screen to control the external storage device (USB, SD).

- For details, refer to *Using the touch panel keys* on page 100.
- ❑ Playback is performed in order of folder numbers. Folders are skipped if they contain no playable files. If there are no playable files in folder 01 (root folder), playback starts from folder 02.

Selecting files from the file name list


You can select files to view using the file name list which is a list of the files stored on a disc or in the external storage device (USB, SD).

1 Touch the following key.



Displays the list of the files or folders stored on a disc or in the external storage device (USB, SD).

2 Touch a file on the list to play back.






- ❑ Files are played back in file number order and folders are skipped if they contain no files. (If folder 01 (root folder) contains no files, playback commences with folder 02.)
- ❑ Touching a folder on the list shows its contents. You can play a file on the list by touching it.
- Touch the playback sign of the thumbnail to preview the file. 

Setting a repeat play range

The repeat play range can be changed by only touching a single key.

● Touch the following key repeatedly until the desired setting appears.

Changes the repeat play range.


-  or  (default): Repeats all files.
- : Repeats just the current folder.
- : Repeats just the current file. 

Frame-by-frame playback

This lets you move ahead one frame at a time during pause.

● Touch [II▶] during pause.

Each time you touch [II▶], you move ahead one frame.

- ❑ To return to normal playback, touch [▶/II].
- ❑ With some discs and external storage devices (USB, SD), images may be unclear during frame-by-frame playback. 

Slow motion playback


This lets you slow down the playback speed.

1 Touch and hold [II▶] until an arrow icon is displayed during playback.

The arrow icon is displayed, and forward slow motion playback begins.

- ❑ To return to normal playback, touch [▶/II].

2 Touch [II▶] to adjust playback speed during slow motion playback.

- ❑ There is no sound during slow motion playback.
- ❑ With some discs and external storage devices (USB, SD), images may be unclear during slow motion playback.
- ❑ Reversed slow motion playback is not possible. 


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 the following key.

Displays the pop-up menu for selecting a media file type to play on the disc or in the external storage device (USB, SD).


2 Touch the item you want to set.

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

Operating with the hardware buttons**Press the TRK button**

You can skip files forward or backward.

Press and hold the TRK button

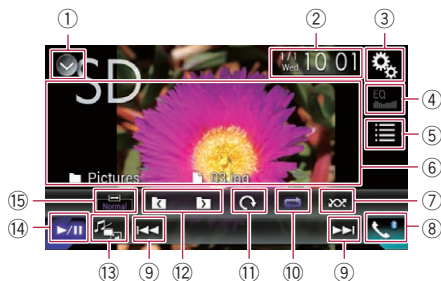
You can perform fast reverse or fast forward. 

Playing compressed still image files

You can view still images stored in an external device (USB, SD) using the built-in drive of this product. This section describes how.

➔ For details, refer to *Media compatibility chart* on page 202.

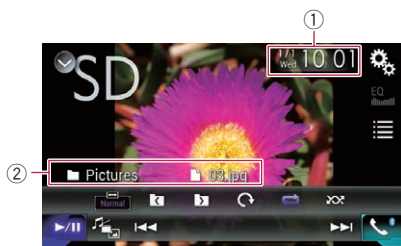
Using the touch panel keys



- ① **Displays the source list.**
➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the Time and date setting screen.**
➔ For details, refer to *Setting the time and date* on page 181.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
 This key is not available while you are viewing still images stored in an external device (USB, SD).
- ⑤ **Selects a file from the list.**
➔ For details, refer to *Selecting files from the file name list* on page 104.
- ⑥ **Hides the touch panel keys.**
Touching this area hides the touch panel keys.
 Touch anywhere on the LCD screen to display the touch panel keys again.
- ⑦ **Plays files in random order.**
➔ For details, refer to *Playing files in random order* on page 104.
- ⑧ **Displays the Phone menu screen.**
➔ For details, refer to *Displaying the phone menu* on page 61.
- ⑨ **Skips files forward or backward.**
- ⑩ **Sets a repeat play range.**
➔ For details, refer to *Setting a repeat play range* on page 104.

- ⑪ **Rotates the displayed picture 90° clockwise.**
- ⑫ **Selects the previous folder or the next folder.**
- ⑬ **Switches the media file type.**
➔ For details, refer to *Switching the media file type* on page 104.
- ⑭ **Switches between playback and pause.**
- ⑮ **Changes the wide screen mode.**
➔ For details, refer to *Changing the wide screen mode* on page 181.

Reading the screen



- ① **Current time and date**
- ② **Current file information**
 - **File name**
Shows the name of the file currently playing.
 - **Folder name**
Shows the name of the folder containing the file currently playing.

Starting procedure

- 1 **Display the AV source selection screen.**
➔ For details of the operations, refer to *Displaying the AV operation screen* on page 20.
- 2 **Insert the SD memory card into the SD card slot or plug the USB storage device into the USB connector.**
 - ➔ For details, refer to *Plugging in a USB storage device* on page 16.
 - ➔ For details, refer to *Inserting and ejecting an SD memory card* on page 15.


Playing compressed still image files

- ❑ Playback is performed in order of folder numbers. Folders are skipped if they contain no playable files. If there are no playable files in folder 01 (root folder), playback starts from folder 02.

3 Touch [USB] or [SD] on the AV source selection screen.

The image is displayed on the screen.

4 Use the touch panel keys on the screen to control the external storage device (USB, SD).

- ➔ For details, refer to *Using the touch panel keys* on page 103. 

Selecting files from the file name list


You can select files to view using the file name list which is a list of the files stored in the external storage device (USB, SD).

1 Touch the following key.



Displays the list of the files stored in the external storage device (USB, SD).

2 Touch a file on the list to play back.

- ❑ Files are played back in file number order and folders are skipped if they contain no files. (If folder 01 (root folder) contains no files, playback commences with folder 02.)
- ❑ Touching a folder on the list shows its contents. You can play a file on the list by touching it. 




Playing files in random order

All files in the external storage device (USB, SD) can be played at random by only touching a single key.

● Touch the following key repeatedly until the desired setting appears.



Turns random play on or off.

-  (default): Does not play files in random order.
- : Plays all files in the current repeat play range in random order.
 - ❑ If you turn random play on when the repeat play range is set to the current file, the repeat play range changes to the whole of the current external storage device (USB, SD) automatically. 




Setting a repeat play range

The repeat play range can be changed by only touching a single key.

● Touch the following key repeatedly until the desired setting appears.



Changes the repeat play range.

-  (default): Repeats all files.
- : Repeats the current folder. 

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 the following key.



Displays the pop-up menu for selecting a media file type to play in the external storage device (USB, SD).

2 Touch the item you want to set.

- **Music:** Switches the media file type to music (compressed audio).
- **Video:** Switches the media file type to video.
- **Photo:** Switches the media file type to still image (JPEG data). 

Playing compressed still image files

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.

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

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The “**Video Setup**” screen appears.

3 Touch [Time Per Photo Slide].

The pop-up menu appears.

4 Touch the item you want to set.

- **10sec** (default):
JPEG images switch at intervals of 10 seconds.
- **5sec**:
JPEG images switch at intervals of 5 seconds.
- **15sec**:
JPEG images switch at intervals of 15 seconds.
- **Manual**:
JPEG images can be switched manually.

Operating with the hardware buttons

Press the TRK button

You can skip files forward or backward.

Press and hold the TRK button

You can search 10 JPEG files at a time.

- If the number of files in the folder (from the file currently being played to the first or last file) is fewer than 10, the first or last file in the folder is automatically played.
- If the file currently being played is the first or last file in the folder, the search is not performed.

For iPod with a 30-pin connector users

- ❑ Depending on your iPod, there may not be any output unless you use a USB interface cable for iPod / iPhone (CD-IU201S/CD-IU201V) (sold separately). Be sure to use a USB interface cable for iPod / iPhone (CD-IU201S/CD-IU201V) (sold separately) to connect your iPod.

iPod audio and/or video sources are enabled if either of the cables is connected.

- ➔ For details of the connections, refer to the Installation Manual.

For iPod / iPhone with a Lightning connector users

- ❑ To use iPod audio source, you must connect your iPod to this product using a USB interface cable for iPod / iPhone (CD-IU52) (sold separately).

However, functions related to iPod video files and **AppRadio Mode** are not available.

- ❑ iPod audio and/or video sources are not available when an iPod with a Lightning connector is connected to this product with a interface cable (CD-IH202) (sold separately).

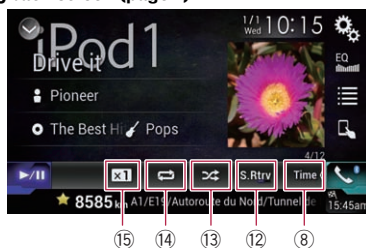
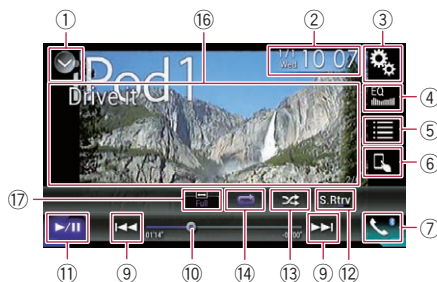
- ➔ For details of the connections, refer to the Installation Manual.

When you want to play audio and/or video files on your iPod with a Lightning connector, first install **CarMediaPlayer** on your iPod with a Lightning connector and then launch **CarMediaPlayer** while in **AppRadio Mode**.

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

CAUTION

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

Using the touch panel keys (for audio)**Playback screen (page 1)****Playback screen (page 2)****Using the touch panel keys (for video)****1 Displays the source list.**

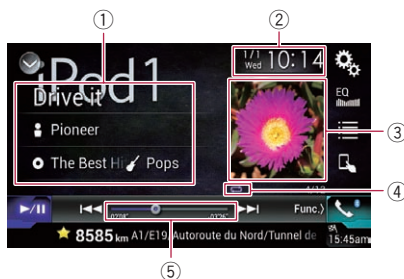
- ➔ For details, refer to *Selecting a front source on the source list* on page 21.

2 Displays the Time and date setting screen.

Using an iPod

- ➔ For details, refer to *Setting the time and date* on page 181.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
 - ➔ For details, refer to *Using the equaliser* on page 160.
- ⑤ **Selects a track from the list.**
 - ➔ For details, refer to *Selecting song or video sources from the playlist screen* on page 109.
- ⑥ **Switches the control mode to “App Mode”.**
 - ➔ For details, refer to *Using this product’s iPod function from your iPod* on page 109.
- ⑦ **Displays the Phone menu screen.**
 - ➔ For details, refer to *Displaying the phone menu* on page 61.
- ⑧ **Switches to the next or previous page of touch panel keys.**
- ⑨ **Skips files forward or backward.**
- ⑩ **Changes the playback point by dragging the key.**
 - ➔ For details, refer to *Operating the time bar* on page 23.
- ⑪ **Switches between playback and pause.**
- ⑫ **Uses “Sound Retriever” function.**
 - ➔ For details, refer to *Setting the “Sound Retriever” function* on page 181.
- ⑬ **Plays files in random order.**
 - ➔ For details, refer to *Setting the shuffle play* on page 108.
- ⑭ **Sets a repeat play range.**
 - ➔ For details, refer to *Setting a repeat play range* on page 108.
- ⑮ **Changes the audiobook speed.**
 - ➔ For details, refer to *Changing the speed of audiobook playback* on page 110.
- ⑯ **Hides the touch panel keys.**
 - Touching this area hides the touch panel keys.
 - Touch anywhere on the LCD screen to display the touch panel keys again.
- ⑰ **Changes the wide screen mode.**
 - ➔ For details, refer to *Changing the wide screen mode* on page 181.

Reading the screen (for audio)



Reading the screen (for video)



① Current track information

- **Song title**
Shows the title of the song currently playing (when available). “No Title” is displayed if there is no corresponding information.
- **Artist name**
Shows the artist name for the song currently playing (when available). “No Name” is displayed if there is no corresponding information.
- **Album title**
Shows the title of the album of the current file (when available). “No Title” is displayed if there is no corresponding information.
- **Genre**
Shows the genre of the current file (when available). “No Genre” is displayed if there is no corresponding information.



② Current time and date**③ Album artwork**

Album art of the current song is displayed if it is available.



④ Playback condition indicator

Indicates the current playback condition.


Setting the shuffle play

Indicator	Meaning
	Plays back songs or videos in random order within the selected list.
	Selects an album randomly, and then plays back all songs in that album in order.

Setting a repeat play range

Indicator	Meaning
	Repeats all songs or videos in the selected list.
	Repeats just the current song or video.

⑤ Play time indicator

Shows the elapsed playing time within the current file. 

Starting procedure

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

➔ For details, refer to Chapter 13.

1 Display the AV source selection screen.


➔ For details of the operations, refer to *Displaying the AV operation screen* on page 20.

2 Connect your iPod.

The source changes and then playback will start.

- If the iPod is already connected, touch **[iPod]** on the AV source selection screen.
- If connecting an iPhone or iPod touch, quit applications before connecting.

3 Touch [iPod] on the AV source selection screen.**4 Use the touch panel keys on the screen to control your iPod.**




- ➔ For details, refer to *Using the touch panel keys (for audio)* on page 106.
- ➔ For details, refer to *Using the touch panel keys (for video)* on page 106.
- 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.
 - ➔ For details of the operations, refer to *Selecting the video for the rear display* on page 183. 

Setting the shuffle play

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

● Touch the following key repeatedly until the desired setting appears.

Turns random play on or off.




-  Plays back songs or videos in random order within the selected list.
-  Selects an album randomly, and then plays back all songs in that album in order. 

Setting a repeat play range

The repeat play range can be changed by only touching a single key.

● Touch the following key repeatedly until the desired setting appears.

Changes the repeat play range.

-  Repeats all songs or videos in the selected list.
-  Repeats just the current song or video. 

Using an iPod

Selecting song or video sources from the playlist screen

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

1 Touch the following key.



Displays the list of the category.

The “ROOT” screen appears.

2 Touch the following keys to switch the music or video category list.

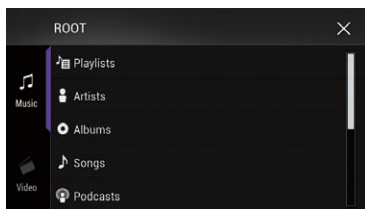


Switches to the music category list.



Switches to the video category list.

3 Touch the category you want to search for.



Category lists (for music):

- Playlists
- Artists
- Albums
- Songs
- Podcasts
- Genres
- Composers
- Audiobooks

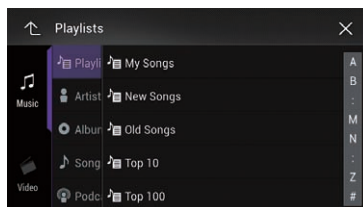
Category lists (for video):

- Video Playlists
- Movies
- Music Videos
- TV Shows

- Video Podcasts
- Category items that do not correspond to the connected iPod are not displayed.

4 Touch the Initial Search Bar to display the alphabet search screen.

- The Initial Search Bar is not displayed in the top category list or the song list.



5 Touch the first letter of the title of the song or video you are looking for.

While searching, touch panel key operation is not available.

- To refine the search with a different letter, touch **[Cancel]**.

6 Touch the title of the list that you want to play.

Repeat this operation until you find the desired song or video.

7 Start playback of the selected list.

- Depending on the generation or version of the iPod, some functions may not be available.
- You can play playlists created with the **MusicSphere** application. The application is available on our website.
- Playlists that you created with the **MusicSphere** application are displayed in abbreviated form.

Using this product's iPod function from your iPod

You can control this product's iPod function from the connected iPod if the control mode is set to “**App Mode**”. The application screen of the iPod can be displayed on this product, and the music files and video files in the iPod can be played back with this product.


Using an iPod

- 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 the following key.



Switches the control mode.

- The control mode switches to "App Mode". The icon changes to .

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

- The following 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.
 - Playing/pausing
 - Fast forwarding/reversing
 - Tracking up/down
 - Moving up/down to a chapter

3 Touch the following key.



Switches the control mode, to control iPod functions from this product.

Changing the speed of audiobook playback

The playback speed can be changed while playing an audiobook.

● Touch the following key.



Changes the playback speed.

- **x1** (default):
Plays back in normal speed.
- **x2**:
Plays back faster than normal speed.
- **x½**:
Plays back slower than normal speed. □

Displaying lists related to the song currently playing (link search)

1 Touch the artwork to open a list of the names of songs on the album currently playing.

2 Touch the name of the song you want to play to start playing that song.

- If part of the recorded information is not displayed, a scroll key appears on the right side of list. Touch the scroll key to scroll. □

Operating with the hardware buttons

Press the TRK button

You can skip songs or videos forward or backward.

When a song or video with chapters is played, you can skip a chapter forward or backward.

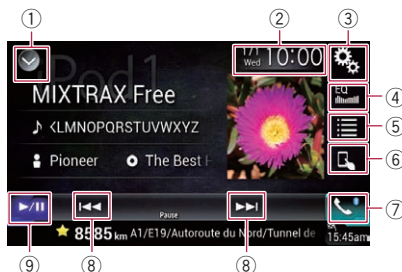
Press and hold the TRK button

You can perform fast reverse or fast forward. □

Playing back music from a music app other than iPod music, as the iPod source

The app name and the song information are also displayed.


Using the touch panel keys



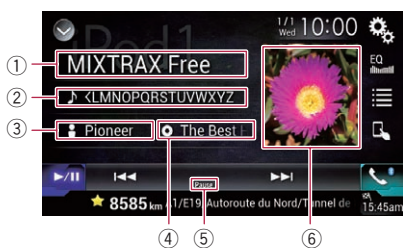
Using an iPod

- ① **Displays the source list.**
 ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the Time and date setting screen.**
 ➔ For details, refer to *Setting the time and date* on page 181.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
 ➔ For details, refer to *Using the equaliser* on page 160.
- ⑤ **Selects a track from the list.**
 ➔ For details, refer to *Selecting song or video sources from the playlist screen* on page 109.
- ⑥ **Switches the control mode to “App Mode”.**
 ➔ For details, refer to *Using this product's iPod function from your iPod* on page 109.
- ⑦ **Displays the Phone menu screen.**
 ➔ For details, refer to *Displaying the phone menu* on page 61.
- ⑧ **Skips files forward or backward.**
- ⑨ **Switches between playback and pause.**

played if there is no corresponding information.

- ④ **Album title**
 Shows the title of the album of the current file (when available). “No Title” is displayed if there is no corresponding information.
- ⑤ **Pause indicator**
- ⑥ **Album artwork**
 Album art of the current song is displayed if it is available. 

Reading the screen



- ① **App name**
 Shows the App name of the currently playing.
- ② **Song title**
 Shows the title of the song currently playing (when available). “No Title” is displayed if there is no corresponding information.
- ③ **Artist name**
 Shows the artist name for the song currently playing (when available). “No Name” is dis-

⚠ 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 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.

- ❑ 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.
- ❑ When an application not compatible with **AppRadio Mode** is started, depending on the application, you can see an image of the application on the screen of this product. However, you will not be able to operate the application.

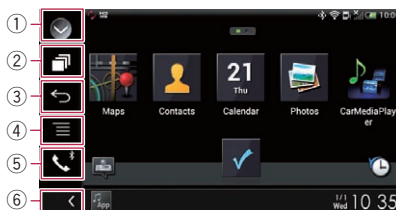
To use **AppRadio Mode**, install the **AppRadio app** on the iPhone or smartphone beforehand to enable launching of the application on this product. For details about the **AppRadio app**, visit the following site:

<http://www.pioneer.com.au/AppRadioMode>

- ❑ Be sure to read *Using app-based connected content* before you perform this operation.
 - ➔ For details, refer to *Using app-based connected content* on page 208.

- 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**, functionality through the product is limited while driving, with available functions determined by the App providers.
- Availability of **AppRadio Mode** functionality is determined by the App provider, and not determined by Pioneer.
- **AppRadio Mode** allows access to applications other than those listed (subject to limitations while driving), but the extent to which content can be used is determined by the App providers.

Using the touch panel keys (App control side bar)



- ① **Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the launcher application screen.**
- ③ **Displays the previous screen.**
 - ❑ When you use the iPhone, this key is not appears.
- ④ **Displays the menu screen.**
 - ❑ When you use the iPhone, this key is not appears.
- ⑤ **Displays the Phone menu screen.**
 - ➔ For details, refer to *Displaying the phone menu* on page 61.
- ⑥ **Displays the current source.**
 - ❑ In **AppRadio Mode**, App control side bar will appear.

Using your iPhone or smartphone applications

- ❑ If you press the **HOME** button twice, the App control side bar will disappear. Press the **HOME** button twice again, and the App control side bar will appear.

Starting procedure

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

➔ For details, refer to Chapter 13.

The procedure varies depending on the type of device.

For iPhone with a 30-pin connector users

1 Connect your iPhone.

- ➔ For details of the connections, refer to the Installation Manual.

2 Press the HOME button to display the Top menu screen.

3 Touch [APPS].

A message, which notifies you that your iPhone can launch the application, appears on the screen.

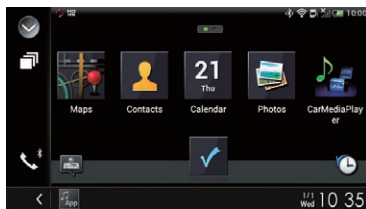
A message, which asks you whether you want to launch your application, appears on your iPhone.

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.



- ❑ If you connect your device while an **AppRadio Mode**-compatible application is

already running, the application operation screen will appear on this product.

6 Touch the desired application icon.

The desired application is launched, and the application operation screen appears.

7 Operate the application.

8 Press the HOME button to go back to the Top menu screen.

For iPhone with a Lightning connector users

1 Register your iPhone and connect it to this product via Bluetooth wireless technology.

- ❑ The registered device must be selected as the priority device.
- ➔ For details, refer to *Registering your Bluetooth devices* on page 55.

