

# Pioneer

## AVIC-Z1000DAB

NAVIGATION AV SYSTEM

English

### Operation Manual

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

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

# Contents

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

## Important

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

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# Precaution



## Notes on internal memory

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

## About this manual

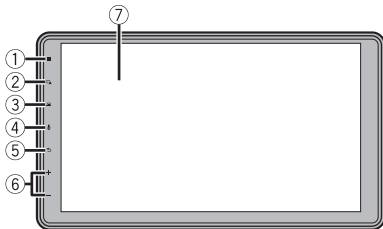
- This manual uses diagrams of actual screens to describe operations. However, the screens on some units may not match those shown in this manual depending on the model used.
- The screens in this manual are shown in English as an example.
- When an iPhone is connected to the unit, the source name on the unit appears as [iPod]. Please note that this unit only supports iPhone regardless of the source name. For details of iPhone compatibility, refer to Compatible iPhone models (page 73).

## Meanings of symbols used in this manual

	This indicates to touch the appropriate soft key on the touch screen.
	This indicates to touch and hold the appropriate soft key on the touch screen.

# Parts and controls

## Main unit



①		Touch to display the top menu screen. Touch and hold to power off. To power back on, touch any button.
②		Touch to switch between the Application screen and the Application screen/ AV operation screen and the Map screen. Touch and hold to switch to the camera view mode. <b>NOTES</b> <ul style="list-style-type: none"> <li>You may not be able to go back from the map screen displayed on Apple CarPlay/Android Auto to the AV operation screen.</li> <li>To activate the camera view mode with this button, set [Back Camera Input] to [On] or [AV Input] to [Camera] (page 109).</li> </ul>
③		Touch to display the menu bar (page 9). Touch and hold to mute or unmute.
④		Touch to activate the voice recognition mode with a connected iPhone or smartphone. Touch and hold to display the connectable device list screen or device search screen.
⑤		Touch to display the top menu screen or back to previous screen. Touch and hold to turn off the display.
⑥	VOL (+/-)	Touch to adjust the volume.
⑦	LCD screen	

# Basic operation

## Remote control

The remote control CD-R33 is sold separately. For details concerning operations, see the remote control manual.

## Starting up the unit

- 1 Start the engine to boot up the system.**  
The [Select Program Language] screen appears.

### NOTES

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

- 2 Touch the language.**

- 3 Touch .**

The [Speaker Mode Settings] screen appears.

- 4 Touch the speaker modes.**

### [Standard Mode]

4-speaker system with front and rear speakers, or a 6-speaker system with front and rear speakers and subwoofers.

### [Network Mode]

3-way system with a high range speaker, middle range speaker and subwoofer (low range speaker) for reproduction of high, middle and low frequencies (bands).

### WARNING

Do not use the unit in Standard Mode when a speaker system for 3-way Network Mode is connected to the unit. This may cause damage to the speakers.

- 5 Touch [OK].**

The [DAB ANTENNA POWER SETTING] screen appears.

- 6 Touch [Yes] then [OK] to use the DAB aerial power (page 78).**

Initial Legal Disclaimer screen appears.

- 7 Touch [OK].**

The top menu screen appears.

**NOTE**

Once the speaker mode is set, the setting cannot be changed unless this product is restored to the default settings. Restore the default settings to change the speaker mode setting (page 129).

## Switching the speaker mode

To change the speaker mode, you need to restore this product to the default settings.



- 1 Restore the default setting (page 112).

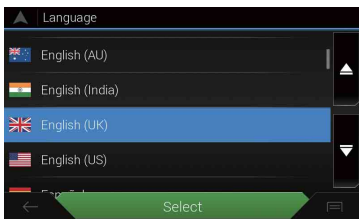
## Starting up the navigation system

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

**TIP**

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

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



- 4 Read the terms carefully, check the details, and then touch [Accept] if you agree to the conditions.
- 5 Touch [Next].
- 6 Touch the language that you want to use for voice guidance messages, then touch [Next].
- 7 If needed, modify the unit settings, then touch [Next].
- 8 If needed, modify the default route planning options, then touch [Next].

## 9 Touch [Finish].

### Using the touch panel


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

#### NOTE

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

### Common touch panel keys

: Returns to the previous screen.

: Close the screen.

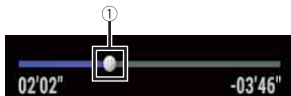
### Operating list screens



①	<b>Touching an item on the list allows you to narrow down the options and proceed to the next operation.</b>
②	<b>Appears when all characters are not displayed on the display area.</b> If you touch the key, the rests are scrolled for display. <b>NOTE</b> This function is available only when you stop your vehicle in a safe place and apply the handbrake.
③	<b>Appears when items cannot be displayed on a single page.</b> Drag the side bar, the initial search bar or the list to view any hidden items.



## Operating the time bar




①

**You can change the playback point by dragging the key.**

The playback time corresponding to the position of the key is displayed while dragging the key.

## Operating the menu bar

1 Touch .

The menu bar pops up on the screen.

### NOTE

The menu bar availability may vary depending on the activating source.



Switches the dimmer duration by day or night.



Switches between playback and pause.



Skips files forwards or backwards.



Performs fast reverse or fast forwards.



Displays setting menu screen (page 108).



Closes the menu bar.

## Switching the operation panel

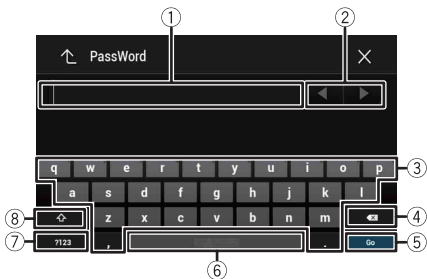
1 Touch .