2 Unlock your iPhone.

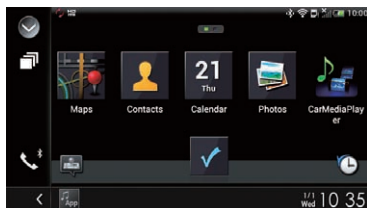
3 Connect your iPhone.

- ❑ The cable connection method varies depending on your device.
- ➔ For details of the connections, refer to the Installation Manual.

4 Press the HOME button to display the Top menu screen.

5 Touch [APPS].

The **AppRadio app** is launched, and the **AppRadio Mode** screen (Application menu 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.

Using your iPhone or smartphone applications

6 Touch the desired application icon.

The desired application is launched, and the application operation screen appears.

7 Operate the application.

8 Press the HOME button to go back to the Top menu screen.

For smartphone users

1 Register your smartphone and connect it to this product via Bluetooth wireless technology.

- ❑ The registered device must be selected as the priority device.
 - ➔ For details, refer to *Registering your Bluetooth devices* on page 55.

2 Unlock your smartphone.

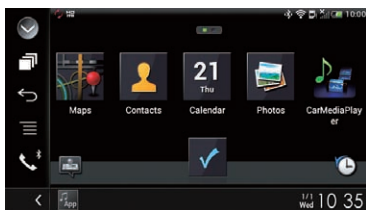
3 Connect your smartphone to this product via the separately sold App Connectivity Kit (CD-AH200).

- ❑ The cable connection method varies depending on your device.
 - ➔ For details of the connections, refer to the Installation Manual.

4 Press the HOME button to display the Top menu screen.

5 Touch [APPS].

The **AppRadio app** is launched, and the **AppRadio Mode** screen (Application menu 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.

6 Touch the desired application icon.

The desired application is launched, and the application operation screen appears.

7 Operate the application.

8 Press the HOME button to go back to the Top menu screen.

Using the keyboard



CAUTION

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

- ❑ This function is only available in **AppRadio Mode** on the iPhone.

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.

- ❑ The language preference for the keyboard of this product should be same as the setting on your iPhone. If the settings for this product and the iPhone are different, you may be unable to enter characters properly.

1 Set the keyboard language.

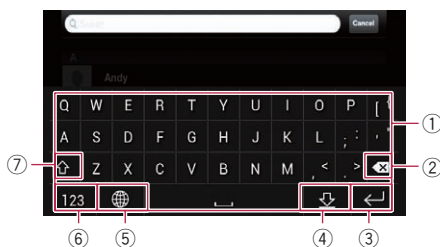
- ➔ For details of the operations, refer to *Setting the keyboard language with the application for iPhone* on page 146.

2 Start up the AppRadio Mode.

- ➔ For details, refer to *Starting procedure* on page 113.


3 Touch the text input area on the application operation screen.

A keyboard for entering text appears.



- ① Enters the characters.
- ② Deletes the entered text one letter at a time, beginning at the end of the text.

Using your iPhone or smartphone applications

- ③ Confirms the entry and allows you to proceed to the next step.
- ④ Hides the keyboard and the text can now be entered using the keyboard of the iPhone.
- ⑤ Changes the iPhone keyboard layout.
 - ❑ The iPhone keyboard layouts that can be selected by tapping  depends on the setting for Hardware Keyboard Layout set on your iPhone.
- ⑥ Switches to a keyboard offering numeric characters and symbols.
- ⑦ Converts the case of the keyboard characters.

Adjusting the image size (For smartphone users)

Black dots may appear on the screen when using **AppRadio Mode** with an Android device connected to this product.

CAUTION

This setting is available only when you stop your vehicle in a safe place and apply the handbrake.

- ❑ This function can be set under the following conditions:
 - When an Android device is connected to this product using the CD-AH200 (sold separately), and when **AppRadio Mode** is available after a Bluetooth connection using SPP (Serial Port Profile) has been established.
- ❑ If this setting has not been set, the setting screen automatically appears in the following cases:
 - When entering **AppRadio Mode** after a Bluetooth connection using SPP (Serial Port Profile) has been established.
 - When a Bluetooth connection using SPP (Serial Port Profile) has been established in **AppRadio Mode**.

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The “**System**” screen appears.

3 Touch [Input/Output settings].

4 Touch [AppRadio Video Adjustment].

The confirmation screen appears.

5 Touch [OK].

6 Touch the following keys to adjust the line to fit smartphone image size.



Moves the line to the left.



Moves the line to the right.



Moves the line upward.



Moves the line downward.

7 Touch [Preview].

- ❑ Confirm that the whole image fills the screen.

8 Touch [OK].

- ❑ If you want to adjust the setting again from the beginning, touch [**RESET**].

Displaying the image of your application (iPhone with 30-pin connector)

You can set an image of an application for iPhone, which is not compatible with **AppRadio Mode**, to be shown on the screen.

- ❑ Depending on the type of application, you may not be able to see the image on the screen.
- ❑ You can only control the application on the connected device.

Using your iPhone or smartphone applications

- ❑ When you touch the display in this function, “Don't Touch” mark appears on the upper right corner of the screen.

1 Connect your iPhone.

- ➔ For details of the connections, refer to the Installation Manual.

2 Press the HOME button to display the Top menu screen.

3 Touch [APPS].

A message, which notifies you that your iPhone can launch the application, appears on the screen.

A message, which asks you whether you want to launch your application, appears on your iPhone.

4 Use your iPhone to refuse to launch the application.

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

The black screen appears.

6 Launch an application on your iPhone.

An image of the application appears on the screen.

7 Press the HOME button to return to the Top menu screen.

Displaying the image of your application (iPhone with Lightning connector)

You can set an image of an application for smartphone, which is not compatible with **AppRadio Mode**, to be shown on the screen.

- ❑ Depending on the type of application, you may not be able to see the image on the screen.
- ❑ When you use this function, do not connect other devices via Bluetooth wireless technology. Be sure to disconnect your Bluetooth device before using this function.
- ❑ You can only control the application on the connected device.

- ❑ When you touch the display in this function, “Don't Touch” mark appears on the upper right corner of the screen.

1 Connect your iPhone.

- ❑ The cable connection method varies depending on your device.
- ➔ For details of the connections, refer to the Installation Manual.

2 Press the HOME button to display the Top menu screen.

3 Touch [APPS].

The image in your iPhone appears on the screen.

4 Launch an application on your iPhone.

An image of the application appears on the screen.

5 Press the HOME button to return to the Top menu screen.

Displaying the image of your application (smartphone)

You can set an image of an application for smartphone, which is not compatible with **AppRadio Mode**, to be shown on the screen.

- ❑ Compatibility with all smartphones is not guaranteed.
- ❑ When you use this function, do not connect other devices via Bluetooth wireless technology. Be sure to disconnect your Bluetooth device before using this function.
- ❑ You can only control the application on the connected device.
- ❑ When you touch the display in this function, “Don't Touch” mark appears on the upper right corner of the screen.

1 Connect your smartphone to this product via the separately sold App Connectivity Kit (CD-AH200).

- ❑ The cable connection method varies depending on your device.
- ➔ For details of the connections, refer to the Installation Manual.

2 Press the HOME button to display the Top menu screen.

Using your iPhone or smartphone applications

3 Touch [APPS].

The image in your smartphone appears on the screen.

4 Launch an application on your smartphone.

An image of the application appears on the screen.

5 Press the HOME button to return to the Top menu screen.

➤ For details, refer to *Displaying the phone menu* on page 61.

⑥ Displays the current source.

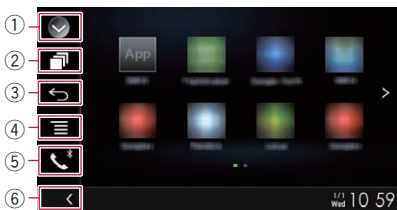
- In **MirrorLink** mode, App control side bar will appear.
- If you press the **HOME** button twice, the App control side bar will disappear. Press the **HOME** button twice again, and the App control side bar will appear.

Using MirrorLink

When you connect a **MirrorLink** device with compatible applications installed, you can control the applications for the mobile device directly from this product (**MirrorLink** mode). You can view and operate the compatible applications via the display with multi-touch gestures like tapping, dragging, scrolling, and flicking.

- Multi-touch gestures may be disabled depending on the **MirrorLink** device model that is connected.

Using the touch panel keys (App control side bar)



- ① **Displays the source list.**
 - For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the launcher application screen.**
- ③ **Displays the previous screen.**
 - Depending on the type of **MirrorLink** device, this key is not appears.
- ④ **Displays the menu screen.**
 - Depending on the type of **MirrorLink** device, this key is not appears.
- ⑤ **Displays the Phone menu screen.**

Starting procedure

When connecting a **MirrorLink** device to this product, you must select the method for connecting your device. Settings are required according to the connected device.

➔ For details, refer to Chapter 13.

1 Unlock your MirrorLink device.

2 Connect your MirrorLink device to this product via the separately sold USB interface cable for use with MirrorLink devices (CD-MU200).

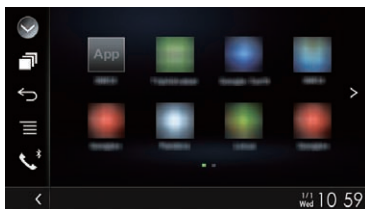
❑ The cable connection method varies depending on your device.

➔ For details of the connections, refer to the Installation Manual.

3 Press the HOME button to display the Top menu screen.

4 Touch [APPS].

If the launcher application is installed in the **MirrorLink** device, the application launches. If not, the Application menu screen will appear.



5 Touch the desired application icon.

The desired application is launched, and the application operation screen appears.

❑ Some applications may not launch depending on the state of the connected device. If it does not launch, launch the application according to the application startup message.

6 Operate the application.

7 Press the HOME button to go back to the Top menu screen. ◻

Using the audio mix function

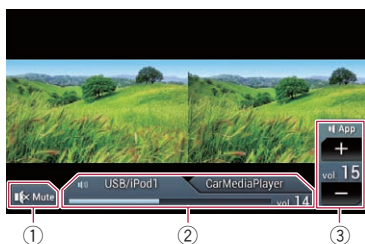
You can output audio mixing AV source and an application for iPhone or smartphone when the **AppRadio Mode** or **MirrorLink** mode is used.

- ❑ 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.
- ❑ If the screen is switched to the Map screen when the audio mix function is set to "On", the message, "**NOTE: Navigation Sounds are unavailable with the current app & source selections. Do you want to output Navigation Sounds instead of App-based Audio?**" is displayed. To output voice guidance for the navigation system, touch "Yes".

1 Start up the AppRadio Mode or MirrorLink mode.

2 Press the VOL (+/-) button.

The audio mix menu will be displayed on the screen.



- 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). The App volume is displayed. If you touch the App volume, the volume keys will be displayed.
 - Right tab: The audio mix function is disabled (mix off).
- ③ Adjusts the application audio volume.

Each touch of [+] or [-] increases or decreases the volume level.

- ❑ The AV operation screen and the Application screen can be switched by pressing the **MODE** button.
- ❑ The right tab is not displayed on the AV operation screen.
- ❑ You cannot adjust the volume of the main sound on the screen. Press the **VOL (+/-)** button to adjust the volume of the main sound.
- ❑ The audio mix menu is displayed for four seconds. If the screen disappears, press the **VOL (+/-)** button again. The screen reappears. ■

⚠ 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.

Pandora operations

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 products:
➡ For details, refer to Chapter 13.
- Please update the firmware of the Pandora application to the latest version before use.
- The latest version of the Pandora application can be downloaded 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 from the website (<http://www.pandora.com/register>).
- If the Data Plan for your iPhone does not provide for unlimited data usage, additional charges from your carrier may apply for accessing the Pandora service via 3G, EDGE and/or LTE (4G) networks.
- You need to connect to the Internet via 3G, EDGE, LTE (4G) or Wi-Fi network to use the Pandora service.


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, firmware version of the Pandora application, changes to the Pandora music service.

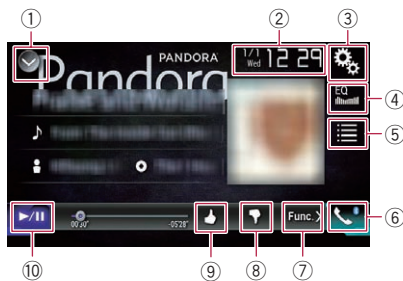
- Certain functions of the Pandora service are not available when accessing the service through Pioneer car audio/video products. They include, but are not limited to the following: creating new stations, deleting stations, sending information about current stations, buying tracks from iTunes, viewing additional text information, logging in to Pandora, adjusting Cell Network Audio Quality.

Notes

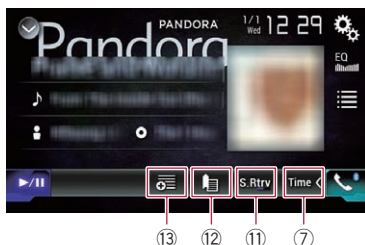
- Pandora internet radio is a music service not affiliated with Pioneer. More information is available at <http://www.pandora.com>
- The Pandora mobile application is available for most iPhone and smartphone, please visit www.pandora.com/everywhere/mobile for the latest compatibility information. 

Using the touch panel keys

Playback screen (page 1)



Playback screen (page 2)



- ① **Displays the source list.**
➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the Time and date setting screen.**
➔ For details, refer to *Setting the time and date* on page 181.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
➔ For details, refer to *Using the equaliser* on page 160.
- ⑤ **Touching the key displays the list of your Pandora stations so you can select one of them to play.**
- ⑥ **Displays the Phone menu screen.**
➔ For details, refer to *Displaying the phone menu* on page 61.
- ⑦ **Switches to the next or previous page of touch panel keys.**
- ⑧ **Touching the key gives a “Thumbs Down” to the track currently playing and skips to the next track.**
 This function is not available when using a shared station.
- ⑨ **Touching the key gives a “Thumbs Up” to the track currently playing.**
 This function is not available when using a shared station.
- ⑩ **Switches between playback and pause.**
- ⑪ **Uses “Sound Retriever” function.**
➔ For details, refer to *Setting the “Sound Retriever” function* on page 181.
- ⑫ **Adds information for the track currently playing to bookmarks.**
- ⑬ **Creates a new station.**

Reading the screen



- ① **Current track information**
 - Shows the Pandora station name the tuner is currently tuned in to.
 - **Track title**
Shows the title of the current track.
 - **Artist name**
Shows the artist name for the track currently playing.
 - **Album title**
Shows the title of the album of the current track.
 “-----” is displayed if there is no corresponding information.
- ② **Play time indicator**
Shows the elapsed time, remaining time and time bar of the current track.

Starting procedure

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

➔ For details, refer to Chapter 13.

For iPhone with a 30-pin connector users

- 1 **Unlock your iPhone.**
- 2 **Connect your iPhone.**
 Connect via USB or Bluetooth.

- ➔ For details of the Bluetooth connection, refer to *Registering your Bluetooth devices* on page 55.

3 Display the AV source selection screen.

- ➔ For details of the operations, refer to *Displaying the AV operation screen* on page 20.

4 Touch [Pandora] on the AV source selection screen.

5 Use the touch panel keys on the screen to control the Pandora application.

- ➔ For details, refer to *Using the touch panel keys* on page 120.

For iPhone with a Lightning connector users

1 Unlock your iPhone.

2 Connect your iPhone.

- Connect via USB, Bluetooth, or HDMI and Bluetooth.
 - ➔ For details of the Bluetooth connection, refer to *Registering your Bluetooth devices* on page 55.
- The cable connection method varies depending on your device.
 - ➔ For details of the connections, refer to the Installation Manual.

3 Display the AV source selection screen.

- ➔ For details of the operations, refer to *Displaying the AV operation screen* on page 20.

4 Touch [Pandora] on the AV source selection screen.

When you touch [Pandora], this product will start establishing a Bluetooth connection. After the connection is successfully established, the touch panel key on the "Pandora" screen is activated.

5 Use the touch panel keys on the screen to control the Pandora application.

- ➔ For details, refer to *Using the touch panel keys* on page 120.

For smartphone users

1 Unlock your smartphone.

2 Connect your smartphone.

- Connect via USB, Bluetooth, or HDMI and Bluetooth.
 - ➔ For details of the Bluetooth connection, refer to *Registering your Bluetooth devices* on page 55.
- The cable connection method varies depending on your device.
 - ➔ For details of the connections, refer to the Installation Manual.


3 Display the AV source selection screen.

- ➔ For details of the operations, refer to *Displaying the AV operation screen* on page 20.

4 Touch [Pandora] on the AV source selection screen.

When you touch [Pandora], this product will start establishing a Bluetooth connection. After the connection is successfully established, the touch panel key on the "Pandora" screen is activated.

5 Use the touch panel keys on the screen to control the Pandora application.

- ➔ For details, refer to *Using the touch panel keys* on page 120. 

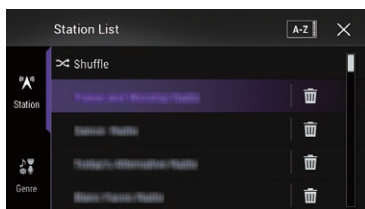
Selecting a Pandora station from the list

● Touch the following key.



Displays the list of Pandora stations.

The following screen appears.



Operating with the hardware buttons

Press the TRK button

You can skip songs forward.

- Touch to switch to the station list.
- Touch to switch to the genre list.
- Touching plays only one track based on particular musical characteristics, one at a time, from several shuffled stations.
- Stations indicated by are shared stations.
- When you touch [A-Z] or [Date], the list items can be sorted.
 - A-Z:** You can sort the items in the list alphabetically.
 - Date:** You can sort the items in the list in the order of the dates the items were created.
- If you touch the station will be deleted. A message prompting you to delete the station appears. Touch [Yes]. The station will be deleted. To cancel, touch [No].

Add station

1 Touch the following key.



Displays the selection screen.

2 Touch [Track] (from track) or [Artist] (from artist).

A new station is created.

- To cancel adding a new station, touch [Cancel].

⚠ 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.

When you connect an iPhone or a smartphone with the Aha Radio installed, you can control, view, and/or listen to Aha Radio content from this product.

- ❑ In this chapter, iPhone and iPod touch will be referred to as "iPhone".
- ❑ For details concerning operations, refer to the Help and Tips section within the Aha Radio application.
- ❑ Aha Radio stations may require initial setup or sign in before the station can be accessed.
- ❑ Be sure to read *Using app-based connected content* before you perform this operation.
 - ➔ For details, refer to *Using app-based connected content* on page 208.

Notes:

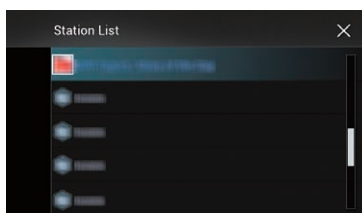
- Certain functionality of the Aha Radio service may not be available when accessing the service through this product, including, but not limited to, creating new Aha stations, deleting Aha stations, recording 'shouts' by voice, adjusting Aha Radio App settings, logging into Facebook, creating a Facebook account, logging into Twitter, or creating a Twitter account.
- Aha Radio is a service not affiliated with Pioneer. More information is available at <http://www.aharadio.com/>.

Using the touch panel keys













- ① **Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the Time and date setting screen.**
 - ➔ For details, refer to *Setting the time and date* on page 181.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
 - ➔ For details, refer to *Using the equaliser* on page 160.
- ⑤ **Selects an Aha Radio station from the list.**

Touching this key displays the list of the available Aha Radio stations. Touch the desired Aha Radio station to change Aha Radio sources.



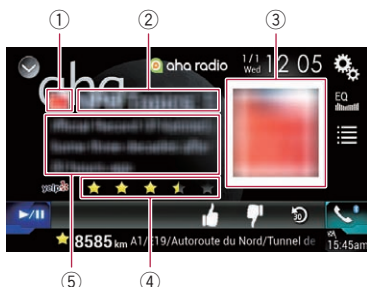
- ⑥ **Displays the Phone menu screen.**
 - ➔ For details, refer to *Displaying the phone menu* on page 61.
- ⑦ **Performs additional functions of each station or content currently playing.**
 - ❑ The icons displayed vary depending on each station or content.

Using Aha Radio

Indicator	Meaning
	Touching the key discloses the current car location through Aha Radio.
	Touching the key retweets the selected tweets with your Twitter account.
	Touching the key performs fast reverse of the current content for 30 seconds.
	Touching the key "dislikes" the current content. <input type="checkbox"/> Depending on the content, touching  or  cancels "dislikes".
	Touching the key "likes" the current content. <input type="checkbox"/> Depending on the content, touching  or  cancels "likes".
	Touching the key lets you make a call to a phone number registered in the current content using the hands-free function.

- ⑧ Switches between playback and pause.

Reading the screen



- ① Station mark

- ② Station name

Shows the name of the Aha Radio station to which this product is currently tuned.

- ③ Content image

Displays an image of the current content if one is available.

- ④ **Rating information**

Shows the rated value of the current content displayed (only when and where applicable).

- ⑤ **Current station information**

Shows which source has been selected.

Shows information on the content currently being played.

- The item is blank if there is no corresponding information.

Starting procedure

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

- ➔ For details, refer to Chapter 13.

For iPhone with a 30-pin connector users

- 1 **Unlock your iPhone.**

- 2 **Connect your iPhone.**

- Connect via USB or Bluetooth.

- ➔ For details of the Bluetooth connection, refer to *Registering your Bluetooth devices* on page 55.

- 3 **Display the AV source selection screen.**

- ➔ For details of the operations, refer to *Displaying the AV operation screen* on page 20.

- 4 **Touch [aha] on the AV source selection screen.**

- 5 **Use the touch panel keys on the screen to control Aha Radio.**

- ➔ For details, refer to *Using the touch panel keys* on page 124.