The hidden function keys appear.

**NOTE**

This key does not appear for some AV sources.



## Operating the on-screen keyboard













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

## Top menu screen



<p>①</p>	<p><b>Favourite source icons</b></p> <p><b>TIP</b> If you select [Power OFF], you can turn off almost all functions. The [Power OFF] mode is released in the following cases.</p> <ul style="list-style-type: none"> <li>- An incoming call is received (only for hands-free phoning via Bluetooth).</li> <li>- A rear view camera image is input when the vehicle is in reverse.</li> <li>- A button on this unit is touched.</li> <li>- The ignition switch is turned off (ACC OFF), then turned on (ACC ON).</li> </ul>
<p>②</p>	<p><b>AV/Device source operation key.</b> Displays the current source.</p> <p><b>TIP</b> When the last source is displayed behind the key, you can switch the source by touching the key.</p>
	<p><b>Setting the time and date (page 126)</b></p>
	<p><b>Settings (page 108) and Favourite menu (page 125)</b></p>

	<p><b>Mode switching key</b> Switches the source or application with connected devices such as Weblink, Apple CarPlay, Android Auto.</p> <p><b>TIP</b> When a device with a compatible application is connected, the favourite application key appears. Once the key appears, you can adjust the range of the favourite application key area with the following steps.</p> <ol style="list-style-type: none"> <li><b>1 Touch and hold</b> .</li> <li><b>2 Drag</b>  <b>to the desired position.</b> To finish the adjusting, touch any place of the display except for the favourite application key.</li> </ol> <p><b>NOTES</b></p> <ul style="list-style-type: none"> <li>• If there is no connected device, a message that prompts you to search the Bluetooth device will appear. Touch [Yes] to search the device.</li> <li>• This function is available only when you stop your vehicle in a safe place and apply the handbrake or the vehicle is completely stopped.</li> </ul>
	<p><b>Device switching key</b> Displays connected device. Touch the device name to switch the mobile device to be connected with the source or application.</p> <p><b>NOTES</b></p> <ul style="list-style-type: none"> <li>• If there is no connected device, a message that prompts you to search the Bluetooth device will appear. Touch [Yes] to search the device.</li> <li>• You can search the device by touching  if you cannot find the device you want to connect.</li> <li>• You can delete the device by touching  if you cannot add the device because the number of registered devices are full.</li> <li>• You can connect or disconnect the Bluetooth device by touching .</li> </ul>
	<b>AV source (page 70)</b>
	<b>Hands-free phoning (page 60)</b>
	<b>Displays the map screen.</b>

# Navigation

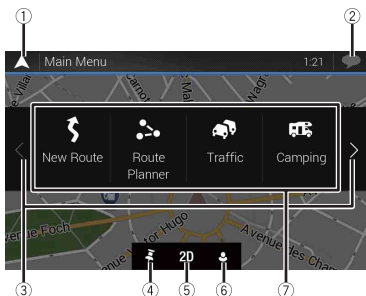
## Menu screen view and operations

1 Touch .









2 Touch .

The main menu screen appears.






### Main screen



①	Returns to the map screen.
②	Notifications that contain important information.
③	Displays the previous or next page of the navigation menu.
④	The locations that you saved as favourites.
⑤	Switches between 2D, 3D, and 2D North up view modes.
⑥	The [User Profiles] screen where you can create new profiles or edit the existing profiles. If multiple drivers are using this product, they can create their own profiles with their own settings. If you select a new profile, this product restarts so that the new settings can take effect.

	<b>Navigation items</b>
	Searches for a destination using various methods (page 20).
	Builds your route or edits the route currently set (page 29).
	Displays the traffic screen (page 38).
	Displays the list of the destinations or waypoints that a camper van is available for (page 26). • This function may not be able to be available on some models.
	Displays useful information to support your driving (page 41).
	Configures the navigation-related settings (page 46).
	Displays information about your navigation system (e.g. the version information or licence).

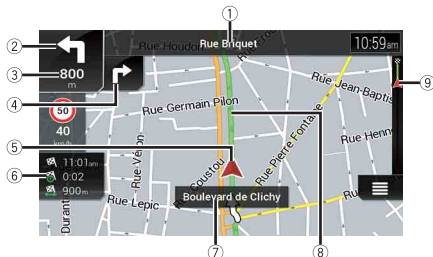
### Main menu screen icons with a planned route (only appear when a route is planned)

	Adds a waypoint (page 31).
	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.
	Deletes your route or removes a waypoint.
	Suspends and resumes the route guidance.

## Map Screen

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



### NOTE

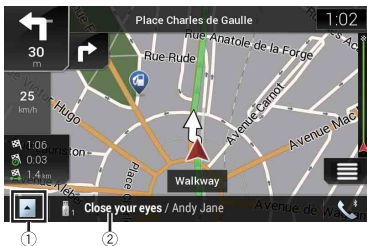
Depending on the conditions and settings, some items may not be displayed.


①*	Shows the number and name of the street to be used (or next guidance point).
②*	Shows the next guidance point (manoeuvre). The type of the event (turn, roundabout, exiting motorway, etc.) is displayed (page 18).
③*	Shows the distance to the next guidance point (manoeuvre).
④*	Shows the manoeuvre after the next manoeuvre.
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. <b>NOTE</b> When there is no GPS position, the triangular mark is transparent. It shows your last known position.
⑥	Displays the data field.
⑦	Shows the name of the street (or city) that your vehicle is travelling on (or in).
⑧*	Indicates the current route. The route currently set is highlighted in colour on the map.
⑨*	Indicates the progress to the final destination.

\* The information appears only when a route is set.