For iPhone with a Lightning connector users

1 Unlock your iPhone.

2 Connect your iPhone.

- ❑ Connect via USB, Bluetooth, or HDMI and Bluetooth.
 - ➔ For details of the Bluetooth connection, refer to *Registering your Bluetooth devices* on page 55.
- ❑ The cable connection method varies depending on your device.
 - ➔ For details of the connections, refer to the Installation Manual.

3 Display the AV source selection screen.

- ➔ For details of the operations, refer to *Displaying the AV operation screen* on page 20.

4 Touch [aha] on the AV source selection screen.

When you touch [aha], this product will start establishing a Bluetooth connection.

After the connection is successfully established, the touch panel key on the “aha radio” screen is activated.

5 Use the touch panel keys on the screen to control Aha Radio.

- ➔ For details, refer to *Using the touch panel keys* on page 124.

For smartphone users

1 Unlock your smartphone.

2 Connect your smartphone.

- ❑ Connect via USB, Bluetooth, or HDMI and Bluetooth.
 - ➔ For details of the Bluetooth connection, refer to *Registering your Bluetooth devices* on page 55.
- ❑ The cable connection method varies depending on your device.
 - ➔ For details of the connections, refer to the Installation Manual.

3 Display the AV source selection screen.

- ➔ For details of the operations, refer to *Displaying the AV operation screen* on page 20.

4 Touch [aha] on the AV source selection screen.

When you touch [aha], this product will start establishing a Bluetooth connection.

After the connection is successfully established, the touch panel key on the “aha radio” screen is activated.

5 Use the touch panel keys on the screen to control Aha Radio.

- ➔ For details, refer to *Using the touch panel keys* on page 124.

Operating with the hardware buttons

Press the TRK button

You can skip contents forward or backward.

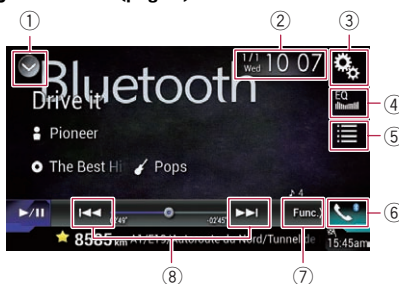
Using a Bluetooth audio player

You can control a Bluetooth audio player.

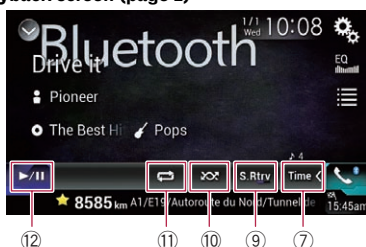
- ❑ Before using the Bluetooth audio player, you must register and connect the device to this product.
 - ➔ For details, refer to *Registering your Bluetooth devices* on page 55.
- ❑ Operations may vary depending on the Bluetooth audio player.
- ❑ Depending on the Bluetooth audio player connected to 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.
- ❑ Since a number of Bluetooth audio players are available on the market, operations with your Bluetooth audio player using this product vary considerably in range. Please refer to the instruction manual that came with your Bluetooth audio player as well as this manual while operating your player on this product.
- ❑ While you are listening to songs on your Bluetooth audio player, please refrain from operating your mobile phone as much as possible. If you try operating your mobile phone, the signal may cause noise for song playback.
- ❑ Even if you switch to another source while listening to a song on your Bluetooth audio player, song playback may continue.
- ❑ Depending on the Bluetooth audio player you connected to this product, operations on this product to control the player may differ from those explained in this manual.
- ❑ When you are talking on a mobile phone connected to this product via Bluetooth wireless technology, song playback from your Bluetooth audio player connected to this product may be paused.

Using the touch panel keys

Playback screen (page 1)



Playback screen (page 2)



- ① **Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the Time and date setting screen.**
 - ➔ For details, refer to *Setting the time and date* on page 181.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
 - ➔ For details, refer to *Using the equaliser* on page 160.
- ⑤ **Selects a file from the list.**
 - ➔ For details, refer to *Selecting files from the file name list* on page 129.
- ⑥ **Displays the Phone menu screen.**
 - ➔ For details, refer to *Displaying the phone menu* on page 61.
- ⑦ **Switches to the next or previous page of touch panel keys.**
- ⑧ **Skips files forward or backward.**
- ⑨ **Uses “Sound Retriever” function.**
 - ➔ For details, refer to *Setting the “Sound Retriever” function* on page 181.

- ⑩ **Plays files in random order.**
 - For details, refer to *Playing files in random order* on page 129.
- ⑪ **Sets a repeat play range.**
 - For details, refer to *Setting a repeat play range* on page 129.
- ⑫ **Switches between playback and pause.**

- In the following cases, file information will only be displayed after a file starts or resumes playing:
 - You connect a Bluetooth audio player compatible with AVRCP1.3, and operate the player to start playing.
 - You select another file when playback is paused.

Reading the screen



- ① **Current time and date**
- ② **File number indicator**
Shows the file number currently playing (when available).
- ③ **Play time indicator**
Shows the elapsed playing time within the current file (when available).
- ④ **Current file information**
If the connected Bluetooth audio player features AVRCP 1.3, the following file information will be displayed.

- **Track title**

Shows the title of the track currently playing (when available).

- **Artist name**

Shows the name of the artist for the track currently playing (when available).

- **Album title**

Shows the title of the album of the current file (when available).

- **Genre**

Shows the genre of the current file (when available).

Starting procedure

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 Press the HOME button to display the Top menu screen.

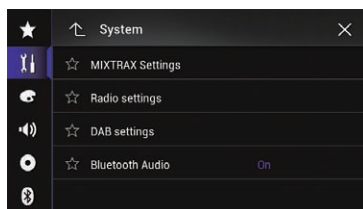
3 Touch the following keys in the following order.



The “**System**” screen appears.

4 Touch [AV Source Settings].

The following screen appears.



5 Confirm that “Bluetooth Audio” is turned on.

- The default setting is “**On**”.

6 Display the AV source selection screen.

- For details of the operations, refer to *Displaying the AV operation screen* on page 20.

Using a Bluetooth audio player

7 Touch [Bluetooth Audio] on the AV source selection screen.

The “Bluetooth Audio” screen appears.

8 Use the touch panel keys on the screen to control the Bluetooth audio player.

- ➔ For details, refer to *Using the touch panel keys* on page 127. 

Selecting files from the file name list

The file name list lets you see the list of track titles for the Bluetooth audio player and lets you select one of them to play back.

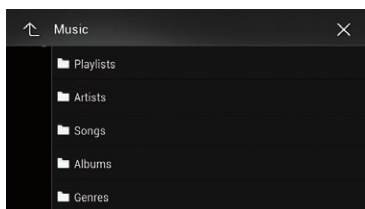
- This function is only available when the connected Bluetooth audio player supports AVRCP 1.4.

1 Touch the following key.




Displays the file name list.

The following screen appears.



2 Touch a file on the list to play back.

- Touching a folder on the list shows its contents. You can play a file on the list by touching it. 

Playing files in random order

All of the files within the repeat play range can be played at random by only touching a single key.

- This function is only available when the connected Bluetooth audio player supports AVRCP 1.3.

● Touch the following key repeatedly until the desired setting appears.



Turns random play on or off.



Setting a repeat play range

The repeat play range can be changed by only touching a single key.

- This function is only available when the connected Bluetooth audio player supports AVRCP 1.3.

● Touch the following key repeatedly until the desired setting appears.



Changes the repeat play range between the current file and all audio files in the Bluetooth audio player.




Operating with the hardware buttons

Press the TRK button

You can skip files forward or backward.

Press and hold the TRK button

You can perform fast reverse or fast forward. 

Using an HDMI source

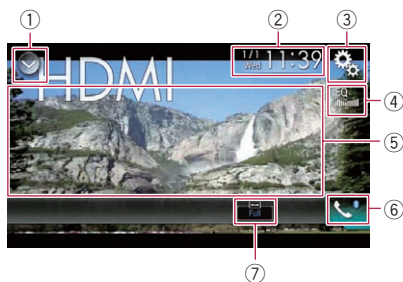
You can display the video image output by the device connected to this product. This section describes operations for an HDMI source.

- ❑ A High Speed HDMI® Cable (sold separately) is required for connection.
 - ➔ For details of the connection method, refer to the Installation Manual.

CAUTION

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

Using the touch panel keys



- ① **Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the Time and date setting screen.**
 - ➔ For details, refer to *Setting the time and date* on page 181.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
 - ➔ For details, refer to *Using the equaliser* on page 160.
- ⑤ **Hides the touch panel keys.**

Touching this area hides the touch panel keys.

 - ❑ Touch anywhere on the LCD screen to display the touch panel keys again.
- ⑥ **Displays the Phone menu screen.**
 - ➔ For details, refer to *Displaying the phone menu* on page 61.

- ⑦ **Changes the wide screen mode.**
 - ➔ For details, refer to *Changing the wide screen mode* on page 181. ❑

Reading the screen



- ① **Current time and date** ❑

Starting procedure

- 1 **Display the AV source selection screen.**
 - ➔ For details of the operations, refer to *Displaying the AV operation screen* on page 20.
- 2 **Touch [HDMI] on the AV source selection screen.**

The image is displayed on the screen.
- 3 **Use the touch panel keys on the screen to control the external unit.**
 - ➔ For details, refer to *Using the touch panel keys* on page 130. ❑

Using an AUX source

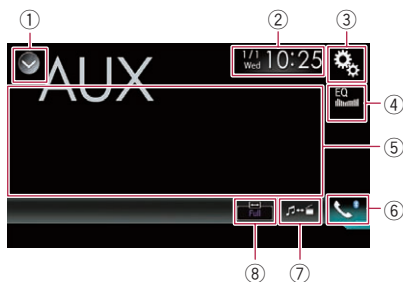
You can display the video image output by the device connected to this product. This section describes operations for an AUX source.

- ❑ A Mini-jack AV cable (CD-RM10) (sold separately) is required for connection.
 - ➔ For details of the connection method, refer to the Installation Manual.

CAUTION

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

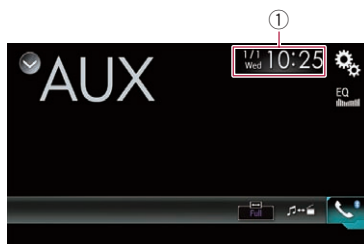
Using the touch panel keys



- ① **Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the Time and date setting screen.**
 - ➔ For details, refer to *Setting the time and date* on page 181.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
 - ➔ For details, refer to *Using the equaliser* on page 160.
- ⑤ **Hides the touch panel keys.**
 - Touching this area hides the touch panel keys.
 - ❑ Touch anywhere on the LCD screen to display the touch panel keys again.
- ⑥ **Displays the Phone menu screen.**
 - ➔ For details, refer to *Displaying the phone menu* on page 61.

- ⑦ **Switches the operation screen.**
 - ➔ For details, refer to *Switching the operation screen* on page 132.
- ⑧ **Changes the wide screen mode.**
 - ➔ For details, refer to *Changing the wide screen mode* on page 181. ❑

Reading the screen



- ① **Current time and date** ❑

Starting procedure

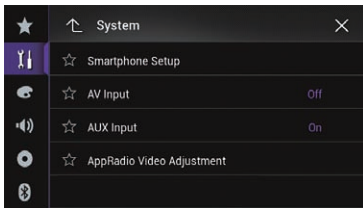
You can display the video image output by the device connected to video input.

- 1 **Press the HOME button to display the Top menu screen.**
- 2 **Touch the following keys in the following order.**



The "System" screen appears.

- 3 **Touch [Input/Output settings].**
The following screen appears.



4 Confirm that "AUX Input" is turned on.

- ☐ The default setting is "On".

5 Display the AV source selection screen.

- ➔ For details of the operations, refer to *Displaying the AV operation screen* on page 20.

6 Touch [AUX] on the AV source selection screen.

The image is displayed on the screen.

7 Use the touch panel keys on the screen to control the external unit.

- ➔ For details, refer to *Using the touch panel keys* on page 131. ☐

Setting the video signal

When you connect this product to an AUX equipment, select the suitable video signal setting.

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

1 Press the HOME button to display the Top menu screen.

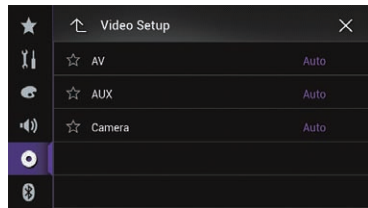
2 Touch the following keys in the following order.



The "Video Setup" screen appears.

3 Touch [Video Signal Setting].

The following screen appears.



4 Touch [AUX].

The pop-up menu appears.

5 Touch the item you want to set.

- **Auto** (default):
Adjusts the video signal setting automatically.
- **PAL**:
Sets the video signal to PAL.
- **NTSC**:
Sets the video signal to NTSC.
- **PAL-M**:
Sets the video signal to PAL-M.
- **PAL-N**:
Sets the video signal to PAL-N.
- **SECAM**:
Sets the video signal to SECAM. ☐

Switching the operation screen

You can switch between the screen to operate music files and that to operate video files.

- ☐ This touch panel key is only available when there are both audio and video files on the auxiliary equipment.

• Touch the following key.



Switches between the screen to operate video files and that to operate music files.



Using AV input

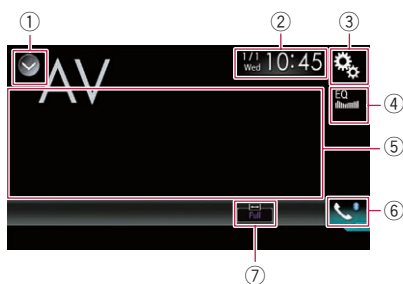
You can display the video image output by the device connected to this product.

- ➔ For details of the connection method, refer to the Installation Manual.

CAUTION

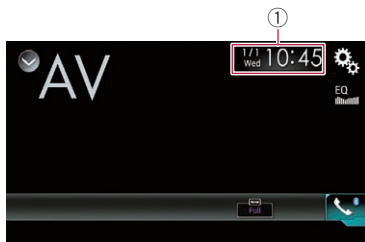
For safety reasons, video images cannot be viewed while your vehicle is in motion. To view video images, you must stop in a safe place and apply the handbrake.

Using the touch panel keys



- Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- Displays the Time and date setting screen.**
 - ➔ For details, refer to *Setting the time and date* on page 181.
- Displays the Setting menu screen.**
- Recalls equaliser curves.**
 - ➔ For details, refer to *Using the equaliser* on page 160.
- Hides the touch panel keys.**
 - Touching this area hides the touch panel keys.
 - ☐ Touch anywhere on the LCD screen to display the touch panel keys again.
- Displays the Phone menu screen.**
 - ➔ For details, refer to *Displaying the phone menu* on page 61.
- Changes the wide screen mode.**
 - ➔ For details, refer to *Changing the wide screen mode* on page 181. ☐

Reading the screen



- Current time and date** ☐

Starting procedure (for AV source)

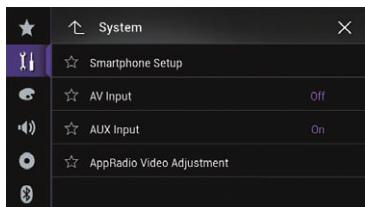
You can display the video image output by the device connected to video input.

- Press the HOME button to display the Top menu screen.**
- Touch the following keys in the following order.**



The "System" screen appears.

- Touch [Input/Output settings].**
The following screen appears.



- Touch [AV Input].**
The pop-up menu appears.

- Touch [Source].**
The video image output by the connected external device can be displayed.

Using AV input

6 Display the AV source selection screen.

- ➔ For details of the operations, refer to *Displaying the AV operation screen* on page 20.

7 Touch [AV] on the AV source selection screen.

The image is displayed on the screen.

8 Use the touch panel keys on the screen to control the external unit.

- ➔ For details, refer to *Using the touch panel keys* on page 133. 

Starting procedure (for camera)

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

1 Press the HOME button to display the Top menu screen.

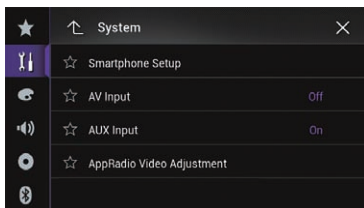
2 Touch the following keys in the following order.



The "System" screen appears.

3 Touch [Input/Output settings].

The following screen appears.



4 Touch [AV Input].

The pop-up menu appears.

5 Touch [Camera].

The image output by the connected external camera can be displayed.

6 Display the AV source selection screen.

- ➔ For details of the operations, refer to *Displaying the AV operation screen* on page 20.

7 Touch [AV] on the AV source selection screen.

The image is displayed on the screen.

8 Use the touch panel keys on the screen to control the external unit.

- ➔ For details, refer to *Using the touch panel keys* on page 133. 

Setting the video signal

When you connect this product to an AV equipment, select the suitable video signal setting.

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

1 Press the HOME button to display the Top menu screen.

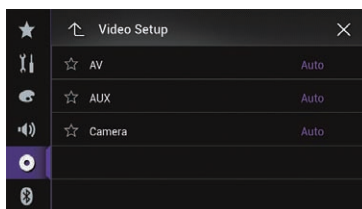
2 Touch the following keys in the following order.



The "Video Setup" screen appears.

3 Touch [Video Signal Setting].

The following screen appears.



4 Touch [AV].

The pop-up menu appears.

5 Touch the item you want to set.

- **Auto** (default):

Using AV input

Adjusts the video signal setting automatically.

- **PAL:**
Sets the video signal to PAL.
- **NTSC:**
Sets the video signal to NTSC.
- **PAL-M:**
Sets the video signal to PAL-M.
- **PAL-N:**
Sets the video signal to PAL-N.
- **SECAM:**
Sets the video signal to SECAM.


MIXTRAX is original technology for creating non-stop mixes of selections from your audio library, complete with DJ effects that make them sound as if a DJ is right there with you playing the music.

MIXTRAX operation

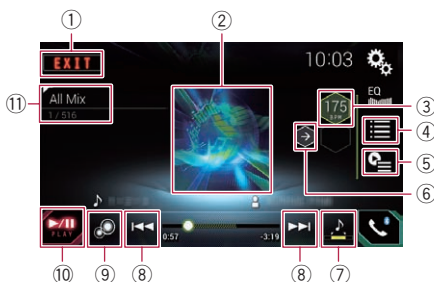
You can enjoy your music files by installing the MIXTRAX software to your computer and using the software to transfer the files to external storage device (USB, SD).

The MIXTRAX software can be downloaded from the website below.


<http://www.mixtraxnet.com>

For details on how to use the MIXTRAX software, refer to the online manual. 

Touch panel keys



- ① Exits the MIXTRAX screen.
- ② Displays the LinkGate screen.
Touch the desired item. Songs related to the selected item are played.
- ③ Specifies the BPM.
The original BPM is not displayed during playback.
- ④ Displays the item selection screen.
➔ For details of the operations, refer to *Selecting an item to play songs* on page 136.
- ⑤ Displays the playback list screen.

- ➔ For details of the operations, refer to *Selecting songs not to be played* on page 137.
- ⑥ Sets to the original BPM (Beats Per Minute).
- ⑦ Specifies the playback portion.
➔ For details of the operations, refer to *Specifying the playback portion* on page 137.
- ⑧ Touch to select a track.
Touch and hold to fast forward or rewind.
- ⑨ Turns on or off the MIXTRAX original visual display.
- ⑩ Pauses and starts playback.
- ⑪ Displays the item selected on the LinkGate screen or item selection screen. 

Selecting an item to play songs

You can specify an item to play songs related to it.

1 Touch the following key.



Displays the item selection screen.

2 Touch the following keys to select the item.



Displays the MIX pattern list.




Displays the tag list.



Displays the file list.

3 Select an item in the list.

Songs related to the selected item are played. 

Using MIXTRAX

Selecting songs not to be played

You can select items or songs not to be played.

1 Touch the following key.



Displays the playback list screen.

2 Touch the following key.



Displays the "Playback not allowed" screen.

3 Touch [Songs], [Artists] or [Albums].

4 Touch the box on the left of the item or song that you do not want to play.

An icon is displayed. Items displayed with the icon will not be played.

- If you touch [**Unselect All**], all the selections are cancelled.
- If you touch [**Select All**], all the items are selected.

Specifying the playback portion

You can specify the playback portion.

● Touch the following key repeatedly until the desired setting appears.



Changes the playback portion.

- (default):
Plays back a middle portion.
 - :
Plays back a long portion.
 - :
Plays back a short portion.
- The most suitable sound effect is automatically applied when switching to the next song.

Setting the flash pattern

The flashing colour changes with the changes in the sound and bass levels.

1 Press the HOME button to display the Top menu screen.

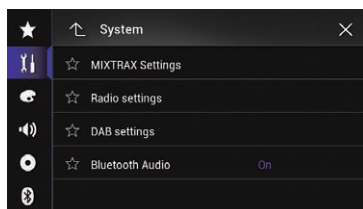
2 Touch the following keys in the following order.



The "System" screen appears.

3 Touch [AV Source Settings].

The following screen appears.



4 Touch [MIXTRAX Settings].

5 Touch [Flash Pattern].

The pop-up menu appears.

6 Touch the item you want to set.

- **Sound1** (default) to **Sound6**:
The flash pattern changes according to the sound level. Select a desired mode.
- **L-Pass1** to **L-Pass6**:
The flash pattern changes according to the bass level. Select a desired mode.
- **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.

Navigation info window

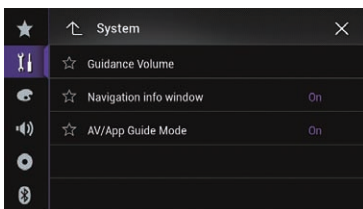
You can set whether to display the guidance information of the navigation on the AV operation screen.

- 1 Press the HOME button to display the Top menu screen.
- 2 Touch the following keys in the following order.



The “System” screen appears.

- 3 Touch [Navigation Related Settings]. The following screen appears.