### ► AV information bar







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



①	<b>Touch to display the AV source list.</b>
②	<b>Shows the current status of AV source briefly.</b>
	<b>Touch to display the phone menu screen (page 60).</b>

### Changing the scale or the map manually

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

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

#### ▶ Smart Zoom

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

- When the route is set:  
When approaching a turn, "Smart Zoom" will zoom in and raise the view angle to enable you to easily recognise 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 is displayed. For 2D map view mode, you can select between "Heading up" and "North up".




<b>Heading up</b>	<b>The map display always shows the vehicle's direction as proceeding towards the top of the screen.</b>
<b>North up</b>	<b>The map display always has north at the top of the screen.</b> <b>NOTE</b> The map orientation is fixed at "Heading up" when the 3D map screen is displayed.

1 Touch .

2 Touch .

3 Touch the following key.

Each time you touch the key, the setting changes.

	<b>Indicates 2D Heading up view mode is currently selected.</b>
	<b>Indicates 3D Heading up view mode is currently selected.</b> <b>NOTE</b> There is a limit to map scaling in 3D map view mode. If the map scale is zoomed out further, the map is zoomed out in 2D map.
	<b>Indicates 2D North up view mode is currently selected.</b>

## Scrolling the map to the position you want to see

1 Touch .


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

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

### 3 Touch .

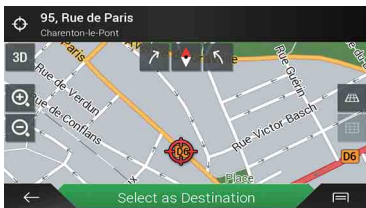
The map returns to the current position.






#### TIP

If you touch , the map returns to the current position.

### ► Control keys on the scrolled map

#### Map screen (scrolled map)





	<b>Changes the map view mode.</b> The current map mode is shown on the control key.
	<b>Zooms in or out on the map.</b> You can also zoom out or in by pinching or expanding the map.
	<b>Rotates the map clockwise or anticlockwise.</b>
	<b>Cancels map rotation.</b>
	<b>Tilts the map angle up or down.</b> You can change the vertical view angle of the map in 3D mode only.








### Route guidance

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

#### ► Frequently shown route events

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


	<b>Turn left, turn right, turn back.</b>
	<b>Go left on the roundabout, 3rd exit (next manoeuvre).</b>

	<b>Enter roundabout (manoeuvre after the next manoeuvre).</b>
	<b>Motorway entrance or motorway exit.</b>
	<b>Board ferry or leave ferry.</b>
	<b>Approaching the destination or a waypoint.</b>
	<b>Lane information</b> When navigating on multilane roads, you will need to make sure to take the proper lane for the recommended route.
	<b>Signposts</b> Signs are displayed at the top of the map.
	<b>Junction view</b> If you are approaching a complex junction, the map is replaced with a 3D view of the junction.

**NOTE**

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.

**TIP**

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

**Browsing the data field**

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

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



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



#### NOTES

- Touching and holding the field allows you to display the setting screen for the field. For details, refer to page 53.
- The estimated time of arrival is an ideal value calculated based on the speed limit value set in [Max. Speed] of vehicle type setting and the actual driving speed. The estimated time of arrival is only a reference value, and does not guarantee arrival at that time. For details, refer to page 46.

## Searching for a destination

Search for a destination or waypoint using the address or another method. You can also set a destination by touching the map on the screen. Once the destination is set, the system can start the navigation by touching [Start Navigation] (page 28).

### ⚠ 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.

**NOTE**

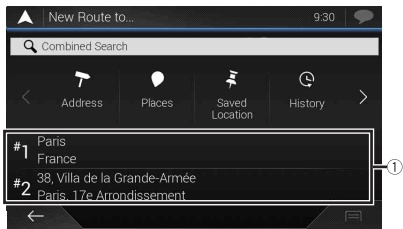
Some information regarding traffic regulations depends on the time when the route calculation is performed. Thus, the information may not correspond with a certain traffic regulation when your vehicle actually passes through the location in question. Also, the information on the traffic regulations provided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










1 Touch .

2 Touch .

3 Touch [New Route].

The following screen appears.



①	<b>Suggests a destination based on your navigation habits, using parameters such as current time of day, day of week and current location.</b>
 	<b>Displays the previous or next page of the searching for a destination menu.</b>
	<b>Searches for a location by entering the specific address (page 22).</b>
	<b>Searches for various facilities (Points Of Interest - POI) such as petrol stations accommodations, etc. by selecting the category (page 22).</b>
	<b>Selects a destination from the stored locations (page 24).</b>
	<b>Searches for a location from the recently visited places (page 25).</b>
	<b>Selects a destination from the stored routes (page 24).</b>
	<b>Searches for a location by entering a latitude and longitude (page 25).</b>
	<b>Searches for a location using multiple factors (page 25).</b>

## Searching for a location by address

Search a destination in which the address is specified.

### TIP

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

- 1 **Touch [Address].**
- 2 **Select the [Country].**  
Proposes the country where you are as a default.  
If you want to change the search area, set another country.
- 3 **Select the [Town or Postcode].**  
Proposes the city/town where you are as a default.  
You can select the city/town using its postal code instead of its name.
- 4 **Select the [Street].**  
If the street name is not available, touch [Go to Town] and select the city/town. This way the centre of the selected city/town becomes the destination of the route.
- 5 **Select [Select House Number or Intersection].**  
This item will be displayed after a street is set. 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].**

## Searching for Points of Interest (POI)


You can search for various facilities (Points Of Interest – POI). by selecting the category such as petrol stations, accommodation or restaurant.