- 4 Touch [Navigation info window] repeatedly until the desired setting appears.

- **On** (default):
Displays the navigation information bar.
- **Off**:
Does not display the navigation information bar.

Setting automatic switching to the navigation screen

You can set whether to automatically switch to the navigation screen from the AV screen when your vehicle approaches a guidance point such as an intersection.

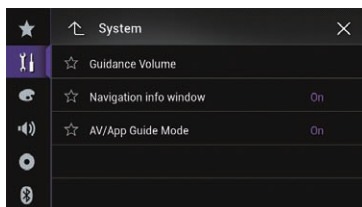
- 1 Press the HOME button to display the Top menu screen.

- 2 Touch the following keys in the following order.



The “System” screen appears.

- 3 Touch [Navigation Related Settings]. The following screen appears.



- 4 Touch [AV/App Guide Mode] repeatedly until the desired setting appears.

- **On** (default):
Switches from the AV operation screen to the map screen.
- **Off**:
Does not switch the screen.

Setting the FM tuning step

Depending on the region, the tuning step can be changed. The FM tuning step can be switched between 100 kHz and 50 kHz.

- This setting is available when the selected source is “OFF”.

- 1 Press the HOME button to display the Top menu screen.

- 2 Touch the following keys in the following order.

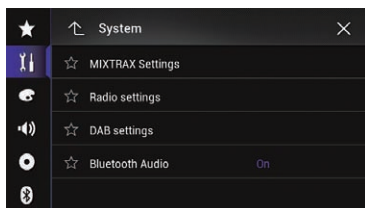


The “System” screen appears.

System settings

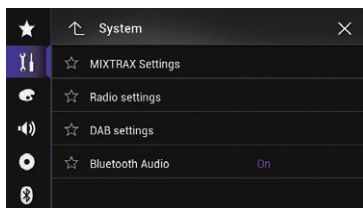
3 Touch [AV Source Settings].

The following screen appears.



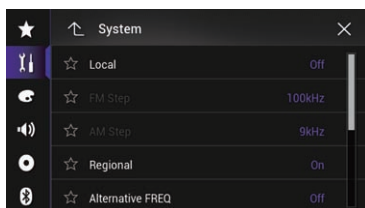
3 Touch [AV Source Settings].

The following screen appears.



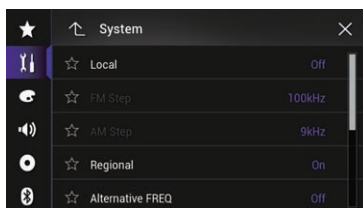
4 Touch [Radio settings].

The following screen appears.



4 Touch [Radio settings].

The following screen appears.



5 Touch [FM Step] repeatedly until the desired setting appears.

- **100kHz** (default):
Switches to 100 kHz.
- **50kHz**:
Switches to 50 kHz.

5 Touch [AM Step] repeatedly until the desired setting appears.

- **9kHz** (default):
Switches to 9 kHz.
- **10kHz**:
Switches to 10 kHz.

Setting the AM tuning step

The AM tuning step can be switched between 9 kHz and 10 kHz. Normally, it is set to 9 kHz (default).

- This setting is available when the selected source is "OFF".

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The "System" screen appears.

Setting the Digital Radio aerial power supply

This function allows you to select whether to output power to a connected Digital Radio aerial.

- For details on how to connect a Digital Radio aerial, refer to the installation manual.

1 Turn the source off.

- For details, refer to *Turning off the AV source* on page 21.

2 Press the HOME button to display the Top menu screen.

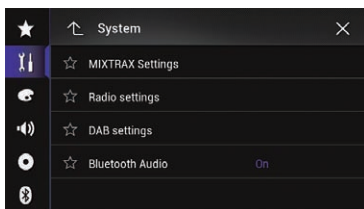
3 Touch the following keys in the following order.



The “**System**” screen appears.

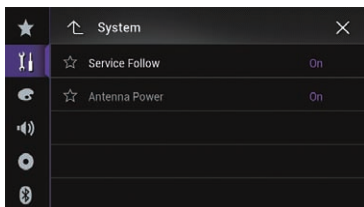
4 Touch [AV Source Settings].

The following screen appears.



5 Touch [DAB settings].

The following screen appears.



6 Touch [Antenna Power] repeatedly until the desired setting appears.

- **On** (default):
Activates the supply of power to a Digital Radio aerial. Select when using the optional Digital Radio aerial (AN-DAB1) (sold separately) with this product.
- **Off**:
Deactivates the supply of power. Select when using a passive aerial with no booster.

Activating the Bluetooth audio source

You need to activate the Bluetooth audio source in order to use a Bluetooth audio player.

1 Press the HOME button to display the Top menu screen.

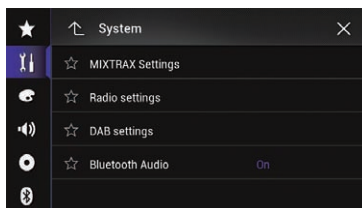
2 Touch the following keys in the following order.



The “**System**” screen appears.

3 Touch [AV Source Settings].

The following screen appears.



4 Touch [Bluetooth Audio] repeatedly until the desired setting appears.

- **On** (default):
Activates the Bluetooth audio source.
- **Off**:
Deactivates the Bluetooth audio source.

Setting the ever scroll

When “**Ever Scroll**” is set to “**On**”, recorded text information scrolls continuously in the display. Set to “**Off**” if you prefer the information to scroll just once.

1 Press the HOME button to display the Top menu screen.

System settings

2 Touch the following keys in the following order.



The “System” screen appears.

3 Touch [Ever Scroll] repeatedly until the desired setting appears.

- **Off** (default):
Turns the ever scroll setting off.
- **On:**
Turns the ever scroll setting on.

Setting AV input

You can use external video equipment such as portable players connected to this product with this setting.

1 Press the HOME button to display the Top menu screen.

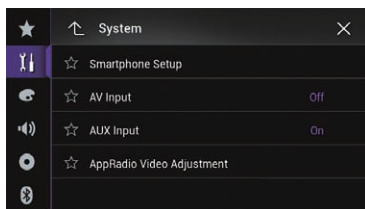
2 Touch the following keys in the following order.



The “System” screen appears.

3 Touch [Input/Output settings].

The following screen appears.



4 Touch [AV Input].

The pop-up menu appears.

- **Off** (default):
Deactivates the AV source.

• **Source:**

Displays the video image output by the connected external device.

• **Camera:**

Displays the image output by the connected external camera.

Setting the rear view camera

The following two functions are available. A separately sold rear view camera (e.g. ND-BC6) is required for utilising 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 gearstick is in the REVERSE (R) position, the screen automatically switches to full-screen rear view camera image.

- If the gearstick is aligned to the REVERSE (R) position immediately after the system of this product is started up, only the camera image will be displayed and the parking assist guidelines and the message, “**The video may appear reversed**” will not be displayed. The parking assist guidelines and the message will be displayed on the camera image after a little while. Be sure to check the conditions around the vehicle even before the guidelines and the message are displayed.

Camera for Camera View mode

Camera View can be displayed at all times (e.g. when monitoring an attached trailer, etc.). 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.

CAUTION

Pioneer recommends the use of a camera which outputs mirror reversed images, otherwise the screen image may appear reversed.

- ❑ Immediately verify whether the display changes to a rear view camera image when the gearstick 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 “**Camera Polarity**”.

Setting rear view camera activation

1 Press the HOME button to display the Top menu screen.

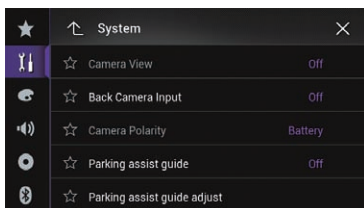
2 Touch the following keys in the following order.



The “**System**” screen appears.

3 Touch [Camera settings].

The following screen appears.



4 Touch [Back Camera Input] repeatedly until the desired setting appears.

- **Off** (default):
Turns the back camera input setting off.
- **On**:
Turns the back camera input setting on.

Setting the polarity of the rear view camera

- ❑ This function is available when “**Back Camera Input**” is “**On**”.

➔ For details, refer to *Setting rear view camera activation* on page 142.

1 Press the HOME button to display the Top menu screen.

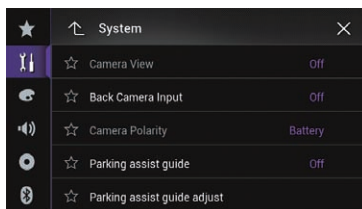
2 Touch the following keys in the following order.



The “**System**” screen appears.

3 Touch [Camera settings].

The following screen appears.



4 Touch [Camera Polarity] repeatedly until the desired setting appears.

- **Battery** (default):
When the polarity of the connected lead is positive while the gearstick is in the REVERSE (R) position.
- **Ground**:
When the polarity of the connected lead is negative while the gearstick is in the REVERSE (R) position.

When the gearstick is moved to the REVERSE (R) position after setting the rear view camera, the rear view image appears. ◻

Setting the camera for Camera View mode

To display **Camera View** at all times, “**Camera View**” needs to be set to “**On**”.

- ❑ To set the rear view camera for **Camera View** mode, “**Back Camera Input**” needs to be set to “**On**”.

System settings

- For details, refer to *Setting rear view camera activation* on page 142.
- ❑ To set the 2nd camera for **Camera View** mode, “**AV Input**” needs to be set to “**Camera**”.
- For details, refer to *Setting AV input* on page 141.

1 Press the HOME button to display the Top menu screen.

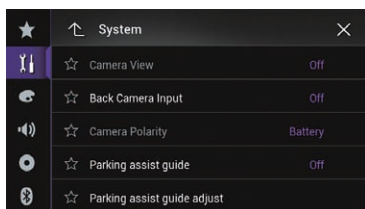
2 Touch the following keys in the following order.



The “**System**” screen appears.

3 Touch [Camera settings].

The following screen appears.



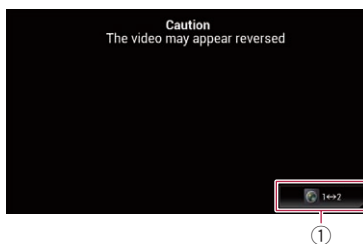
4 Touch [Camera View] repeatedly until the desired setting appears.

- **Off** (default):
Turns the camera view setting off.
- **On**:
Turns the camera view setting on.

If no operations are performed for seven seconds after the AV operation screen is displayed, the camera view will appear automatically.

- ❑ If you touch the screen while the camera view is displayed, the displayed image will turn off temporarily.

When the camera view of both rear view camera and 2nd camera are available, the key to switch the display appears.



- ① Switches the display between rear view image and 2nd camera image.

Displaying the parking assist guidelines

1 Press the HOME button to display the Top menu screen.

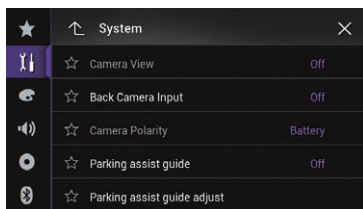
2 Touch the following keys in the following order.



The “**System**” screen appears.

3 Touch [Camera settings].

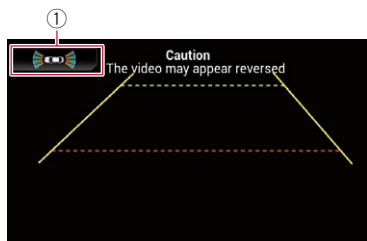
The following screen appears.



4 Touch [Parking assist guide] repeatedly until the desired setting appears.

- **Off** (default):
Hides the guidelines.
- **On**:
Displays the guidelines.

When the gearstick is moved to the REVERSE (R) position after setting the rear view camera, the rear view image appears.



- ① Switches the display to the **"Parking Assist"** screen.
 - ❑ If you press and hold the **MAP** button, the rear view image disappears. ❑

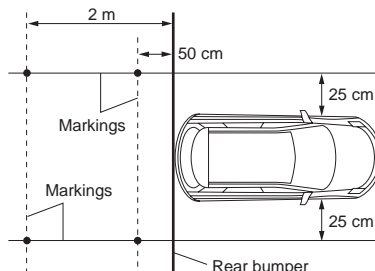
Setting guidelines on the rear view image

⚠ CAUTION

- When adjusting the guidelines, be sure to park the vehicle in a safe place and apply the handbrake.
- 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.)
- 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 handbrake.

2 Using packing tape or similar, place markings approximately 25 cm from each side of the vehicle, and approximately 50 cm and 2 m from the rear bumper.



3 Press the HOME button to display the Top menu screen.

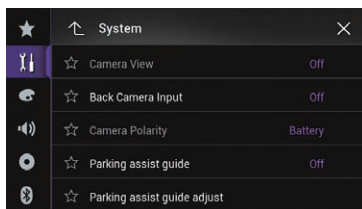
4 Touch the following keys in the following order.



The **"System"** screen appears.

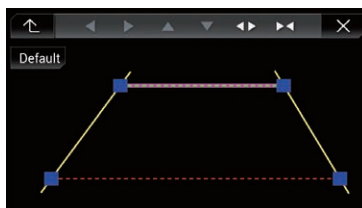
5 Touch [Camera settings].

The following screen appears.



6 Touch [Parking assist guide adjust].

The following screen appears.



System settings

7 Set the guidelines by dragging the four points.

8 Touch the following keys to adjust the position of the point if necessary.



Moves the point to the left.



Moves the point to the right.



Moves the point upward.



Moves the point downward.



Extends the line to the left and right from the current centre point of the distance guideline. The adjustment points on the lateral coordinates at both ends will also move.



Shortens the line from the left and right to the current centre point of the distance guideline. The adjustment points on the lateral coordinates at both ends will also move.

Default

Resets the settings of the distance and vehicle width guidelines and adjustment points to the default.

- When a point is moved, the distance from the initial value is displayed at the bottom of the screen.

Setting the safe mode

For safety reasons, you can limit the functions that are available while your vehicle is in motion.

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The "System" screen appears.

3 Touch [Safe Mode] repeatedly until the desired setting appears.

- **On** (default):
Activates the safe mode function.
- **Off**:
Deactivates the safe mode function.

Turning off the demo screen

If the demo screen appears, perform the following procedure to turn off the demo screen.

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The "System" screen appears.

3 Touch [Demo Mode] repeatedly until the desired setting appears.

- **Off** (default):
Hides the demo screen.
- **On**:
Displays the demo screen.

Selecting the system language

The system language can be selected.

- The languages used in the program and voice guidance can be set on the "Regional" screen.
 - ➔ For details, refer to *Customising the navigation settings* on page 47.

- The language can be changed for the following:
 - The “**Audio**” screen
 - The “**System**” screen
 - The “**Video Setup**” screen
 - The “**Bluetooth**” screen
 - Language for messages
 Some operations on this product are prohibited from use while driving or require careful attention when operated. In such cases, a caution message will appear on the display. You can change the language for caution messages with this setting.
- 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 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The “**System**” screen appears.

3 Touch [System Language].

The pop-up menu appears.

4 Touch the desired language.

After the language is selected, the previous screen returns.

Reversing the climate control status display

If the left/right display of the climate control status screen does not match that of the vehicle, the display can be reversed.

- To configure this setting, the optional Vehicle Bus adapter must be connected.

- ➔ For details of the operations, refer to *Displaying the operating status of the climate control panel* on page 179.

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The “**System**” screen appears.

3 Touch [Climate Reverse] repeatedly until the desired setting appears.

- **Off** (default):
Does not reverse the climate control status display.
- **On**:
Reverses the climate control status display.

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 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The “**System**” screen appears.

3 Touch [Keyboard].

The pop-up menu appears.

System settings

4 Touch the desired language.

After the language is selected, the previous screen returns.

Setting the beep sound

1 Press the **HOME** button to display the Top menu screen.

2 Touch the following keys in the following order.



The “System” screen appears.

3 Touch [**Beep Tone**] repeatedly until the desired setting appears.

- **On** (default):
Sounds a beep.
- **Off**:
Does not sound a beep.

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

F960DAB

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 handbrake.
- 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 Press the **HOME** button to display the Top menu screen.

2 Touch the following keys in the following order.



The “System” screen appears.

3 Touch [**Touch panel calibration**].

The touch panel adjustment screen appears.

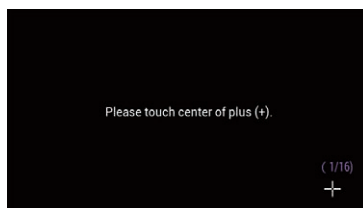
4 Touch two corners of the screen along the arrows, and then touch the centres of two + marks at the same time twice.

5 Press the **HOME** button.

The adjustment results are saved.

6 Press the **HOME** button once again.

The following screen appears.



Proceed to 16-point adjustment.

- If you press and hold the **HOME** button, the adjustment is cancelled.

7 Gently touch the centre of the + mark displayed on the screen.

The target indicates the order.

After you touch all marks, the adjusted position data is saved.

- If you press the **HOME** button, the previous adjustment position returns.
- If you press and hold the **HOME** button, the adjustment is cancelled.

8 Press and hold the **HOME** button.

The adjustment results are saved.

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 handbrake. Refer to Important Information for the User (a separate manual).

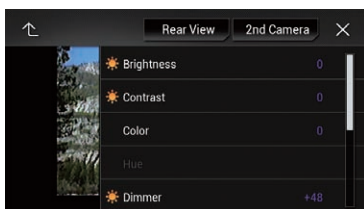
- 1 Display the screen you wish to adjust.
- 2 Press the HOME button to display the Top menu screen.
- 3 Touch the following keys in the following order.



The “System” screen appears.

4 Touch [Picture Adjustment].

The following screen appears.



5 Touch any of the following keys to select the function to be adjusted.

Picture adjustment items are displayed.

- **Brightness:**
Adjusts the black intensity.
- **Contrast:**
Adjusts the contrast.
- **Color:**
Adjusts the colour saturation.
- **Hue:**
Adjusts the tone of colour (which colour is emphasised, red or green).
- **Dimmer:**
Adjusts the brightness of the display.
- **Temperature:**
Adjusts the colour temperature, resulting in a better white balance.
 - You can adjust **Hue** only when the colour system is set to NTSC.
 - If 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.

6 Touch the following keys to adjust the selected item.



Decreases the level of the selected item.



Increases the level of the selected item.



Selects the adjustable previous item.




Selects the adjustable next item.

Each time you touch the key, the level of the selected item increases or decreases.

- “**Brightness**”, “**Contrast**”, “**Color**” and “**Hue**” can be adjusted from “-24” to “+24”.
- “**Dimmer**” can be adjusted from “+1” to “+48”.
- “**Temperature**” can be adjusted from “+3” to “-3”.
- The adjustments of “**Brightness**” and “**Contrast**” are stored separately when your vehicle’s headlights are off (daytime) and when your vehicle’s headlights are on (nighttime). These are switched automatically depending on whether the vehicle’s headlights are on or off.

System settings

- ❑ The adjustment of “**Dimmer**” is stored separately when your vehicle’s headlights are off (daytime) and when your vehicle’s headlights are on (nighttime). “**Dimmer**” is switched automatically only when the value of nighttime is lower than that of daytime.
- ❑ The picture adjustment may not be available with some rear view cameras.
- ❑ The setting contents can be memorised separately for the following screens and video images.
 - **DVD**, **Video CD** and **Disc**
 - **AV** and external camera
 - **USB (Video)**, **USB (JPEG)** and **MirrorLink**
 - **SD (Video)** and **SD (JPEG)**
 - **HDMI** and **AppRadio Mode (HDMI)**
 - Internal navigation system, MIXTRAX, images output from the external device 

Displaying the firmware version

1 Press the HOME button to display the Top menu screen.

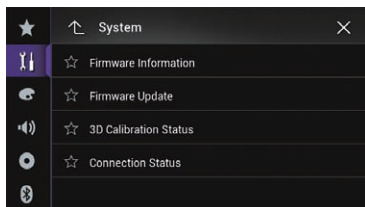
2 Touch the following keys in the following order.



The “**System**” screen appears.

3 Touch [System Information].

The following screen appears.



4 Touch [Firmware Information].

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

Updating firmware

CAUTION

- The only USB port that supports the firmware update is USB port 1.
- Never turn this product off, eject the SD memory card or disconnect the USB storage device while the firmware is being updated.
- You can only update the firmware when the vehicle is stopped and the handbrake is engaged.

1 Download the firmware update files.

2 Connect a blank (formatted) SD memory card or USB storage device to your computer, and then locate the correct update file and copy it onto the SD memory card or USB storage device.

3 Turn the source off.

- For details, refer to *Turning off the AV source* on page 21.

4 Press the HOME button to display the Top menu screen.

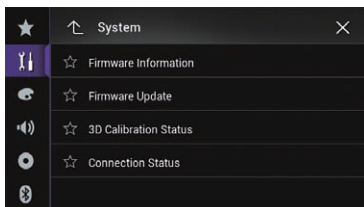
5 Touch the following keys in the following order.



The “**System**” screen appears.

6 Touch [System Information].

The following screen appears.



7 Touch [Firmware Update].

The “Firmware Update” screen appears.

8 Touch [Continue] to display the data transfer mode.

- ❑ Follow the on-screen instructions to finish updating the firmware.
- ❑ This product will reset automatically after the firmware update is completed if the update is successful.
- ❑ When the firmware update starts, the source is turned off and the Bluetooth connection is disconnected.
- ❑ If an error message appears on the screen, touch [Continue] to proceed and start the recovery sequence.

Checking sensor learning status and driving status

- ❑ This product can automatically use its sensor memory based on the outer dimensions of the tyres.

1 Press the HOME button to display the Top menu screen.

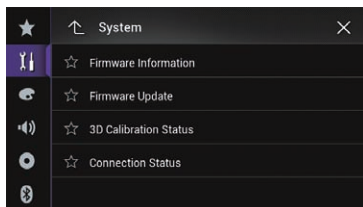
2 Touch the following keys in the following order.



The “System” screen appears.