### ► Searching for POIs using preset categories

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

- 1 **Touch [Places].**
- 2 **Touch the category.**  
The preset search categories are as follows.
  - [Petrol Station]
  - [Accommodation]
  - [Restaurant]
  - [Parking]
- 3 **Touch the POI.**  
The searched location appears on the map screen.

## TIP

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

## 4 Touch [Select as Destination].

### NOTES

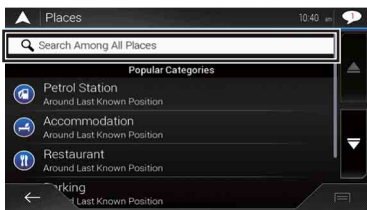
- When a route is not set, POIs are searched for around the current position.
- When the current position is not available either (no GPS signal), POIs are searched for around the last known position.
- When a route is set, [Petrol Station] and [Restaurant] are searched for along the route, and [Accommodation] and [Parking] are searched for around the destination.

### ► **Searching for POIs by category 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 Touch [Places].

#### 2 Touch [Search Among All Places].



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

- [Category View]:  
You can select whether or not POI categories are displayed.
- [Around Here]:  
Searches around the current position. Or, around the last known position if the current position is not available. The results will be listed in order of the distance from this position.
- [In a Town]:  
Searches for a place within a selected city/town. The results will be listed in order of the distance from the centre of the selected city/town.
- [Around Destination]:  
Searches for a place around the destination of the current route. The results will be listed in order of the distance from the destination. (This key is active only when the route is set.)

- [Along Route]:

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

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


##### TIP

Use the keyboard to enter the name of the place if you touch [Search by Name].

#### 5 Touch the POI.

The searched location appears on the map screen.

##### TIP

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

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

### 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.

##### NOTE

This function is available if locations have been registered in [Saved Location] that contains two preset categories: [Home] and [Work] (page 34).


#### 1 Touch [Saved Location].

#### 2 Touch the entry.

The searched location appears on the map screen.

#### 3 Touch [Select as Destination].

##### TIP

You can edit the details of saved locations by touching  and then [Edit].

### Selecting a destination from stored routes

Storing routes you use frequently saves time and effort.

##### NOTE

This function is available if routes have been registered in [Saved Routes] (page 37).

#### 1 Touch [Saved Routes].

#### 2 Touch the entry.

#### 3 Touch [Show Route].



#### 4 Touch [Start Navigation].

##### TIP

You can change the final destination or add waypoints in [Route Planner] (page 29).

### Selecting a destination from history

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


- 1 Touch [History].
- 2 Touch the entry.  
The searched location appears on the map screen.
- 3 Touch [Select as Destination].

### Searching for a location using [Combined Search]

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

##### TIP

The [Combined Search] function also searches your stored data.

- 1 Touch [Combined Search].
- 2 Touch the right text box to enter the country and city/town.
- 3 Enter the name, address, or category of the destination to the left text box, then touch .
- 4 Touch the entry.  
The searched location appears on the map screen.
- 5 Touch the right of the list to narrow down the search results.

##### TIP

If you touch a map data provider logo, you can narrow down the list of results by showing the results from the provider.

- 6 Touch [Select as Destination].

### Searching for a location by the coordinates

Entering a latitude and longitude pinpoints the location.

- 1 Touch [Coordinates].
- 2 Enter the latitude value and touch [OK].

**TIP**

When entering the coordinates in UTM format, touch , then [UTM Coordinates].

**3 Enter the longitude value and touch [GO!].**

The searched location appears on the map screen.

**4 Touch [Select as Destination].****TIP**


You can change the display format of the latitude and longitude to any of the following formats: decimal degrees; degrees and decimal minutes; or degrees, minutes and decimal seconds.

**NOTE**

When a value is already entered in the text field, delete the value first.

## Searching for a location by scrolling the map

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

**1 Touch .****2 Touch and drag the screen to scroll the map.****3 Touch the location that you want to select as your destination.**

The cursor appears.

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

## Searching for the place for camping

(This function may not be available on some models.)

You can search for the destination or waypoint that a camper van is available for by the area or name.

**1 Touch .****2 Touch .****3 Touch [Camping].****4 Touch [Around Here] and then select the area in which the place should be searched for.**

- [Around Here]:  
Searches around the current position. Or, around the last known position if the current position is not available. The results will be listed in order of the distance from that position.
- [Along Route]:  
Searches along the current route, and not around a point already set. This is useful

when searching for a stopover that results in a minimal detour, such as searching for petrol stations or restaurants. The results will be listed in order of the length of the necessary detour. (This key is active only when the route is set.)

- [Around Destination]: Searches for a place around the destination of the current route. The results will be listed in order of the distance from the destination. (This key is active only when the route is set.)
- [In a Town]: Searches for a place within a selected city/town. The results will be listed in order of the distance from the centre of the selected city/town.

## 5 Touch the place.

The searched location appears on the map screen.

### TIP

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

## 6 Touch [Select as Destination].

### Selecting the route options





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

### TIP

If you touch the map, the cursor is placed at that position. Also, you can scroll the map by dragging the map.