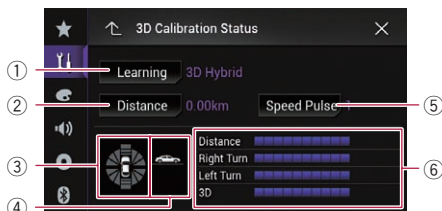
3 Touch [System Information].

The following screen appears.



4 Touch [3D Calibration Status].

The “3D Calibration Status” screen appears.



① Learning

Indicates the current driving mode.

② Distance

Indicates driving distance.

③ Acceleration or deceleration/Rotational speed

Indicates the acceleration or deceleration velocity of your vehicle. The rotational speed when your vehicle turns to the left or right is also shown.

④ Inclination

Indicates the incline of the street that you are currently on.

⑤ Speed Pulse

Indicates the total number of speed pulses.

⑥ Degree of learning

Sensor learning situations for distance (**Distance**), right turns (**Right Turn**), left turns (**Left Turn**) and 3D detection (**3D**) are indicated by the length of the bars.

- ❑ When the tyres have been changed or chains have been fitted, turning on the Speed Pulse allows the system to detect the fact that the tyre diameter has changed, and automatically replaces the value for calculating distance.

System settings

- ❑ If a separately sold speed pulse generator (ND-PG1) is connected, the distance calculation value cannot be replaced automatically. ❑

Clearing the status

You can delete the learned results stored in "Distance", "Speed Pulse" or "Learning".

1 Touch [Distance] or [Speed Pulse].

A message confirming whether to erase the data appears.

2 Touch [Yes].

The results stored in "Distance" or "Speed Pulse" are cleared.

3 Touch [Learning].

The pop-up menu appears.

4 Touch [Reset All].

All learned results are cleared.

- ❑ Touch [Reset All] for the following cases:
 - After changing the installation position of the navigation system
 - After changing the installation angle of the navigation system
 - After moving the navigation system to another vehicle
- 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. Also check whether they are connected in the correct positions.

1 Press the HOME button to display the Top menu screen.

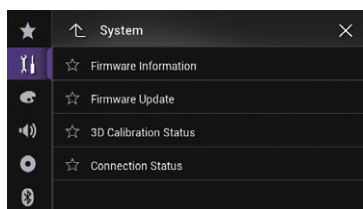
2 Touch the following keys in the following order.



The "System" screen appears.

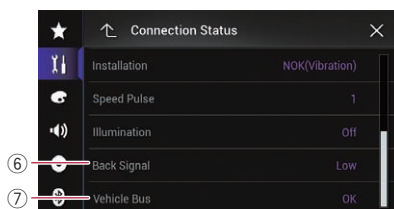
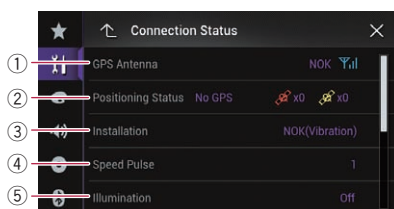
3 Touch [System Information].

The following screen appears.



4 Touch [Connection Status].

The "Connection Status" screen appears.



① GPS Antenna

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

Colour	Signal communication	Used in positioning
Orange	Yes	Yes
Yellow	Yes	No

- ❑ When the GPS aerial is connected to this product, "**OK**" is displayed. When the GPS aerial is not connected to this product, "**NOK**" is displayed.
- ❑ If reception is poor, please change the installation position of the GPS aerial.

② 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.

➡ For details, refer to *Positioning technology* on page 193.

③ Installation

The installation position of this product is shown. If installed correctly, "**OK**" appears. Indicates whether the installation position of this product is correct or not. When this product is installed at an extreme angle exceeding the limitation of the installing angle, "**NOK(Installation Angle)**" will be displayed. When the angle of this product has been changed, "**NOK(Vibration)**" will be displayed.

④ Speed Pulse

The Speed Pulse value detected by this product is shown. "**0**" is shown while the vehicle is stationary.

⑤ Illumination

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

⑥ Back Signal

When the gearstick is shifted to "**R**", the signal switches to "**High**" or "**Low**". (One of

these is displayed depending on the vehicle.)

⑦ Vehicle Bus

When the optional Vehicle Bus adapter is connected, "**OK**" is displayed. If not connected, "**NOK**" is displayed. ■

Audio adjustments

Using fader/balance adjustment

You can select a fader/balance setting that provides an ideal listening environment in all occupied seats.

- This function is available when "Rear Speaker" is set to "On".

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The "Audio" screen appears.

3 Touch [Fader/Balance].

The "Fader/Balance" screen appears.

4 Touch the following keys to adjust the front/rear speaker balance.



Moves towards the front.



Moves towards the rear.

Each time you touch the keys, the front/rear speaker balance moves towards the front or rear.

- "Front25" to "Rear25" is displayed as the front/rear speaker balance moves from the front to rear.
- The default setting is "F/R 0 L/R 0".
- Set "Front" and "Rear" to "0" when using a dual speaker system.

5 Touch the following keys to adjust the left/right speaker balance.



Moves towards the left.



Moves towards the right.

Each time you touch the keys, the left/right speaker balance moves towards the left or right.

- "Left25" to "Right25" is displayed as the left/right speaker balance moves from the left to right.
- The default setting is "L/R 0".
- You can also set the fader/balance by dragging the point on the displayed table.

Using balance adjustment

You can adjust the balance between right/left sound output.

- This function is available when "Rear Speaker" is set to "Off".

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The "Audio" screen appears.

3 Touch [Balance].

The "Fader/Balance" screen appears.

4 Touch the following keys to adjust the left/right speaker balance.



Moves towards the left.



Moves towards the right.

Each time you touch the keys, the left/right speaker balance moves towards the left or right.

- ❑ "Left25" to "Right25" is displayed as the left/right speaker balance moves from the left to right.
- ❑ The default setting is "L/R0".
- ❑ You can also set the fader/balance 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 application volume when the navigation outputs the guidance voice.

- 1 Press the HOME button to display the Top menu screen.
- 2 Touch the following keys in the following order.



The "Audio" screen appears.

- 3 Touch [Mute Level].
The pop-up menu appears.

- 4 Touch the item you want to set.

- **ATT** (default):
The volume becomes 1/10.
- **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 you want to adjust.
- 2 Press the HOME button to display the Top menu screen.
- 3 Touch the following keys in the following order.



The "Audio" screen appears.

- 4 Touch [Source Level Adjuster].
The "Source Level Adjuster" screen appears.
- 5 Touch the following keys to adjust the source volume.



Increases the source volume.



Decreases 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".

Audio adjustments

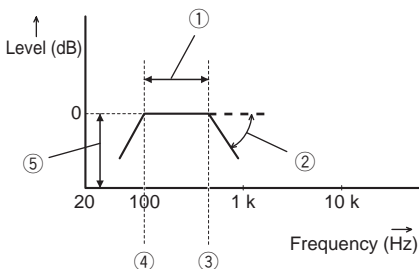
The following AV sources are set to the same source level adjustment volume automatically.

	Required cable (sold separately)	Smartphone Setup		AV sources
		Device	Connection	
iPod / iPhone with a 30-pin connector	CD-IU201V	iPhone/iPod	USB	USB1 iPod1 aha Pandora
	CD-IU201S	iPhone/iPod	USB	USB1 aha Pandora iPod1 AppRadio Mode
iPod / iPhone with a Lightning connector	<ul style="list-style-type: none"> • CD-IH202 • CD-IU52 • Lightning Digital AV Adapter 	iPhone/iPod	Digital AV adapter	aha Pandora AppRadio Mode HDMI
Android device	CD-AH200	Others	HDMI	aha Pandora AppRadio Mode HDMI

- ❑ When a USB storage device is connected to USB port 1 or USB port 2, the source level adjustment volume is automatically set to the same level as the USB port to which the device is connected. The source level adjustment volume that is automatically set varies depending on whether the device is connected to USB port 1 or USB port 2.
- ❑ When an iPod / iPhone with a Lightning connector is connected to USB port 1 or USB port 2 using a USB interface cable for iPod / iPhone (CD-IU52) (sold separately), the source level adjustment volume is automatically set to the same level as the USB port to which the iPod / iPhone with a Lightning connector is connected. The source level adjustment volume that is automatically set varies depending on whether the iPod / iPhone with a Lightning connector is connected to USB port 1 or USB port 2.
- ❑ When a MirrorLink device is connected to USB port 2, the source level adjustment volume is automatically set to the same level as USB port 2. ■

Adjusting the filter

The following adjustments can be made during filter adjustments. Make the appropriate adjustments for the reproduced frequency band and characteristics of the connected speaker unit.



- ① Reproduced frequency band
- ② Slope adjustment
- ③ Cut-off frequency of the LPF
- ④ Cut-off frequency of the HPF
- ⑤ Level adjustment

Adjusting the front and rear speaker output

You can set the frequency range for the sound output from the front and rear speakers.

- 1 Press the HOME button to display the Top menu screen.
- 2 Touch the following keys in the following order.



The "Audio" screen appears.

- 3 Confirm that "Rear Speaker" is set to "On".

The default setting is "On".

- 4 Touch [Cross Over].

The "Cutoff" screen appears.

- 5 Touch the following keys to select "Front" or "Rear".



Selects the adjustable previous speaker.



Selects the adjustable next speaker.

- 6 Touch [HPF] to turn on.

- 7 Drag the line graph horizontally to adjust the range of cut-off frequency from "50" Hz to "200" Hz.

The default setting is "100" Hz.

- 8 Drag the tip of the slope to adjust the range of level between "-6" dB/oct and "-18" dB/oct.

The default setting is "-12" dB/oct.

Using the subwoofer output

This product is equipped with a subwoofer output mechanism, which can be turned on or off.

- 1 Press the HOME button to display the Top menu screen.
- 2 Touch the following keys in the following order.



The "Audio" screen appears.

- 3 Touch [Subwoofer] to set the subwoofer output "On".

The default setting is "Off".

- 4 Touch [Subwoofer].

The "Cutoff" screen appears.

Audio adjustments

5 Touch the following keys to select “Subwoofer”.



Selects the adjustable previous speaker.



Selects the adjustable next speaker.

6 Touch [LPF] to turn on.

7 Touch the following keys to select the phase of subwoofer output.



Sets the phase of subwoofer output to normal.



Sets the phase of subwoofer output to reverse.

8 Drag the line graph horizontally to adjust the range of cut-off frequency from “50” Hz to “200” Hz.

- The default setting is “100” Hz.

9 Drag the tip of the slope to adjust the range of level between “-6” dB/oct and “-18” dB/oct.

- The default setting is “-18” dB/oct.

Selecting the listening position

You can select a listening position that you want to make as the centre of sound effects.

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The “Audio” screen appears.

3 Touch [Listening Position].

The “Listening Position” screen appears.

4 Touch the desired position.

- **Off** (default):
Changes the listening position setting to off.
- **Front:**
Changes the listening position setting to front.
- **Front-L:**
Changes the listening position setting to front left.
- **Front-R:**
Changes the listening position setting to front right.
- **All:**
Changes the listening position setting to all.

Adjusting the speaker output levels finely

Fine adjustments of the speaker output level can be made by listening to audio output.

- This function is available when “Rear Speaker” is set to “On”.
 - For details, refer to *Adjusting the front and rear speaker output* on page 156.
- This function is available when “Subwoofer” is set to “On”.
 - For details, refer to *Using the subwoofer output* on page 156.

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The “Audio” screen appears.

3 Touch [Speaker Level].

The “Speaker Level” screen appears.

Audio adjustments

4 Touch the following keys to select the listening position if necessary.



Selects the listening position.



- **Off:**
Changes the listening position setting to off.
 - **Front Left:**
Changes the listening position setting to front left.
 - **Front Right:**
Changes the listening position setting to front right.
 - **Front:**
Changes the listening position setting to front.
 - **All:**
Changes the listening position setting to all.
- If you change the listening position setting, the output levels of all the speakers will change in conjunction with the setting.

5 Touch the following keys to adjust the speaker output level.



Decreases the speaker level.



Increases the speaker level.

- "-24" dB to "10" dB is displayed as the distance to be corrected is increased or decreased.
- **Front Left:**
Changes the speaker level of the front left speaker.
 - **Front Right:**

Changes the speaker level of the front right speaker.

- **Rear Left:**
Changes the speaker level of the rear left speaker.
- **Rear Right:**
Changes the speaker level of the rear right speaker.
- **Subwoofer:**
Changes the speaker level of the subwoofer speaker.
 - If you touch [**Apply Auto EQ**], the result of "A-EQ&TA Measurement" will be applied to the speaker level setting.
 - To use this function, the vehicle's acoustics must be measured in advance.

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.

- This function is available when "Rear Speaker" is set to "On".
 - ➔ For details, refer to *Adjusting the front and rear speaker output* on page 156.
- This function is available when "Subwoofer" is set to "On".
 - ➔ For details, refer to *Using the subwoofer output* on page 156.
- This function is available only when the listening position setting is set to "Front Left" or "Front Right".
 - ➔ For details, refer to *Selecting the listening position* on page 157.

1 Measure the distance between the head of the listener and each speaker unit.

2 Press the HOME button to display the Top menu screen.

Audio adjustments

3 Touch the following keys in the following order.



The “**Audio**” screen appears.

4 Touch [Time Alignment].

The “**Time Alignment**” screen appears.

5 Touch the following keys to select the listening position if necessary.



Selects the listening position.



- **Off:**
Changes the listening position setting to off.
 - **Front Left:**
Changes the listening position setting to front left.
 - **Front Right:**
Changes the listening position setting to front right.
 - **Front:**
Changes the listening position setting to front.
 - **All:**
Changes the listening position setting to all.
- If you change the listening position setting, the output levels of all the speakers will change in conjunction with the setting.

6 Touch the following keys to input the distance between the selected speaker and the listening position.



Decreases the distance between the selected speaker and the selected listening position.



Increases the distance between the selected speaker and the selected listening position.

- “0.0” cm to “500.0” cm is displayed as the distance to be corrected is increased or decreased.
- **Front Left:**
Changes the distance between the front left speaker and the selected listening position.
- **Front Right:**
Changes the distance between the front right speaker and the selected listening position.
- **Rear Left:**
Changes the distance between the rear left speaker and the selected listening position.
- **Rear Right:**
Changes the distance between the rear right speaker and the selected listening position.
- **Subwoofer:**
Changes the distance between the subwoofer speaker and the selected listening position.
 - If you touch [TA On], the time alignment is turned off mandatorily.
 - This function is available only when the listening position setting is set to “**Front Left**” or “**Front Right**”.
 - If you touch [Apply Auto EQ], the result of “**A-EQ&TA Measurement**” will be applied to the time alignment setting.
 - To use this function, the vehicle’s acoustics must be measured in advance.

Using the automatic sound leveliser

During driving, noise in the car changes according to the driving speed and road conditions. ASL (automatic sound leveliser) 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 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The "Audio" screen appears.

3 Touch [ASL].

The "ASL" screen appears.

4 Touch the item you want to set.

- **Off** (default):
Turns the ASL setting off.
- **LOW:**
Changes the ASL level to low.
- **MID-LOW:**
Changes the ASL level to mid-low.
- **MID:**
Changes the ASL level to mid.
- **MID-HIGH:**
Changes the ASL level to mid-high.
- **HIGH:**
Changes the ASL level to high.

Using the equaliser

The equaliser lets you adjust equalisation to match the vehicle interior acoustic characteristics as desired.

Recalling equaliser curves

There are seven stored equaliser curves that you can easily recall at any time. Here is a list of the equaliser curves:

Equaliser curve

S.Bass is a curve in which only low-pitched sound is boosted.

Powerful is a curve in which low- and high-pitched sounds are boosted.

Natural is a curve in which low- and high-pitched sounds are slightly boosted.

Vocal is a curve in which the midrange, which is the human vocal range, is boosted.

Flat is a flat curve in which nothing is boosted.

Custom1 is an adjusted equaliser curve that you create. If you select this curve, the effect is applied to all AV sources.

Custom2 is an adjusted equaliser curve that you create. If you select this curve, the effect is applied to all AV sources.

- The default setting is "Powerful".
- When "Flat" is selected, no supplement or correction is made to the sound. This is useful to check the effect of the equaliser curves by switching alternatively between "Flat" and a set equaliser curve.

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The "Audio" screen appears.

3 Touch [Graphic EQ].

The "Graphic EQ" screen appears.

4 Touch the equaliser you want.

Audio adjustments

Customising the equaliser curves

You can adjust the currently selected equaliser curve setting as desired. Adjustments can be made with a 13-band graphic equaliser.

- ❑ If you make adjustments when a curve “**S. Bass**”, “**Powerful**”, “**Natural**”, “**Vocal**”, or “**Flat**” is selected, the equaliser curve settings will be changed to “**Custom1**” mandatorily.
- ❑ If you make adjustments when the “**Custom2**” curve is selected for example, the “**Custom2**” curve will be updated.
- ❑ “**Custom1**” and “**Custom2**” curves can be created common to all sources.

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The “**Audio**” screen appears.

3 Touch [Graphic EQ].

The “**Graphic EQ**” screen appears.

4 Touch one of the keys to select a curve that you want to use as the basis of customising.

5 Touch the frequency for which you want to adjust the level.

- ❑ If you trail a finger across the bars of multiple equaliser bands, the equaliser curve settings will be set to the value of the touched point on each bar.

Using the auto-adjusted equaliser

You can set the auto-adjusted equaliser to suit the vehicle’s acoustics. To use this function, the vehicle’s acoustics must be measured in advance.

➔ For details of the operations, refer to *Adjusting the equaliser curve automatically (Auto EQ)* on page 161.

- ❑ To manually adjust the equaliser curve, set “**Auto EQ&TA**” to “**Off**”.

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The “**Audio**” screen appears.

3 Touch [Auto EQ&TA] repeatedly until the desired setting appears.

- **Off** (default):
Turns the Auto EQ&TA setting off.
- **On**:
Turns the Auto EQ&TA setting on. ❑

Adjusting the equaliser curve automatically (Auto EQ)

By measuring the vehicle’s acoustics, the equaliser 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 power to car phones or mobile phones in the vehicle, or remove them from the vehicle before performing Auto EQ. Sounds other than the measurement tone (surrounding sounds, engine sound, telephones ringing, etc.) may prevent correct measurement of the vehicle's acoustics.
- Be sure to perform Auto EQ using 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, a message appears and measurement is cancelled. 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

- Auto EQ changes the audio settings as follows:
 - "Auto EQ&TA" is set to "On".
 - ➔ For details, refer to *Using the auto-adjusted equaliser* on page 161.
 - The fader/balance settings return to the centre position.
 - ➔ For details, refer to *Using balance adjustment* on page 153.
 - The equaliser curve switches to "Flat".
 - ➔ For details, refer to *Using the equaliser* on page 160.
 - The front and rear speakers will automatically be adjusted to a high pass filter setting.
- Previous settings for Auto EQ will be overwritten.
- For AVIC-F60DAB users
 - Do not press the ▲ button to open or close the panel when you are using the microphone.

CAUTION

Do not turn off the engine while the measurement is in progress.

Audio adjustments

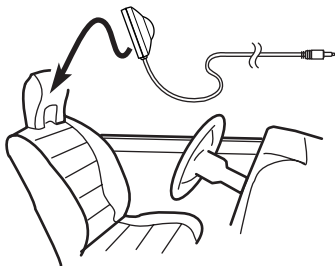
1 Stop the vehicle in a quiet place, close all the doors, windows and sun roof, and then turn the engine off.

If the engine is left running, engine noise may prevent correct Auto EQ.

- If driving restrictions are detected during measurement, measurement is cancelled.

2 Fix the microphone for acoustical measurement (sold separately) in the centre 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. Noise from the fan in the air conditioner or heater may prevent correct Auto EQ.

5 Switch the AV source to "OFF".

- ➞ For details of the operations, refer to *Displaying the AV operation screen* on page 20.

6 Press the HOME button to display the Top menu screen.

7 Touch the following keys in the following order.



The "Audio" screen appears.

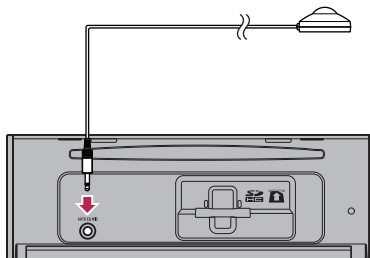
8 Touch [A-EQ&TA Measurement].

The "A-EQ&TA Measurement" screen appears.

9 Connect the microphone for acoustical measurement (sold separately) with this product.

F60DAB

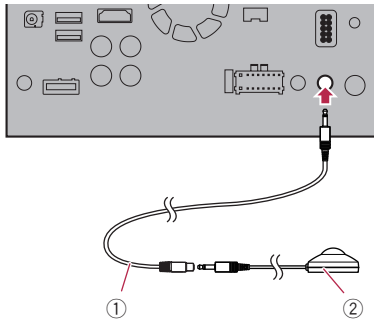
Plug the microphone into the microphone input jack on this product.



F960DAB

Connect the microphone with the mini-jack extension cable, and then plug it into the auxiliary input jack on this product.

- ➞ For details of the operations, refer to the Installation Manual.



- ① Mini-jack extension cable
- ② Microphone for acoustical measurement (sold separately)

10 Touch [Front Left] or [Front Right] to select the current listening position.

11 Touch [Start].

A 10-second countdown starts.

- ❑ The Bluetooth connection is disconnected before the process starts.

12 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.

13 Wait until the measurement is completed.

When Auto EQ is completed, a message is displayed indicating that the measurement is completed.

- ❑ If the vehicle's acoustics cannot be measured correctly, an error message will be displayed.
- ❑ The measurement time varies depending on the type of vehicle.
- ❑ To stop the measurement, touch [Stop].