①	<b>Zoom in/zoom out</b> <b>TIP</b> You can also pinch or expand the map to zoom in or out.
②	<b>Cancels the [Map Location] screen and displays the map of the current position.</b>

③	<b>Returns the cursor to the initial position and the map scale to the initial scale.</b>
④	<p><b>Shows the route setting preferences for route calculation. Touch the keys to activate or deactivate the preference.</b></p> <p>: Calculates the route prioritising the use of motorways when the key is activated.</p> <p>: Calculates the route prioritising the use of per-use charged toll roads when the key is activated.</p> <p>: Calculates the route prioritising the use of ferries when the key is activated.</p> <p>: Calculates the route prioritising the use of carpool and HOV lanes when the key is activated.</p>
⑤	<b>Returns to the previous screen.</b>
⑥	<b>Sets the cursor position to your destination (or waypoint).</b>
⑦	<p><b>Displays the shortcuts.</b></p> <ul style="list-style-type: none"> <li>• [Detailed Information]: Shows the detailed information of the point.</li> <li>• [Save Location]: Saves the displayed location as your favourite location. The saved location can be easily recalled later.</li> <li>• [Places Around Cursor]: Searches for POIs around the displayed location. Touch the POI to show the [Map Location] screen, and also set the POI as the destination (or waypoint).</li> </ul>

## Starting the navigation

- 1** Once the destination is selected, touch [Select as Destination].  
The route summary screen appears and countdown begins. When the countdown ends, the guidance automatically starts. If you touch the screen anywhere during the countdown, the countdown stops and the screen will stay as it is.
- 2** Touch [Start Navigation].  
Your navigation system starts the route guidance.

### TIP

See page 18 for details on the route summary screen.

## Checking and modifying the current route



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

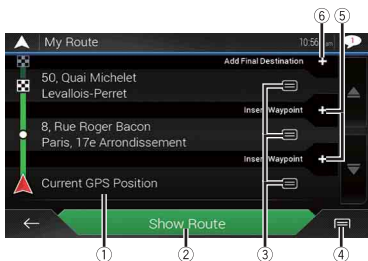
## Building a route using [Route Planner]

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

### TIP

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

- 1 Touch  then touch .
- 2 Touch [Route Planner] or [My Route].
- 3 Touch one of the options.





①	<b>Starting position (The current vehicle position is set as default and [Current GPS Position] is displayed.) (page 30)</b>
②	<b>Calculates the route and shows the [Route Summary] screen.</b>
③	<b>Displays the options for the location.</b> [Move Up]/[Move Down]: Edits the order you want to visit the locations. [Delete]: Deletes the destination or waypoint. [Save Location]: Stores the location in [Saved Location] (page 34). [Change]: Changes the destination or waypoint to another location. [Show on Map]: Shows the selected location on the map.

④	<p><b>Displays the shortcuts.</b></p> <p>[Delete All]: Deletes all waypoints and the destination. Touch [Continue Without Route] to cancel the planned route.</p> <p>[Optimise Waypoints]: Changes the order of waypoints automatically so that the route can be easily travelled. (If the resulting order is the same as the current order, this option is invalid.)</p> <p>[Optimise Route]: Changes the order of all waypoints and the destination automatically so that the route can be easily travelled. (If the resulting order is the same as the current order, this option is invalid.)</p>
⑤	<p><b>Inserts a new waypoint.</b></p>
⑥	<p><b>Adds a new destination and changes the current destination to the last waypoint.</b></p>

### ► Changing the starting position



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

- 1 Touch  then touch .
- 2 Touch [Route Planner] or [My Route].
- 3 Touch [Current GPS Position].
- 4 Touch [Set Start Point] or [Change Start Point] and then touch [OK].
- 5 Search for a location.
- 6 Touch [Set Start Point] or [Change Start Point].  
The selected position is set as the starting position for route calculation.
- 7 Touch [Show Route] or [Continue Without Route].  
The system starts route recalculation after [Show Route] is touched, and then the [Route Summary] screen appears. After [Start Navigation] is touched, your navigation system starts the route guidance.



#### **NOTE**

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

### ► Changing the starting position



- 1 Touch  then touch .
- 2 Touch [Route Planner] or [My Route].
- 3 Touch [Current GPS Position].
- 4 Touch [Back to GPS Position] and then touch [Delete Start Point].  
The starting position for route calculation returns to the current position.

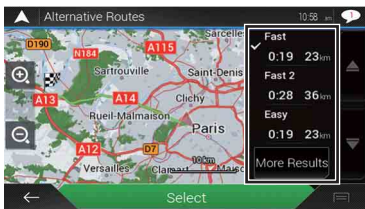
## Adding waypoints

- 1 Touch  then touch .
- 2 Touch [Add Waypoint].
- 3 Search for a location.
- 4 Touch [Select as Waypoint].  
The route is recalculated, and the [Route Summary] screen appears. (When the waypoint is already set, the [My Route] screen appears. Touch [Show Route] and proceed to the next step.)
- 5 Touch [Start Navigation].  
Your navigation system starts the route guidance.

## Checking route alternatives

You can select another route and compare different route alternatives.

- 1 Touch  then touch .
- 2 Touch [Detours & Alternatives].
- 3 Touch [Alternative Routes].
- 4 Touch any of the route calculate conditions.  
You can see the approximate time required and total distance of selected route alternatives. Touch any of the route alternatives to see it on the map.





### TIP

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

- 5 Touch [Select].  
The selected route is applied as your current route. For more information about route calculation conditions, refer to [Route Planning Method] (page 48).

## Checking detour routes

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

- 1 Touch  then touch .
- 2 Touch [Detours & Alternatives].
- 3 Touch one of the options.



Menu Item	Description
[Alternative Routes]	Shows the alternative routes (page 31).
[Avoid Special Sections]	Shows the route avoiding certain sections. Touch the list item to select the section you want to avoid. The distance and time difference, suggested route, current route, and the section avoided are shown. Touch [Accept] to apply the suggested route.
[Avoid Specific Road]	Shows the route avoiding certain roads. Touch the list item to select the road you want to avoid. Distance and time difference, suggested route, current route, section avoided are shown. Touch [Accept] to apply the suggested route.
[Avoid Road Ahead]	Shows the route avoiding the road ahead. Touch [+] or [-] to set the distance you want to avoid. Touch [Avoid] to apply the suggested route.
[Restore Original Route]	Cancels the route with avoidances and restores the previous route.