14 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, colour change or malfunction. ▣

Theme menu

Selecting the background display

The background display can be selected from 8 different preset displays for the AV operation screen and 5 different preset displays for the Top menu screen. Furthermore, you can change the background display to other images imported from an external device.

1 Press the HOME button to display the Top menu screen.

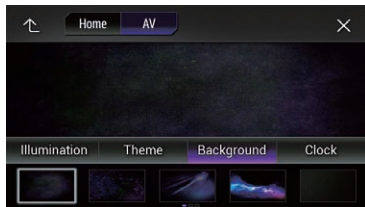
2 Touch the following keys in the following order.



The “**Theme**” screen appears.

3 Touch [Background].

The following screen appears.




- ❑ You can also change the screen for settings by touching [Illumination], [Theme] or [Clock] on this screen.


4 Touch [Home] or [AV] to switch the screen displays.

- ❑ The setting contents can be memorised separately for the AV operation screen and the Top menu screen.

5 Touch the item you want to set.

- **Preset displays:**
Selects the desired preset background display.
-  (custom):
Displays the background display image imported from the external device.

➔ For details, refer to *Changing to the background display image stored on the external device (USB/SD)* on page 165.

-  (off):
Hides the background display.

Changing to the background display image stored on the external device (USB/SD)

You can change the background display image to an image imported from the external device (USB/SD).

- ❑ 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 × 4 000 pixel or smaller

CAUTION

Do not turn off the engine while importing an image from the external device (USB/SD).

1 Press the HOME button to display the Top menu screen.

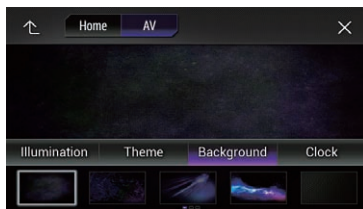
2 Touch the following keys in the following order.



The “**Theme**” screen appears.

3 Touch [Background].

The following screen appears.



- ❑ You can also change the screen for settings by touching **[Illumination]**, **[Theme]** or **[Clock]** on this screen.

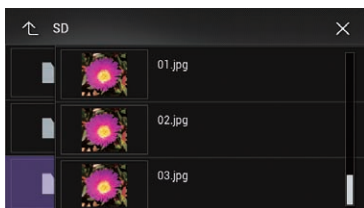
4 Touch the following key.



Displays the list of the background display images stored on the external device (USB/SD).


5 Touch the desired external device.

The following screen appears.



6 Touch the image to use as the background display from the list.

The image is set as the background display.

- ❑ You can delete the imported image and restore the setting for the background display to the default by touching and holding the custom key. 

Setting the illumination colour

The illumination colour can be selected from 5 different colours. Furthermore, the illumination can be switched between these 5 colours in order.

Selecting the colour from the preset colours

You can select an illumination colour from the colour list.

1 Press the HOME button to display the Top menu screen.

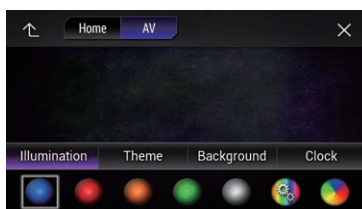
2 Touch the following keys in the following order.



The **"Theme"** screen appears.



3 Touch **[Illumination]**.

The following screen appears.



- ❑ You can also change the screen for settings by touching **[Theme]**, **[Background]** or **[Clock]** on this screen.

4 Touch the colour you want.

- **Coloured keys:**
Selects the desired preset colour.
-  (custom):
Displays the screen to customise the illumination colour.
➡ For details, refer to *Creating a user-defined colour* on page 166.
-  (rainbow):
Shifts gradually between the five default colours in sequence.
- ❑ You can preview the Top menu screen or the AV operation screen by touching **[Home]** or **[AV]** respectively.

Creating a user-defined colour

You can create a user-defined colour. The created colour is stored, and you can select the colour when setting the illumination colour the next time.

1 Press the HOME button to display the Top menu screen.

Theme menu

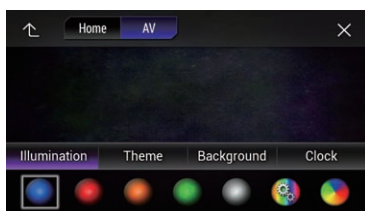
- 2 Touch the following keys in the following order.



The “**Theme**” screen appears.

- 3 Touch [**Illumination**].

The following screen appears.



- You can also change the screen for settings by touching [**Theme**], [**Background**] or [**Clock**] on this screen.

- 4 Touch the following key.



Displays the screen to create a user-defined colour and store it to memory.

- 5 Touch the following keys.



Adjusts the brightness and the level of red, green and blue to create a favourite colour.



- You can also adjust the colour tone by dragging the colour bar.

- 6 Touch and hold [**Memo**] to store the customised colour in the memory.

The customised colour is stored in the memory.

The set colour will be recalled from the memory the next time you touch the same key.

Selecting the theme colour

A theme colour can be selected from 5 different colours.

- 1 Press the HOME button to display the Top menu screen.

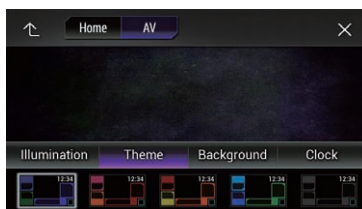
- 2 Touch the following keys in the following order.



The “**Theme**” screen appears.

- 3 Touch [**Theme**].

The following screen appears.



- You can also change the screen for settings by touching [**Illumination**], [**Background**] or [**Clock**] on this screen.

- 4 Touch the colour you want.

- You can preview the Top menu screen or the AV operation screen by touching [**Home**] or [**AV**] respectively.

Selecting the clock image

The clock on the AV operation screen and the Top menu screen can be selected from 3 different images.

- 1 Press the HOME button to display the Top menu screen.

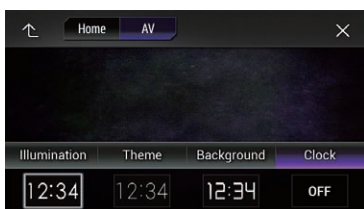
2 Touch the following keys in the following order.



The "Theme" screen appears.

3 Touch [Clock].

The following screen appears.



- You can also change the screen for settings by touching [Illumination], [Theme] or [Background] on this screen.

4 Touch the item you want to set.

- **Preset images:**
Selects the desired preset clock image.
- **OFF (off):**
Hides the clock display.
- You can preview the Top menu screen or the AV operation screen by touching [Home] or [AV] respectively.

Changing the preinstalled splash screen

You can change the splash screen to other images preinstalled in this product.

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The "Theme" screen appears.

3 Touch [Splash Screen].

The following screen appears.



4 Touch the item you want to set.

- **Preset images:**
Selects the desired preset splash screen image.
- **🔍 (custom):**
Displays the splash screen image imported from the external device.
- ➡ For details, refer to *Changing to the splash screen stored on the external device (USB/SD)* on page 168.

Changing to the splash screen stored on the external device (USB/SD)

You can change the splash screen to other images imported from the external device (USB/SD).

⚠ CAUTION

Do not turn off the engine while importing an image from the external device (USB/SD).

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The "Theme" screen appears.

Theme menu

3 Touch [Splash Screen].

The following screen appears.



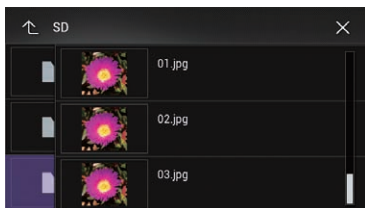
4 Touch the following key.



Displays the list of the splash screens stored on the external device (USB/SD).


5 Touch the desired external device.

The following screen appears.



6 Touch the image to use as the splash screen from the list.

The image is set as the splash screen.

- You can delete the imported image and restore the setting on the splash screen to the default by touching and holding the custom key. 

Replicating the settings

Exporting “Theme” settings

You can export settings you have made on the “Theme” screen to an SD memory card. These settings can be exported separately.


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



CAUTION

Do not turn off the engine while exporting the settings.

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

-  For details, refer to *Inserting and ejecting an SD memory card* on page 15.

2 Press the HOME button to display the Top menu screen.

3 Touch the following keys in the following order.



The “Theme” screen appears.

4 Touch [Export].

The “Settings Export” screen appears.

5 Touch the desired item.

- **illumination:**
Selects the illumination colour setting.
- **Splash Screen:**
Selects the splash screen setting.
- **Select All:**
Selects all settings.

6 Touch [Export].

Data export starts.

After the data is exported, a completion message appears.

- The source is turned off and the Bluetooth connection is disconnected before the process starts.

Importing “Theme” settings

The settings made on the “Theme” screen that were exported to an SD memory card can be imported.

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

**CAUTION**

- Do not turn off the engine while importing the settings.
- To prevent data loss and damage to the SD memory card, never edit the data exported to the SD memory card.

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

- ➔ For details, refer to *Inserting and ejecting an SD memory card* on page 15.

A message confirming whether to import the stored setting data appears.

2 Touch [Import].

Data import starts.

When the data is successfully imported, an import complete message is displayed.

- ▣ The source is turned off and the Bluetooth connection is disconnected before the process starts. ▣

Setting up the video player

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.

- ❑ This setting is available when the selected source is “Disc”, “CD”, “Video CD” or “DVD”.

Setting the subtitle language

You can set a desired subtitle language. When available, the subtitles will be displayed in the selected language.

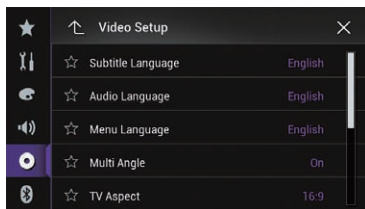
- 1 Press the HOME button to display the Top menu screen.
- 2 Touch the following keys in the following order.



The “Video Setup” screen appears.

- 3 Touch [DVD/DivX Setup].


The following screen appears.



- 4 Touch [Subtitle Language].

The pop-up menu appears.

- 5 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 .

- For details, refer to *Language code chart for DVDs* on page 177.

The subtitle language is set.

- ❑ If the selected language is not available, the language specified on the disc is displayed.
- ❑ You can also switch the subtitle language by touching the switch subtitle languages key during playback.
- ❑ The setting made here will not be affected even if the subtitle language is switched during playback using the switch subtitle languages key.

Setting the audio language

You can set the preferred audio language.

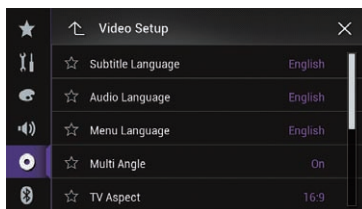
- 1 Press the HOME button to display the Top menu screen.
- 2 Touch the following keys in the following order.



The “Video Setup” screen appears.

- 3 Touch [DVD/DivX Setup].


The following screen appears.



- 4 Touch [Audio Language].

The pop-up menu appears.

- 5 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 .

- For details, refer to *Language code chart for DVDs* on page 177.

The audio language is set.

- ❑ If the selected language is not available, the language specified on the disc is displayed.
- ❑ You can also switch the audio language by touching the switch audio languages key during playback.
- ❑ The setting made here will not be affected even if the audio language is switched during playback using the switch audio languages key.

Setting the menu language

You can set the preferred language in which the menus recorded on a disc are displayed.

1 Press the HOME button to display the Top menu screen.

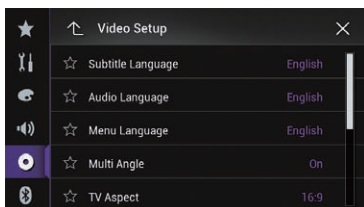
2 Touch the following keys in the following order.



The “**Video Setup**” screen appears.

3 Touch [DVD/DivX Setup].

The following screen appears.



4 Touch [Menu Language].

The pop-up menu appears.

5 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 .

- ➔ For details, refer to *Language code chart for DVDs* on page 177.

The menu language is set.

- ❑ If the selected language is not available, the language specified on the disc is displayed.

Setting the angle icon display

The angle icon can be set so it appears on scenes where the angle can be switched.

- ❑ This setting is available when the selected source is “**Disc**”, “**CD**”, “**Video CD**” or “**DVD**”.

1 Press the HOME button to display the Top menu screen.

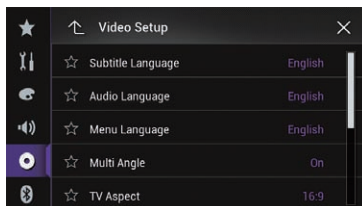
2 Touch the following keys in the following order.



The “**Video Setup**” screen appears.

3 Touch [DVD/DivX Setup].

The following screen appears.



4 Touch [Multi Angle] repeatedly until the desired setting appears.

- **On** (default):
Turns the multi-angle setting on.
- **Off**:
Turns the multi-angle setting off.

Setting up the video player

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.)

- ❑ When using a regular display, select either “**Letter Box**” or “**Pan Scan**”. Selecting “**16:9**” may result in an unnatural image.
- ❑ If you select the TV aspect ratio, this product’s display will change to the same setting.
- ❑ This setting is available when the selected source is “**Disc**”, “**CD**”, “**Video CD**” or “**DVD**”.

1 Press the HOME button to display the Top menu screen.

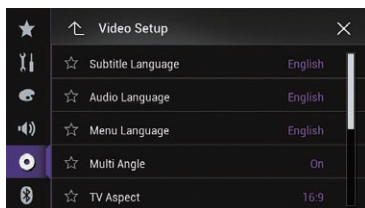
2 Touch the following keys in the following order.



The “**Video Setup**” screen appears.

3 Touch [DVD/DivX Setup].

The following screen appears.



4 Touch [TV Aspect].

The pop-up menu appears.

5 Touch the item you want to set.

- **16:9** (default):
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 pan-scan system, the disc is played back with “**Letter Box**” even if you select the “**Pan Scan**” setting. Confirm whether the disc package bears the **16:9 LB** 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.
- ❑ This setting is available when the selected source is “**Disc**”, “**CD**”, “**Video CD**” or “**DVD**”.

Setting the code number and level

When you first use this function, register your code number. If you do not register a code number, the parental lock will not operate.

1 Press the HOME button to display the Top menu screen.

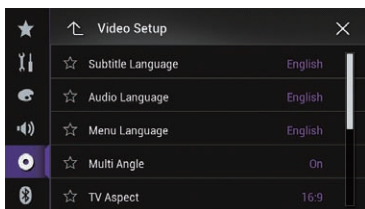
2 Touch the following keys in the following order.



The “**Video Setup**” screen appears.

3 Touch [DVD/DivX Setup].

The following screen appears.

**4 Touch [Parental].**

The "Parental" screen appears.

5 Touch [0] to [9] to input a four-digit code number.**6 While the input number is displayed, touch the following key.**

Registers the code number, and you can now set the level.

7 Touch any number between [1] to [8] to select the desired level.

- **8:**
Enables playback of the entire disc (initial setting).
- **7 to 2:**
Enables playback of discs for children and non-adult oriented discs.
- **1:**
Enables only playback of discs for children.

8 While the input number is displayed, touch the following key.

Sets the parental lock level.

- We recommend that you keep a record of your code number in case you forget it.
- The parental lock level is recorded on the disc. You can confirm it by looking at the disc package, the included literature or the disc itself. 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.

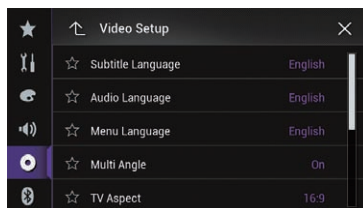
- Keep a record of the code as you will need it when you register this product to the DivX VOD provider.
- This setting is available when the selected source is "Disc", "CD", "Video CD" or "DVD".

1 Press the HOME button to display the Top menu screen.**2 Touch the following keys in the following order.**

The "Video Setup" screen appears.

3 Touch [DVD/DivX Setup].

The following screen appears.

**4 Touch [DivX® VOD].**

The "DivX® VOD" screen appears.

Setting up the video player

- ❑ If a registration code has already been activated, it cannot be displayed.

5 Touch [Registration Code].

Your 10-digit registration code is displayed.

- ❑ Make a note of the code as you will need it when you register with a DivX VOD provider.

Displaying your DivX VOD deregistration code

A registration code registered with a deregistration code can be deleted.

- ❑ This setting is available when the selected source is "Disc", "CD", "Video CD" or "DVD".

1 Press the HOME button to display the Top menu screen.

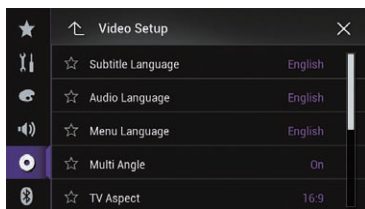
2 Touch the following keys in the following order.



The "Video Setup" screen appears.

3 Touch [DVD/DivX Setup].

The following screen appears.



4 Touch [DivX® VOD].

The "DivX® VOD" screen appears.

5 Touch [Deregistration Code].

Your eight-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.

- ❑ Some DVDs may not operate properly. If this function is not fully operable, turn this function off and start playback.
- ❑ This setting is available when the selected source is "Disc", "CD", "Video CD" or "DVD".

1 Press the HOME button to display the Top menu screen.

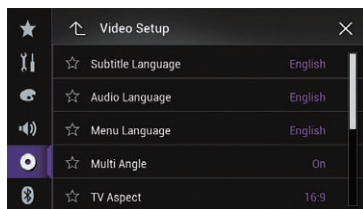
2 Touch the following keys in the following order.



The "Video Setup" screen appears.

3 Touch [DVD/DivX Setup].

The following screen appears.



4 Touch [DVD Auto Play] repeatedly until the desired setting appears.

- **Off** (default): Turns the DVD Auto Play setting off.
- **On**: Turns the DVD Auto Play setting on.

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.

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

1 Press the HOME button to display the Top menu screen.

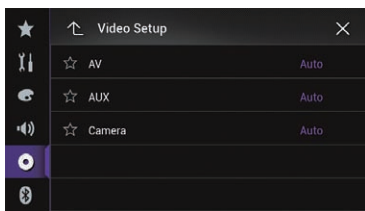
2 Touch the following keys in the following order.



The “Video Setup” screen appears.

3 Touch [Video Signal Setting].

The following screen appears.



4 Touch [Camera].

The pop-up menu appears.

5 Touch the item you want to set.

- **Auto** (default):
Adjusts the video signal setting automatically.
- **PAL**:
Sets the video signal to PAL.
- **NTSC**:
Sets the video signal to NTSC.
- **PAL-M**:
Sets the video signal to PAL-M.
- **PAL-N**:
Sets the video signal to PAL-N.
- **SECAM**:
Sets the video signal to SECAM.

- ❑ The video output format setting has no effect on AUX, AV, and iPod sources (when the control mode is set to iPod).
- ❑ This function is available when nothing is output to the front screen, and a source other than Disc, USB1, USB2, and SD is output to the rear display.

1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The “Video Setup” screen appears.

3 Touch [Video Output Format] repeatedly until the desired setting appears.

- **PAL** (default):
Sets the video output format to PAL.
- **NTSC**:
Sets the video output format to NTSC.

Setting the video output format

You can switch the video output format of the rear display between NTSC and PAL.

Setting up the video player

Language code chart for DVDs

Two-letter code, input code	Language	Two-letter code, input code	Language	Two-letter code, input code	Language
aa, 0101	Afar	ie, 0905	Interlingue	rn, 1814	Rundi
ab, 0102	Abkhazian	ik, 0911	Inupiaq	ro, 1815	Romanian
af, 0106	Afrikaans	in, 0914	Indonesian	ru, 1821	Russian
am, 0113	Amharic	is, 0919	Icelandic	rw, 1823	Kinyarwanda
ar, 0118	Arabic	it, 0920	Italian	sa, 1901	Sanskrit
as, 0119	Assamese	iw, 0923	Hebrew	sd, 1904	Sindhi
ay, 0125	Aymara	ja, 1001	Japanese	sg, 1907	Sango
az, 0126	Azerbaijani	ji, 1009	Yiddish	sh, 1908	Serbo-Croat
ba, 0201	Bashkir	jw, 1023	Javanese	si, 1909	Sinhala
be, 0205	Belarusian	ka, 1101	Georgian	sk, 1911	Slovak
bg, 0207	Bulgarian	kk, 1111	Kazakh	sl, 1912	Slovenian
bh, 0208	Bihari	kl, 1112	Greenlandic	sm, 1913	Samoan
bi, 0209	Bislama	km, 1113	Central Khmer	sn, 1914	Shona
bn, 0214	Bengali	kn, 1114	Kannada	so, 1915	Somali
bo, 0215	Tibetan	ko, 1115	Korean	sq, 1917	Albanian
br, 0218	Breton	ks, 1119	Kashmiri	sr, 1918	Serbian
ca, 0301	Catalan	ku, 1121	Kurdish	ss, 1919	Swati
co, 0315	Corsican	ky, 1125	Kirghiz	st, 1920	Sotho
cs, 0319	Czech	la, 1201	Latin	su, 1921	Sundanese
cy, 0325	Welsh	ln, 1214	Lingala	sv, 1922	Swedish
da, 0401	Danish	lo, 1215	Lao	sw, 1923	Swahili
de, 0405	German	lt, 1220	Lithuanian	ta, 2001	Tamil
dz, 0426	Dzongkha	lv, 1222	Latvian	te, 2005	Telugu
el, 0512	Greek	mg, 1307	Malagasy	tj, 2007	Tajik
en, 0514	English	mi, 1309	Maori	th, 2008	Thai
eo, 0515	Esperanto	mk, 1311	Macedonian	ti, 2009	Tigrinya
es, 0519	Spanish	ml, 1312	Malayalam	tk, 2011	Turkmen
et, 0520	Estonian	mn, 1314	Mongolian	tl, 2012	Tagalog
eu, 0521	Basque	mo, 1315	Moldavian	tn, 2014	Tswana
fa, 0601	Persian	mr, 1318	Marathi	to, 2015	Tonga
fi, 0609	Finnish	ms, 1319	Malay	tr, 2018	Turkish
fj, 0610	Fijian	mt, 1320	Maltese	ts, 2019	Tsonga
fo, 0615	Faroese	my, 1325	Burmese	tt, 2020	Tatar
fr, 0618	French	na, 1401	Nauru	tw, 2023	Twi
fy, 0625	Western Frisian	ne, 1405	Nepali	uk, 2111	Ukrainian
ga, 0701	Irish	nl, 1412	Dutch	ur, 2118	Urdu
gd, 0704	Scot.Gaelic	no, 1415	Norwegian	uz, 2126	Uzbek
gl, 0712	Galician	oc, 1503	Occitan	vi, 2209	Vietnamese
gn, 0714	Guarani	om, 1513	Oromo	vo, 2215	Volapük
gu, 0721	Gujarati	or, 1518	Oriya	wo, 2315	Wolof
ha, 0801	Hausa	pa, 1601	Panjabi	xh, 2408	Xhosa
hi, 0809	Hindi	pl, 1612	Polish	yo, 2515	Yoruba
hr, 0818	Croatian	ps, 1619	Pashto	zh, 2608	Chinese
hu, 0821	Hungarian	pt, 1620	Portuguese	zu, 2621	Zulu
hy, 0825	Armenian	qu, 1721	Quechua		
ia, 0901	Interlingua	rm, 1813	Romansh		



Registering your favourite 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 favourite menu.