### NOTE

The route set by [Alternative Routes] cannot be cancelled.

## Checking route information and preferences

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

- 1 Touch  then touch .
- 2 Touch [Route Summary].
- 3 Touch one of the options.





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



#### TIP

You can scroll the map by dragging the map.

①	<p><b>Shows the information for a transit point on the route.</b> Touch to see the location on the map. Touch [Avoid] and [Accept] to set the location as a location to avoid.</p>
②	<p><b>Shows alternative routes (page 31).</b></p>
③	<p><b>Displays the shortcuts.</b> [Route Preferences]: Shows the route setting preferences. If you change the preferences, the route is recalculated. [Itinerary]: Shows all transit points in detail. Touch a transit point to show its position on the map. If you touch [Avoid] and [Accept] on the map screen, the route is recalculated avoiding the transit point (as much as possible). [Save Route]: Saves the displayed route. The saved route can be recalled later. [Places Along Route]: Searches for POIs along the displayed route. Touch the POI to show the [Map Location] screen, and also set the POI as a waypoint. [Simulation]: You can run a simulation of the navigation for the current route, as a demonstration (page 34). [Restrictions]: Displays the list of restrictions in your route. Select the one of the restrictions and display the restriction on the map.</p>

## Cancelling the current route guidance

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

- 1 Touch  then touch .

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

**3** Touch one of the options.



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


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

### Watching the simulation of the route

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

**1** Set a route to your destination (page 20).

**2** Touch  then touch .

**3** Touch [Route Summary], and then touch .

**4** Touch [Simulation].

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

#### NOTE

To stop the simulation, touch [Close].



## 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, workplace, and places you have already registered.

### Storing your home and your workplace location

You can store one home location and one workplace location.

**1** Touch  then touch .

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

You can also display the [Saved Location] screen by touching  on the bottom of the screen when the navigation menu is displayed.

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





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

**4** Search for a location (page 20).

- 5 Touch [Save Location].  
The cursor position has been stored.

### Storing your favourite locations





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

- 1 Touch  then touch .
  - 2 Touch [New Route], and then [Saved Location].  
You can also display the [Saved Location] screen by touching  on the bottom of the screen when the navigation menu is displayed.
  - 3 Touch [Add Location].
  - 4 Search for a location (page 20).
  - 5 Touch [Save Location].
  - 6 Enter the name if needed and then touch .
- The cursor position has been stored.

#### TIP

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



### Renaming stored locations


- 1 Touch  then touch .
- 2 Touch [New Route], and then [Saved Location].
- 3 Touch , and then touch [Edit].  
The [Select Location to Edit] screen appears.
- 4 Touch the item you want to rename and touch [Rename].
- 5 Enter the name and then touch .
- 6 Touch [Done].

#### NOTE


[Home] and [Work] cannot be renamed. The location can be set again.

### Deleting stored locations

- 1 Touch  then touch .

- 2 Touch [New Route], and then [Saved Location].
- 3 Touch , and then touch [Edit].  
The [Select Location to Edit] screen appears.
- 4 Touch the item you want to delete and touch [Delete].  
A message will appear asking you to confirm the deletion.

**NOTES**

- [Home] and [Work] cannot be deleted. The location can be set again.
- If you touch  and then touch [Delete All], all entries (including the home and workplace locations) can be deleted.

- 5 Touch [OK].
- 6 Touch [Done].

### 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.

#### Important

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

**NOTE**

To use this function, activate the warnings beforehand and set the alert types (page 50).

- 1 Touch ▲.
- 2 Scroll the map and select a location.  
The cursor appears at the selected point.
- 3 Touch .
- 4 Touch [Add Alert Points].
- 5 Set the necessary parameters.

Menu Item	Description
[Alert Type]	Set the type of the alert point.
[Speed Limit]	Set the speed limit for this alert point (if applicable).
[Direction]	Set the direction from which you expect the alert to come from.




- 6 Touch [Save].

**NOTE**

In [Alert Type], speed camera alert cannot be selected when the cursor is placed on the map of France.

**Editing the stored alert points**





Stored alert points can be edited.

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






**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.

**Storing your favourite routes**





- 1 Set a route to your destination (page 20).
- 2 Touch  then touch .
- 3 Touch [Route Summary], and then touch .
- 4 Touch [Save Route].
- 5 Enter the name if needed and then touch .

**Renaming stored routes**

- 1 Touch  then touch .
- 2 Touch [New Route], and then .
- 3 Touch [Saved Routes].
- 4 Touch , and then touch [Edit].
- 5 Touch the item you want to rename and touch [Rename].
- 6 Enter the name and then touch .

## 7 Touch [Done].

### Deleting stored routes

- 1 Touch  then touch .
- 2 Touch [New Route], and then touch .
- 3 Touch [Saved Routes].
- 4 Touch , and then touch [Edit].
- 5 Touch the item you want to delete and touch [Delete].

#### NOTE



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

- 6 Touch [Delete].

## Receiving real-time traffic information (TMC)



The Traffic Message Channel (TMC) provides real-time traffic reports. If the navigation system is equipped with the TMC feature, you can check the traffic reports and information received.

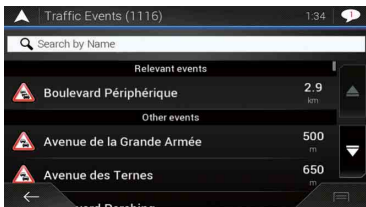
### Displaying the [Traffic Summary] screen

- 1 Touch  then touch .
- 2 Touch [Traffic].  
The [Traffic Summary] screen appears.

### Viewing the traffic list



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

- 1 Touch  then touch .
- 2 Touch [Traffic].  
The [Traffic Summary] screen appears.
- 3 Touch [Traffic Events].





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

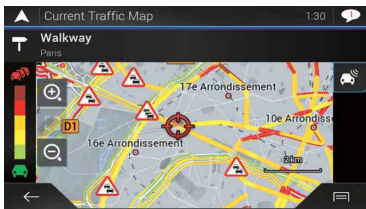
#### NOTES

- If a route is set, relevant events for your current route are shown in the upper section of the list.
- Touching the desired item allows you to check its position on the map. Touch  or  to show the previous or next event.

### Checking the traffic incidents on the map

Traffic event information can be displayed on the map.

- 1 Touch  then touch .
- 2 Touch [Traffic].  
The [Traffic Summary] screen appears.
- 3 Touch [Traffic Map].

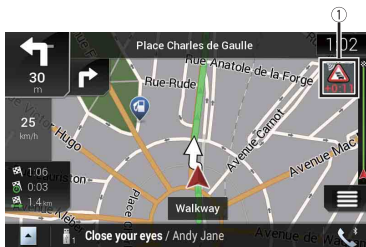






Road segments affected by traffic incidents are displayed in an alternate colour on the map, and small symbols above the road show the nature of the incident. The traffic jam lines indicate the degree of the congestion by colour.

## Traffic notification icon

The notification icon shows the status of traffic information reception.

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



①	Traffic notification icon
	Indicates that there are no traffic incidents in your coverage area.
	Indicates that information on traffic incidents are being received.
	Indicates that there are no significant traffic incidents on your route.
	Indicates that there are significant traffic incidents on your route. The icon shows the type of the next traffic incident.





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

## Turning the traffic information on or off

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

### NOTE

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

- 1 Touch  then touch .
- 2 Touch , and then touch [Settings].
- 3 Touch , and then touch [Traffic].






#### 4 Touch [Traffic] to turn the switch on or off.



## Checking useful information about your trip

### About the [Useful Information] menu

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

- 1 Touch  then touch .
- 2 Touch .
- 3 Touch [Useful Information].  
The [Useful Information] screen appears.

### Information on each option in the [Useful Information] menu

Menu Item	Description
[Where Am I?]	<p>Displays a special screen with information about the current position and a key to search for nearby emergency or roadside assistance services.</p> <p><b>TIPS</b></p> <ul style="list-style-type: none"> <li>• To save the current position as a [Saved Location] destination, touch  (page 34)</li> <li>• To check the country information of your current position, touch .</li> </ul>
[Help Nearby]	<p>Check for POIs in your surroundings. The preset search categories are as follows.</p> <ul style="list-style-type: none"> <li>• [Car Repair]</li> <li>• [Health]</li> <li>• [Police]</li> <li>• [Petrol Station]</li> </ul>
[Country Information]	<p>Check for useful driving information about the selected country (for example, speed limits and maximum blood alcohol level).</p> <p><b>NOTE</b></p> <p>This information may not necessarily correspond to the actual regulations, etc. Utilise the information for your reference.</p>
[Trip Monitor]	<p>Check the statistical data of your trips (for example, start time, end time, average speed, etc.) (page 42).</p>
[GPS Information]	<p>Displays the GPS information screen with satellite position and signal strength information.</p>




Menu Item	Description
[Fuel Consumption]	Estimates the fuel cost to your destination by entering the fuel consumption information in the navigation system.

## Recording your travel history

Activating the trip logger enables you to record your driving history (hereinafter called “trip log”). You can review your trip log later. The trip logger is set so that it can be started manually by default. You can change the settings of this function in order to save the log automatically. For details, refer to [Trip Monitor] (page 57).

### ▶ Activating trip logger temporarily




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

- 1 Touch  then touch .
- 2 Touch .
- 3 Touch [Useful Information].
- 4 Touch [Trip Monitor].  
A list of trip logs already recorded appears. A blank list appears if you have not recorded any trip logs yet.
- 5 Touch [Start New Recording].  
The trip logger is activated. The touch key changes to [Stop Recording]. Touching [Stop Recording] allows you to deactivate the trip logger.


### NOTES

- If there is not enough space in the built-in memory, the oldest trip log will be overwritten by the new one.
- If you want the system to always activate the trip logger whenever the GPS signal is available, turn on [Enable Auto-Saving]. For details, refer to “Setting the trip logger” (page 43).

### ▶ Browsing the trip log





- 1 Record the trip log.
- 2 Touch  then touch .
- 3 Touch .
- 4 Touch [Useful Information].
- 5 Touch [Trip Monitor].  
To export all trip logs, touch [Export All].
- 6 Touch any of the items to see the details.

**TIP**

To display the trip log on the map, touch [Visible on Map] to tick the check box. Touching  allows you to view the shortcuts and enables you to use the following functions.

Menu Item	Description
[View on Map]	Shows the trip log on the map screen.
[Export Track Log]	Exports the track log currently selected to an external storage device.

### ▶ Setting the trip logger





- 1 Record the trip log.
- 2 Touch  then touch .
- 3 Touch .
- 4 Touch [Useful Information].
- 5 Touch [Trip Monitor].
- 6 Touch  and then touch [Trip Monitor Settings].
- 7 Touch any of the items to change the settings.

Menu Item	Description
[Enable Auto-Saving]	Set whether automatic trip logging is activated or not.
[Save Track Log]	Track logs, the sequence of the positions given by the GPS receiver, can be saved together with trip logs. You can activate the track logger whenever the trip logger is activated.