Selecting a shortcut

- 1 Press the HOME button to display the Top menu screen.
- 2 Touch the following keys in the following order.



The "Favorites" screen appears.

- 3 Touch the star icon that you want to add to the favourite menu.

The star icon for the selected menu is filled in.

- To cancel the registration, touch the star icon in the menu column again. □

Removing a shortcut

- 1 Press the HOME button to display the Top menu screen.
- 2 Touch the following keys in the following order.



The "Favorites" screen appears.

- 3 Touch and hold the star icon of the favourite menu you want to remove.

The selected menu is removed from the "Favorites" screen. □

Displaying the operation status of vehicle equipment

By connecting the optional Vehicle Bus adapter, you can display the operation status of the vehicle's parking sensor function and climate control panel on the screen.

CAUTION

- For information on installing the Vehicle Bus adapter, see the operating manual of the Vehicle Bus adapter.
- After installing the Vehicle Bus adapter, be sure to check operations.
- For details about vehicle models that are compatible with Vehicle Bus adapters, refer to the information on our website.
- Functions and displays vary depending on the vehicle model. For details of the functions available according to the model, refer to the information on our website.

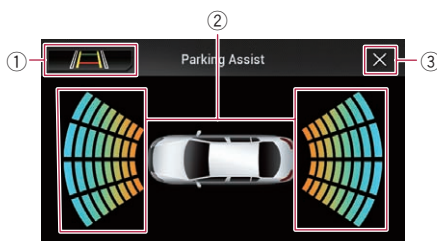
Displaying obstacle detection information

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.

Turn on the parking assist sensor on your vehicle, and the screen will switch to the "Parking Assist" screen.

- This function is only available for vehicles equipped with a parking sensor system.
- The "Parking Assist" screen is not displayed until the navigation screen has started.

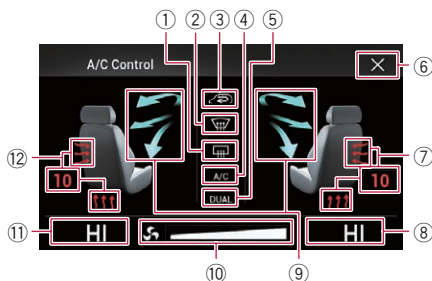


- ① Switches the display to the rear view camera image.
 - The display switches only when the rear view camera setting is set to "On" and the gearstick is in the REVERSE (R) position.
- ② Displays the position of detected obstacles.
- ③ The previous screen returns.

Displaying the operating status of the climate control panel

When you operate the climate control panel of the vehicle, the screen switches automatically to the "A/C Control" screen.

- The settings of the climate control panel operated before this product is started are not displayed on the screen.
- Any climate control panel settings of the vehicle that are turned off are not displayed on the screen.
- If the information displayed on the screen is reversed for the left and right sides of the vehicle, change the "Climate Reverse" setting to "On".
 - ➡ For details of the operations, refer to *Reversing the climate control status display* on page 146.



- ① Displays that the rear window heating setting is on.
- ② Displays that the front window heating setting is on.
- ③ Displays that the internal circulation mode setting is on.
- ④ Displays that the A/C setting is on.
- ⑤ Displays that the dual A/C function is on.
- ⑥ The previous screen returns.
 - ❑ If you do not operate the climate control panel for a few seconds, the previous screen is displayed automatically.
- ⑦ Displays the seat heating setting for the right seat.
- ⑧ Displays the internal temperature setting for the right seat.
- ⑨ Displays the fan direction.
- ⑩ Displays the fan speed.
- ⑪ Displays the internal temperature setting for the left seat.
- ⑫ Displays the seat heating setting for the left seat. ❑

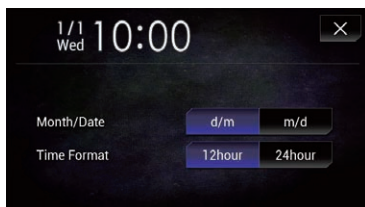
Common operations

Setting the time and date

You can change the date display format and the time format.

1 Touch the current time on the screen to display the Time and date setting screen.

The following screen appears.



2 Touch the item you want to set.

Month/Date

- **d/m** (default):
Changes the date display format to date/month.
- **m/d**:
Changes the date display format to month/date.

Time Format

- **12hour** (default):
Changes the display to 12-hour format with am/pm.
- **24hour**:
Changes the display to 24-hour format.

Setting the "Sound Retriever" function

The "Sound Retriever" function automatically enhances compressed audio and restores rich sound.

● Touch the following key repeatedly until the desired setting appears on the AV operation screen.

S.Rtrv Sets the "Sound Retriever" function.

- **S.Rtrv** (Mode1) (default):

Activates the "Sound Retriever" function.

- **S.Rtrv** (Mode2):
Activates the "Sound Retriever" function.
 - **S.Rtrv** (Off):
Deactivates the "Sound Retriever" function.
- Mode1 has a stronger effect than Mode2.

Changing the wide screen mode

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

- The default setting is "Full", and for JPEG images is "Normal".

1 Touch the following key.



Displays the setting screen to select the appropriate screen ratio for the playback video.

- The appearance of this key changes according to the current setting.

2 Touch the desired mode.

- **Full**
A 4:3 picture is enlarged in the horizontal direction only, enabling you to enjoy a 4:3 TV picture (normal picture) without any omissions.
 This setting is for video only.
- **Zoom**
A 4:3 picture is enlarged in the same proportion both vertically and horizontally; ideal for a cinema-sized (wide screen) picture.
 This setting is for video only.
- **Normal**
A 4:3 picture is displayed normally, giving you no sense of disparity since its proportions are the same as those of the normal picture.
 This setting is for video and JPEG images.
- **Trimming**

An image is displayed across the entire screen with the horizontal-to-vertical ratio left as is. If the horizontal-to-vertical ratio differs between the display and the image, the image may be displayed partly cut off either at the top/bottom or sides.

- This setting is for JPEG images only.
- You cannot operate this function while driving.
- 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.

Other functions

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.

1 Press the HOME button to display the Top menu screen.

2 Touch the following key.



Displays the AV source selection screen.

3 Touch [Rear].

The "Rear" screen appears.

4 Touch the source you want to show on the rear display.

The source you can select is as follows.

- **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.
- **Disc**
The video and sound of DVDs are output to the rear display.
— Compatible file types are DVD-V, Video-CD, DivX, MPEG-1, MPEG-2, and MPEG-4 only.
- **USB/iPod**
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 sound of **AV** are output to the rear display.
— The video image and sound are output only when "**AV**" has both video and sound.

— The video image and sound are output only when the corresponding settings on "**AV Input**" is "**Source**".

➔ For details, refer to *Setting AV input* on page 141.

- **SD**
The video and sound of the SD memory cards are output to the rear display.
— Compatible file types are MPEG-4, H.264, WMV, MKV, and FLV only.
- **OFF**
Nothing is output to the rear display.
- Touch the following key.



Closes the "Rear" screen.

- You can also select [Rear] on the source list.
➔ For details, refer to *Selecting a front source on the source list* on page 21. □

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.

Setting the password

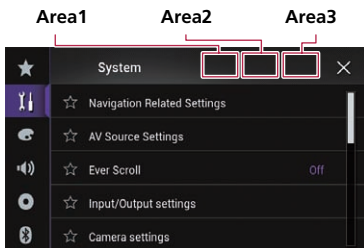
1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The "System" screen appears.

3 Touch Area1, followed by Area2, and then touch and hold Area3.



The “**Anti-theft Setting Menu**” screen appears.

4 Touch [Set Password].

The “**Password Entry**” screen appears.

5 Enter the password you want to set.

- 5 to 16 characters can be entered for a password.

6 Touch [Go].

The “**Hint Entry**” screen appears.

7 Enter a password hint.

- Up to 40 characters can be entered for a hint.

8 Touch [Go].

The “**Password Confirmation**” screen appears.

- If you want to change the password currently set, enter the current password and then enter the new one.

9 Check the password, and then touch [OK].

The “**Anti-theft Setting Menu**” screen appears.

Entering the password

On the password input screen, you must enter the current password.

1 Enter the password.

2 Touch [Go].

When the correct password is entered, this product will be unlocked.

Deleting the password

The current password and password hint can be deleted.

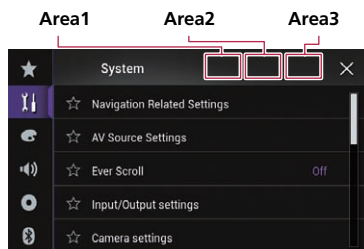
1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The “**System**” screen appears.

3 Touch Area1, followed by Area2, and then touch and hold Area3.



The “**Anti-theft Setting Menu**” screen appears.

4 Touch [Clear password].

A message confirming whether to delete the password appears.

5 Touch [Yes].

The password setting screen appears.

A message confirming a password hint appears.

6 Touch [OK].

The “**Password Entry**” screen appears.

7 Enter the current password.

Other functions

8 Touch [Go].

A message indicating that the security setting is cancelled appears.

Forgotten password

Contact the nearest authorised Pioneer Service Station.

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

Resets various settings registered to this product.

- The settings configured on the "Theme" screen are not reset.

Method 2: Touch the item you want to initialise on the "System" screen

➔ For details, refer to *Restoring the default settings* on page 185.

Method 3: Press the RESET button

➔ For details of the operations, refer to *Resetting the microprocessor* on page 11.

Restoring the default settings

Resets various settings registered to this product to the default settings.

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

CAUTION

Do not turn off the engine while restoring the settings.

1 Press the HOME button to display the Top menu screen.

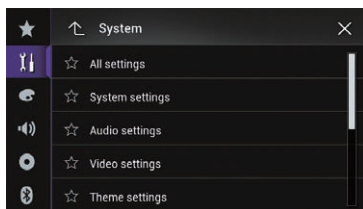
2 Touch the following keys in the following order.



The "System" screen appears.

3 Touch [Restore Settings].

The following screen appears.



4 Touch the item you want to initialise.

- **All settings**
- **Audio settings**
 - This setting is available when the selected source is "OFF".
- **Video settings**
 - This setting is available when the selected source is "Disc", "CD", "Video CD" or "DVD".
- **Theme settings**
- **Bluetooth Settings**

A message confirming whether to initialise the settings appears.

- If you want to return settings or recorded content to the default, touch [All settings].
- Some of the settings configured on the "Theme" setting will not be reset.

5 Touch [Restore].

When the selected item is successfully initialised, a completion message appears.


- The source is turned off and the Bluetooth connection is disconnected before the process starts.

Appendix

Troubleshooting

If you have problems operating your navigation system, refer to this section. The most common problems are listed below, along with likely causes and solutions. If a solution to your problem cannot be found here, contact your dealer or the nearest authorised Pioneer service facility.

Problems with the AV screen

Symptom	Cause	Action (Reference)
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. (Page 199)
The screen is covered by a caution message and the video cannot be shown.	The handbrake lead is not connected or applied.	Connect the handbrake lead correctly, and apply the handbrake.
	The handbrake interlock is activated.	Park your vehicle in a safe place and apply the handbrake.
No video output from the connected equipment.	The "AV Input" setting is incorrect.	Correct the settings. (Page 141)
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.	This operation is not possible. (For example, the DVD playing does not feature that angle, audio system, subtitle language, etc.)
The picture stops (pauses) and 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. (Page 173)
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. (Page 173)
The parental lock for DVD playback cannot be cancelled.	The code number is incorrect.	Input the correct code number. (Page 173)

Appendix

Symptom	Cause	Action (Reference)
Playback is not with the audio language and subtitle language settings selected in "DVD/DivX Setup".	The DVD playing does not feature dialogue or subtitles in the language selected in "DVD/DivX Setup".	Switching to a selected language is not possible if the language selected in "DVD/DivX Setup" is not recorded on the disc. (Page 171, Page 171)
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 analogue 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.	<ul style="list-style-type: none"> Reconnect the iPod with the USB interface cable for iPod / iPhone. Update the iPod software version.
	An error has occurred.	<ul style="list-style-type: none"> Reconnect the iPod with the USB interface cable for iPod / iPhone. Park your vehicle in a safe place, and turn off the engine. Turn the ignition key back to off (ACC OFF). Then restart the engine, and turn the power to this product back on. 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

Symptom	Cause	Action
Dialling is impossible because the touch panel keys for dialling are inactive.	Your phone is out of range for service.	Retry after re-entering the range for service.
	The connection between the mobile phone and this product cannot be established now.	Perform the connection process.

Problems with the Application screen

Symptom	Cause	Action
A black screen is displayed.	While operating an application, the application was ended on the smartphone side.	Press the HOME 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.	<ul style="list-style-type: none"> 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.

Appendix

Symptom	Cause	Action
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 centre.

Common

Message	Cause	Action
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 authorised Pioneer Service Station for assistance.
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 authorised Pioneer Station for assistance.

DAB tuner

Message	Cause	Action
Antenna Error	The aerial connection is incorrect.	Check the aerial connection. If the message fails to disappear even after the engine is switched off/on, contact your dealer or the nearest authorised Pioneer service centre for assistance.

Pandora

Message	Cause	Action
Error-19	Communication failed.	Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.
Skip limit reached.	Skip limit reached.	<ul style="list-style-type: none"> Do not exceed the skip limit. Due to music licensing restrictions, Pandora limits the total number of skips per hour.

Appendix

Message	Cause	Action
Check Device	Device error message displayed in Pandora application.	Please check your connected 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.

Aha Radio

Message	Cause	Action
Communication error occurred.	iPod failure.	Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.
Error-02-6X	iPod failure.	Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.

Disc

Message	Cause	Action (Reference)
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. (Page 11)
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. (Page 202, Page 215)
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.
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.
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. (Page 202, Page 215)
It is not possible to write it in the flash. Unable to write to flash memory.	The playback history for VOD contents cannot be saved for some reason.	<ul style="list-style-type: none"> • Retry. • If the message appears frequently, consult your dealer.

Appendix

Message	Cause	Action (Reference)
Your device is not authorized to play this DivX protected video.	This product's DivX registration code has not been authorised 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. (Page 202, Page 215)

External storage device (USB, SD)

Message	Cause	Action (Reference)
Error-02-9X/-DX	Communication failed.	<ul style="list-style-type: none"> • 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	<p>This type of file cannot be played on this product.</p> <p>Security for the connected external storage device (USB, SD) is enabled.</p>	<p>Select a file that can be played. (Page 202, Page 215)</p> <p>Follow the external storage device (USB, SD) instructions to disable security.</p>
Skipped	The connected external storage device (USB, SD) contains DRM protected files.	The protected files are skipped.
Protect	All the files on the connected external storage device (USB, SD) are embedded with DRM.	Replace the external storage device (USB, SD).
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.
Incompatible SD	The SD memory card is not supported by this product.	<ul style="list-style-type: none"> • Remove your device and replace it with a compatible SD memory card. • Format the SD memory card. It is recommended that you use SD Formatter for formatting SD memory cards. (Page 200)
Check USB	<p>The USB connector or USB cable is short-circuited.</p> <p>The connected USB storage device consumes more than maximum allowable current.</p>	<p>Check that the USB connector or USB cable is not caught in something or damaged.</p> <p>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.</p>
Video resolution not supported	Files that cannot be played on this product are included in the file.	Select a file that can be played. (Page 202, Page 215)

Appendix

Message	Cause	Action (Reference)
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. (Page 202, Page 215)

iPod

Message	Cause	Action
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.

Bluetooth

Message	Cause	Action
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 authorised Pioneer Service Station.

MirrorLink

Message	Cause	Action
The application list could not be read out.	Failed to load the application list.	<ul style="list-style-type: none"> • Disconnect the cable from the smartphone, and then connect the smartphone 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, reset the smartphone. If the error message is still displayed after performing the above action, please contact your dealer or an authorised Pioneer Service Station.
There is no supported application on your MirrorLink device.	No supported applications can be found.	Install MirrorLink compliant applications to your MirrorLink device.

Appendix

Message	Cause	Action
Communication error occurred.	There was a communication error.	<ul style="list-style-type: none"> • Disconnect the cable from the smartphone, and then connect the smartphone again after a few seconds. • Turn the ignition switch to OFF and then to ON. <p>If the error message is still displayed after performing the above action, reset the smartphone.</p> <p>If the error message is still displayed after performing the above action, please contact your dealer or an authorised Pioneer Service Station.</p>
Launching the application failed.	Failed to launch the application.	Try again.
Failed to display the screen of your device because of irregular resolution.	The image size is too large.	The size of the images transferred from the device exceeds 800 × 480.



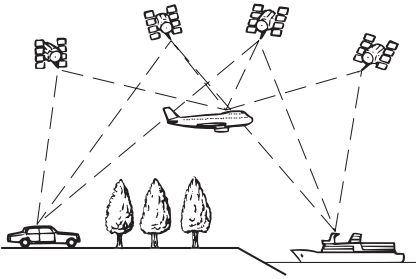
Appendix

Positioning technology

Positioning by GPS

The Global Positioning System (GPS) uses a network of satellites orbiting the Earth. Each of the satellites, which orbit at a height of 21 000 km, continually broadcasts radio signals giving time and position information. This ensures that signals from at least three can be picked up from any open area on the earth's surface.

The accuracy of the GPS information depends on how good the reception is. When the signals are strong and reception is good, GPS can determine latitude, longitude and altitude for accurate positioning in three dimensions. But if signal quality is poor, only two dimensions, latitude and longitude, can be obtained and positioning errors are somewhat greater.



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 travelled 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 authorised Pioneer dealer or an installation professional.
- ❑ Some types of vehicles may not output a speed signal while driving at just a few kilometres per hour. In such a case, the current location of your vehicle may not be displayed correctly while in traffic jam or in a car park.

How do GPS and dead reckoning work together?

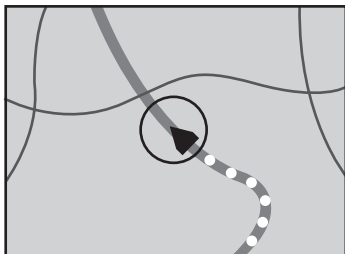
For maximum accuracy, your navigation system continually compares GPS data with your estimated position as calculated from the data of built-in sensor. However, if only the data from the built-in sensor is available for a long period, positioning errors are gradually compounded until the estimated position 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. Initialise the sensor status and it may recover the accuracy to normal condition.
 - ➔ For details, refer to *Clearing the status* on page 151.

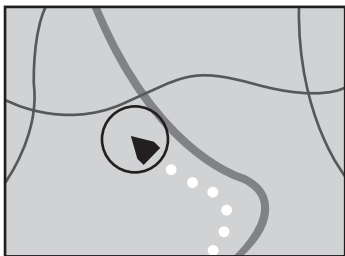
Appendix

Map matching

As mentioned, the positioning systems used by this navigation system are susceptible to certain errors. Their calculations may, on occasion, place you in a location on the map where no road exists. In this situation, the processing system understands that vehicles travel only on roads, and can correct your position by adjusting it to a nearby road. This is called map matching.



With map matching



Without map matching



Handling large errors

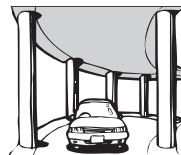
Positioning errors are kept to a minimum by combining GPS, dead reckoning and map matching. However, in some situations, these functions may not work properly, and the error may become bigger.

When positioning by GPS is impossible

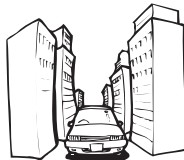
- GPS positioning is disabled if signals cannot be received from more than two GPS satellites.
- In some driving conditions, signals from GPS satellites may not reach your vehicle. In this case, it is impossible for the system to use GPS positioning.



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

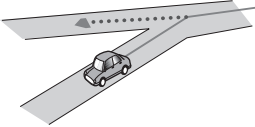
- If a car phone or mobile phone is used near the GPS aerial, GPS reception may be lost temporarily.
- Do not cover the GPS aerial with spray paint or car wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals, so keep the aerial clear.
- If a GPS signal has 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.

Appendix

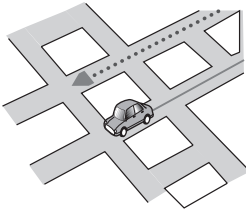
Conditions likely to cause noticeable positioning errors

For various reasons, such as the state of the road you are travelling on and the reception status of the GPS signal, the actual position of your vehicle may differ from the position displayed on the map screen.

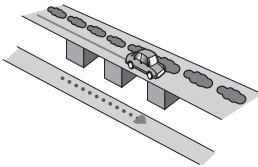
- If you make a slight turn.



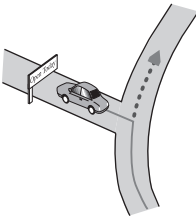
- If there is a parallel road.



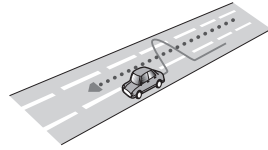
- If there is another road very nearby, such as in the case of an elevated motorway.



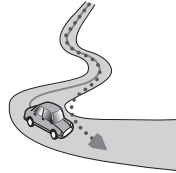
- If you take a recently opened road that is not on the map.



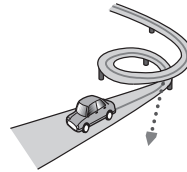
- If you drive in zigzags.



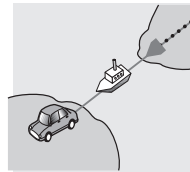
- If the road has a series of hairpin bends.



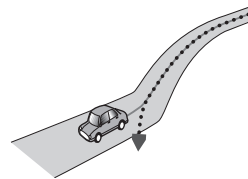
- If there is a loop or similar road configuration.



- If you take a ferry.

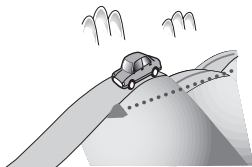


- If you are driving on a long, straight road or a gently curving road.

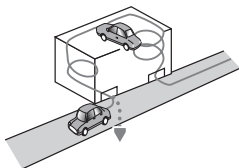


Appendix

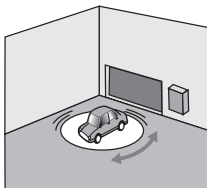
- If you are on a steep mountain road with many height changes.



- If you enter or exit a multi-storey car park or similar structure using a spiral ramp.



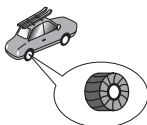
- If your vehicle is turned on a turntable or similar structure.



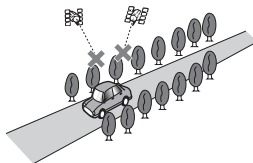
- If your vehicle's wheels spin, such as on a rough track or in snow.



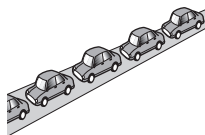
- If you put on chains, or change your tyres for ones with a different size.



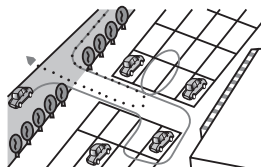
- If trees or other obstacles block the GPS signals for a considerable period.



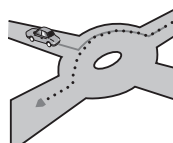
- If you drive very slowly, or in a start-and-stop manner, as in a traffic jam.



- If you join the road after driving around a large car park.



- When you drive around a roundabout.



- When starting driving immediately after starting the engine.

Appendix

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 motorway are announced. However, if you pass intersections, turns, and other guidance points in rapid succession, some may delay or not be announced.
- It is possible that guidance may direct you off a motorway and then back on again.
- In some cases, the route may require you to travel in the opposite direction to your


current heading. In such cases, you are instructed to turn around, so please turn around safely by following the actual traffic rules.

- In some cases, a route may begin on the opposite side of a railway or river from your actual current location. If this happens, drive towards your destination for a while, and try route calculation again.
- When there is a traffic jam ahead, a detour route may not be suggested if driving through the traffic jam would still be better than taking the detour.
- There may be instances when the starting point, the waypoint and the destination point are not on the highlighted route.
- The number of roundabout exits displayed on the screen may differ from the actual number of roads.

Route highlighting

- Once set, the route is highlighted in bright colour on the map.
- The immediate vicinity of your starting point and destination may not be highlighted, and neither will areas with particularly complex road layouts. Consequently, the route may appear to be cut off on the display, but voice guidance will continue.

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. 

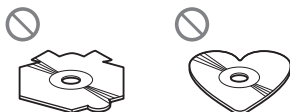
Handling and care of discs

Some basic precautions are necessary when handling your discs.

Appendix

Built-in drive and care

- Use only conventional, fully circular discs. Do not use shaped discs.



- Do not use cracked, chipped, warped, or otherwise damaged discs as they may damage the built-in drive.
- 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 touch the recorded surface of the discs.
- Store discs in their cases when not in use.
- Avoid leaving discs in excessively hot environments including under direct sunlight.
- Do not attach labels, write on or apply chemicals to the surface of the discs.
- Do not attach commercially available labels or other materials to the discs.
 - The discs may warp making the disc unplayable.
 - The labels may come off during playback and prevent ejection of the discs, which may result in damage to the equipment.
- To clean a disc, wipe it with a soft cloth, moving outward from the centre.



- Condensation may temporarily impair the built-in drive's performance. Leave it to adjust to the warmer temperature for about one hour. Also, wipe any damp discs with a soft cloth.

- Playback of discs may not be possible because of disc characteristics, disc format, recorded application, playback environment, storage conditions and so on.
- Road shocks may interrupt disc playback.
- Read the precautions for discs before using them.

Ambient conditions for playing a disc

- At extremely high temperatures, a temperature cutout protects this product by switching it off automatically.
- Despite our careful design of the product, small scratches that do not affect actual operation may appear on the disc surface as a result of mechanical wear, ambient conditions for use or handling of the disc. This is not a sign of the malfunction of this product. Consider it to be normal wear and tear.

Playable discs

DVD-Video and CD

DVD and CD discs that display the logos shown below generally can be played on this built-in DVD drive.

DVD-Video



CD



- DVD** is a trademark of DVD Format/Logo Licensing Corporation.

Appendix

- ❑ 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.

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 licence 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 playback DVD-ROM/ DVD-RAM discs.
- 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

- Unfinalised 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

- Unfinalised discs cannot be played back.
- It may not be possible to playback CD-R/ CD-RW discs recorded on a music CD recorder or a computer because of disc characteristics, scratches or dirt on the disc, or dirt, scratches or condensation on the lens of the built-in drive.

Appendix

- 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 external storage device (USB, SD)

- Do not leave the external storage device (USB, SD) in any location with high temperatures.
- Depending on the kind of the external storage device (USB, SD) you use, this product may not recognise 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 an external storage device (USB, SD) with complex folder hierarchies.
- Operations may vary depending on the kind of an external storage device (USB, SD).
- It may not be possible to play some music files from SD or USB because of file characteristics, file format, recorded application, playback environment, storage conditions, and so on.

Notes on SD memory cards

- Some SD memory cards may not be recognised by this unit even if the SD memory cards can be recognised by a computer. Formatting the SD memory cards using a dedicated formatter may resolve the problem. SD memory cards formatted using

the standard formatting function on a computer do not comply with the SD standard. Problems such as that those cards cannot be read or written could occur. It is recommended that you use a dedicated formatter to avoid such problems. All of the data stored on an SD memory card will be deleted when the card is formatted. Back up any needed data beforehand as necessary. A dedicated formatter for SD memory cards can be obtained from the following site.
<https://www.sdcard.org/home/>
 (Valid as of June 2012)

USB storage device compatibility

- ➔ For details about USB storage device compatibility with this product, refer to *Specifications* on page 215.
- 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 accelerator pedal.
- There may be a slight delay when starting playback of audio files encoded with image data.
- Some USB storage devices connected to this product may generate noise on the radio.
- Do not connect anything other than the USB storage device.

The sequence of audio files on USB storage device

For USB storage device, the sequence is different from that of USB storage device.

SD memory card and SDHC memory card

- ➔ For details about SD memory card compatibility with this product, refer to *Specifications* on page 215.

Appendix

Handling guidelines and supplemental information

- This product is not compatible with the Multi Media Card (MMC).
- Copyright protected files cannot be played back.

Notes specific to DivX files

- Only DivX files downloaded from DivX partner sites are guaranteed for proper operation. Unauthorised 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 174.
- Plays all versions of DivX video, except for DivX 7 with standard playback of DivX media files.
- 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 recognised.
- 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 recognised.
- 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 synchronised.
- 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.

Appendix

Media compatibility chart

General

Media	CD-R/-RW	DVD-R/-R SL/-R DL/DVD-RW	USB storage device	SD memory card
File system	<ul style="list-style-type: none"> ISO9660 level 1 ISO9660 level 2 Romeo, Joliet UDF 1.02 / 1.50 / 2.00 / 2.01 / 2.50 	<ul style="list-style-type: none"> ISO9660 level 1 ISO9660 level 2 Romeo, Joliet UDF 1.02 / 1.50 / 2.00 / 2.01 / 2.50 	FAT16/FAT32/NTFS	
Maximum number of folders	700		1 500	
Maximum number of files	999	3 500	15 000	
Playable file types	MP3, WMA, AAC, DivX, MPEG1, MPEG2, MPEG4		MP3, WMA, AAC, WAVE, FLAC, H.264, MPEG4, WMV, FLV, MKV	
Notes:				
<ul style="list-style-type: none"> Maximum playback time of audio file stored in the disc: 60 h Maximum playback time of audio file stored on an external storage device (USB, SD): 7.5 h (450 minutes) 				

MP3 compatibility

Media	CD-R/-RW	DVD-R/-R SL/-R DL/DVD-RW	USB storage device	SD memory card
File extension	.mp3			
Bit rate	8 kbps to 320 kbps (CBR), VBR			
Sampling frequency	16 kHz to 48 kHz (32 kHz, 44.1 kHz, 48 kHz for emphasis)		8 kHz to 48 kHz	
ID3 tag	ID3 tag Ver. 1.0, 1.1, 2.2, 2.3		ID3 tag Ver. 1.0, 1.1, 2.2, 2.3, 2.4	
Notes:				
<ul style="list-style-type: none"> Ver. 2.x of ID3 tag is prioritised 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 				

Appendix

WMA compatibility

Media	CD-R/-RW	DVD-R/-R SL/-R DL/DVD-RW	USB storage device	SD memory card
File extension	.wma			
Bit rate	5 kbps to 320 kbps (CBR), VBR			
Sampling frequency	8 kHz to 48 kHz			
Note: This product is not compatible with the following: Windows Media™ Audio 9 Professional, Lossless, Voice				

WAV compatibility

Media	CD-R/-RW	DVD-R/-R SL/-R DL/DVD-RW	USB storage device	SD memory card
File extension	WAV files on the CD-R/-RW, DVD-R/-RW/-R SL/-R DL cannot be played.		.wav	
Format			Linear PCM (LPCM)	
Sampling frequency			16 kHz to 48 kHz	
Quantisation bits			8 bits and 16 bits	
Note: The sampling frequency shown in the display may be rounded.				

AAC compatibility

Media	CD-R/-RW	DVD-R/-R SL/-R DL/DVD-RW	USB storage device	SD memory card
File extension	.m4a			
Bit rate	8 kbps to 320 kbps (CBR)			
Sampling frequency	8 kHz to 44.1 kHz		8 kHz to 48 kHz	
Note: This product plays back AAC files encoded by iTunes.				

Appendix

DivX compatibility

Media	CD-R/-RW	DVD-R/-R SL/-R DL/DVD-RW	USB storage device	SD memory card
File extension	.avi/.divx		DivX files on the external storage device (USB, SD) cannot be played.	
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			
Notes:				
<ul style="list-style-type: none"> 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. 				

Appendix

Video files compatibility (USB, SD)

File extension	.avi	.mp4	.m4v	.wmv	
Format	MPEG-4	MPEG-4	H.264	MPEG-4	WMV
Compatible video codec	MPEG-4	MPEG-4	H.264	MPEG-4	WMV
Compatible audio codec	Linear PCM (LPCM) MP3	AAC	AAC	AAC	WMA
Maximum resolution	400 pixels x 240 pixels				
Maximum bit rate:	Bit rate: 2.5 Mbps Frame rate: 30 fps	Bit rate: 2.5 Mbps Frame rate: 30 fps	Bit rate: 1.5 Mbps Frame rate: 30 fps	Bit rate: 2.5 Mbps Frame rate: 30 fps	Bit rate: 768 kbps Frame rate: 30 fps
Maximum file size	4 GB				
Maximum playback time	150 minutes				

Common notes

- 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 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 recognise 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.
- Regardless of the length of blank section between the songs of original recording, compressed audio discs play with a short pause between songs.

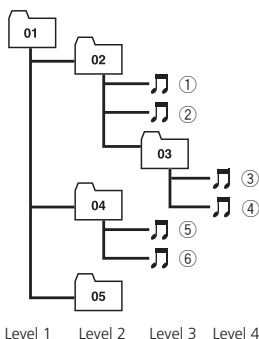
Appendix

Example of a hierarchy

The following figure is an example of the tier structure in the disc. The numbers in the figure indicate the order in which folder numbers are assigned and the order to be played back.

📁: Folder

🎵: File



Notes

- This product assigns folder numbers. The user cannot assign folder numbers.
- If there is a folder that does not contain any playable file, the folder itself will display in the folder list but you cannot check any files in the folder. (A blank list will appear.) Also, these folders will be skipped without displaying the folder number. ▣

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WMA/WMV

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DivX



DivX is a compressed digital video format created by the DivX video codec from DivX, LLC, a subsidiary of Rovi Corporation. This unit can play DivX video files recorded on CD-R/RW/ROM and DVD-R/RW/ROM discs. Keeping the same terminology as DVD video, individual DivX video files are called "Titles". Keep in mind that when naming files/titles on a CD-R/RW or a DVD-R/RW disc prior to burning, they will be played in written order by default.

Appendix

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ABOUT DIVX VIDEO: DivX® is a digital video format created by DivX, LLC, a subsidiary of Rovi Corporation. This is an official DivX Certified® device that plays DivX video. Visit divx.com for more information and software tools to convert your files into DivX videos.

ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in *Displaying your DivX VOD registration code*. Go to vod.divx.com for more information on how to complete your registration.

- ➔ For details, refer to *Displaying your DivX VOD registration code* on page 174. ❑

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. ❑

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MirrorLink

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Detailed information regarding connected iPod devices

⚠ CAUTION

- 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 accelerator pedal.

For details, refer to the iPod manuals.

iPod and iPhone



“Made for iPod” and “Made for iPhone” mean that an electronic accessory has been designed to connect specifically to iPod or iPhone, respectively, 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 iPod or iPhone may affect wireless performance.

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Appendix

Lightning

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App Store

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iOS

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iTunes

iTunes is a trademark of Apple Inc., registered in the U.S. and other countries. 

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 al-


lowing 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.

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Appendix

MHL

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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 licence for private, non-commercial use and does not convey a licence nor imply any right to use this product in any commercial (i.e. revenue-generating) real time broadcasting (terrestrial,

satellite, cable and/or any other media), broadcasting/streaming via internet, intranets and/or other networks or in other electronic content distribution systems, such as pay-audio or audio-on-demand applications. An independent licence for such use is required. For details, please visit <http://www.mp3licensing.com>. □

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*.
- 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.

Appendix

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 mobile phone, keep the aerial of the mobile phone away from the LCD screen to prevent disruption of the video in the form of disturbances such as spots or coloured stripes.


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.

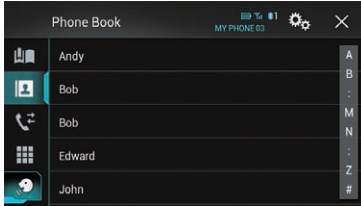
- At low temperatures, using the LED backlight may increase image lag and degrade the image quality because of the characteristics of the LCD screen. Image quality will improve with an increase in temperature.
- The product lifetime of the LED backlight is more than 10 000 hours. However, it may decrease 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 authorised Pioneer Service Station. 

Appendix

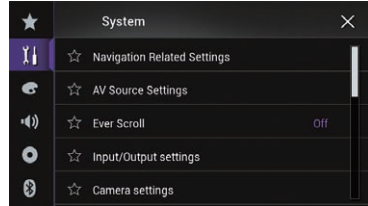
Display information

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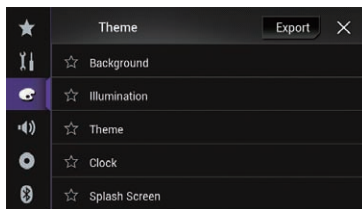


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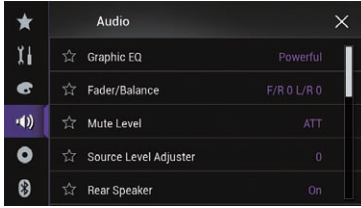
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Audio menu



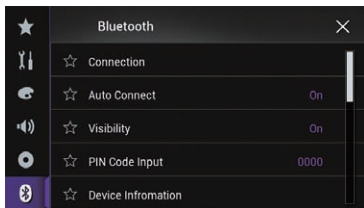
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Appendix

Specifications

General

Rated power source	14.4 V DC (allowable voltage range: 10.8 V to 15.1 V DC)
Earthing system	Negative type
Maximum current consumption	10.0 A
Dimensions (W × H × D):	
AVIC-F60DAB	
Chassis	178 mm × 100 mm × 165 mm
Nose	171 mm × 97 mm × 21 mm
AVIC-F960DAB	
Chassis	178 mm × 100 mm × 165 mm
Nose	170 mm × 97 mm × 9 mm
Weight:	
AVIC-F60DAB	2.1 kg
AVIC-F960DAB	1.8 kg
NAND flash memory	8 GB

Navigation

GPS receiver:	
System	L1, C/Acode GPS SPS (Standard Positioning Service)
Reception system	12-channel multi-channel reception system
Reception frequency ...	1 575.42 MHz
Sensitivity	-140 dBm (typ)
Position update frequency	Approx. once per second
GPS aerial:	
Aerial	Micro strip flat aerial/right-handed helical polarisation
Aerial cable	3.55 m
Dimensions (W × H × D)	33 mm × 14.7 mm × 36 mm
Weight	73.7 g

Display

Screen size/aspect ratio:	
AVIC-F60DAB	6.95 inch wide/16:9
AVIC-F960DAB	6.1 inch wide/16:9
Effective display area:	
AVIC-F60DAB	156.6 mm × 81.6 mm
AVIC-F960DAB	136.2 mm × 72 mm
Pixels	1 152 000 (2 400 × 480)
Display method	TFT Active matrix driving
Colour system	PAL/NTSC/PAL-M/PAL-N/ SECAM compatible

Tolerable temperature range:

Power off -20 °C to +80 °C

Audio

Maximum power output	50 W × 4 (for subwoofer: 70 W × 1 ch/ 2 Ω)
Continuous power output ...	22 W × 4 (50 Hz to 15 kHz, 5%THD, 4 Ω LOAD, Both Channels Driven)
Load impedance	4 Ω (4 Ω to 8 Ω [2 Ω for 1 ch] allowable)
Preout output level (max) ...	4.0 V
Equaliser (13-Band Graphic Equaliser):	
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:	
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	+10 dB to -24 dB
Phase	Normal/Reverse
Time alignment	0 to 200 step (2.5 cm/step)

DVD drive

System	DVD-Video, VCD, CD, MP3, WMA, AAC, DivX, JPEG, MPEG player
Usable discs	DVD-VIDEO, VIDEO-CD, CD, CD-R, CD-RW, DVD-R, DVD- RW, DVD-RDL
Region number	4
Frequency response	5 Hz to 44 000 Hz (with DVD, at sampling frequency 96 kHz)
Signal-to-noise ratio	96 dB (1 kHz) (IEC-A net- work) (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)

Appendix

AAC decoding format	MPEG-4 AAC (only encoded by iTunes): .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.	USB1.1, USB2.0 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
WAVE signal format	Linear-PCM
H.264 video decoding format	BaseLine Profile, Main Profile, High Profile
WMV video decoding format	VC-1 SP/MP/AP, WMV7/8
MPEG4 video decoding format	SimpleProfile, Advanced-SimpleProfile (except GMC)
JPEG decoding format	JPEG

SD (AVIC-F60DAB)

SD memory card, SDHC memory card	Compatible physical format	Version 2.0
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
WAVE signal format	Linear-PCM
H.264 video decoding format	BaseLine Profile, Main Profile, High Profile
WMV video decoding format	VC-1 SP/MP/AP, WMV7/8
MPEG4 video decoding format	SimpleProfile, Advanced-SimpleProfile (except GMC)
JPEG decoding format	JPEG

SD (AVIC-F960DAB)

microSD card, microSDHC card	Compatible physical format	Version 2.0
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	
WAVE signal format	Linear-PCM	
H.264 video decoding format	BaseLine Profile, Main Profile, High Profile	
WMV video decoding format	VC-1 SP/MP/AP, WMV7/8	
MPEG4 video decoding format	SimpleProfile, Advanced-SimpleProfile (except GMC)	
JPEG decoding format	JPEG	

Bluetooth

Version	Bluetooth 3.0+EDR certified
Output power	+4 dBm Max. (Power class 2)

FM tuner

Frequency range	87.5 MHz to 108.0 MHz
Usable sensitivity	11 dBf (0.8 μ V/75 Ω , mono, S/N: 30 dB)

Appendix

Signal-to-noise ratio 72 dB (IEC-A network)

AM tuner

Frequency range 531 kHz to 1 602 kHz (9 kHz)
 530 kHz to 1 640 kHz
 (10 kHz)

Usable sensitivity $25 \mu\text{V}$ (S/N: 20 dB)

Signal-to-noise ratio 62 dB (IEC-A network)

DAB tuner

Frequency range

Band III 174.928 MHz to
 239.200 MHz (5A-13F)

L Band 1 452.960 MHz to
 1 490.624 MHz (LA-LW)

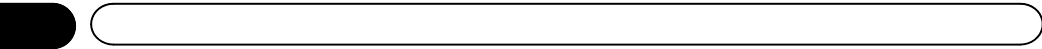
Usable sensitivity -100 dBm

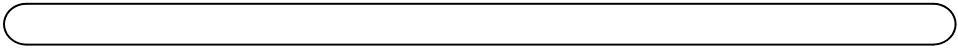
S/N ratio 85 dB



Note

Specifications and design are subject to possible modifications without notice due to improvements.





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>

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