**TIP**

[Trip database size] indicates the current data size of the trip log (track log included).

**Editing a trip log**

- 1 Touch  then touch .
- 2 Touch .
- 3 Touch [Useful Information].
- 4 Touch [Trip Monitor].
- 5 Touch  and then touch [Edit].
- 6 Touch any of the items to edit.

Menu Item	Description
[Delete]	Deletes the trip log.
[Rename]	Renames the trip log.
[Change Colour]	Changes the colour by selecting another colour from the colour table.


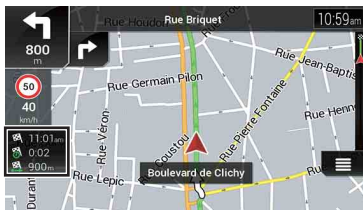
**TIP**



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

**7 Touch [Done].**

## Using the Trip Computer mode

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

**1 Touch .****2 Touch the data field key.****TIPS**

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

## Calculating the fuel consumption





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

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

### ► Setting the initial odometer value

---




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

- 1 Touch  then touch .
  - 2 Touch .
  - 3 Touch [Useful Information].
  - 4 Touch [Fuel Consumption].
  - 5 Touch [Initial Milometer Value].
  - 6 Enter the initial odometer value and then touch .
- The initial odometer value has been set.


### ► Entering the fuel consumption information

---

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




- 1 Touch  then touch .
- 2 Touch .
- 3 Touch [Useful Information].
- 4 Touch [Fuel Consumption].
- 5 Touch [Add].
- 6 Touch [Current Milometer Value] and then enter the current odometer value.
- 7 Touch [Fuel Amount] to enter the amount of fuel pumped this time.
- 8 Touch [Fuel Price / Unit] to enter the fuel unit price this time.
- 9 Touch [Add].
- 10 Touch [Done].


#### TIP

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


### ► Setting the car maintenance schedule

---

- 1 Touch  then touch .
- 2 Touch .
- 3 Touch [Useful Information].
- 4 Touch [Fuel Consumption].




- 5 Touch .
- 6 Touch [Maintenance Schedule].
- 7 Touch [Add] or the one of entries.
- 8 Enter the name, date, and mileage for the reminder.
- 9 Touch [Done].

**TIP**

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


## Navigation Settings

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

- 1 Touch  then touch .
- 2 Touch , and then touch [Settings].  
The [Settings] screen appears.
- 3 Touch one of the following categories, then select the options.
  - [Route Preferences] (page 46)
  - [Sound] (page 49)
  - [Warnings] (page 50)
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### [Route Preferences]

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

Menu Item	Description
[Vehicle]	<p>Set the type of vehicle you will be using on the route.</p> <p><b>NOTES</b></p> <ul style="list-style-type: none"> <li>• The route is planned based on the selected vehicle type.</li> <li>• Depending on the type selected, the route planning may be configured to incorporate dimension, weight, and freight hazard restrictions for maps that contain such data. To enhance the route accuracy, correctly select a vehicle type that is similar to the condition of your vehicle.</li> </ul> <p><b>TIPS</b></p> <ul style="list-style-type: none"> <li>• To edit the name and estimated maximum speed of the selected vehicle profile, touch . For details on the vehicle profile, see page 55.</li> <li>• To add a new vehicle profile, touch [Add Profile]. Then select one of the vehicle types and set the name and estimated maximum speed.</li> </ul>
[Car]	<ul style="list-style-type: none"> <li>• Manoeuvre restrictions and directional constraints are taken into account when planning a route.</li> <li>• Roads are used only if access for cars is allowed.</li> <li>• Private roads and resident-only roads are used only if they are inevitable to reach the destination.</li> </ul>
[Emergency]	<ul style="list-style-type: none"> <li>• All manoeuvres available at junctions are taken into account.</li> <li>• Directional constraints are taken into account in the same way as travel in the opposite direction is allowed at low speeds.</li> <li>• Only private roads that need to be used to access the destination are included.</li> <li>• Walkways are excluded from routes.</li> </ul>
[Bus]	<ul style="list-style-type: none"> <li>• Manoeuvre restrictions and directional constraints are taken into account when planning a route.</li> <li>• Roads are used only if access for buses is allowed.</li> <li>• Private roads, resident-only roads and walkways are excluded from routes.</li> </ul>
[Taxi]	<ul style="list-style-type: none"> <li>• Manoeuvre restrictions and directional constraints are taken into account when planning a route.</li> <li>• Roads are used only if access for taxis is allowed.</li> <li>• Private roads, resident-only roads and walkways are excluded from routes.</li> </ul>

Menu Item	Description
[Camper]	<ul style="list-style-type: none"> <li>• This function may not be available on some models.</li> <li>• Manoeuvre restrictions and directional constraints are taken into account when planning a route.</li> <li>• Roads are used only if access for camper vans is allowed.</li> <li>• Private roads, resident-only roads and walkways are excluded from the routes.</li> </ul>
[Lorry]	<ul style="list-style-type: none"> <li>• Manoeuvre restrictions and directional constraints are taken into account when planning a route.</li> <li>• Only roads that allow lorry access are included.</li> <li>• Private roads, resident-only roads and walkways are excluded from routes.</li> <li>• 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).</li> </ul>
<b>[Route Planning Method]</b>	Set to change the route planning method. Route calculation can be optimised for different situations and vehicle types by changing the planning method.
[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]	Result in a route with fewer turns and no difficult manoeuvre. 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 a route with the shortest distance to your destination as a priority. Usually practical for slower vehicles. Rarely practical to use to search for shorter routes for normal vehicles regardless of the speed.
[Economical]	Calculates a route that is quick and saves fuel.
<b>[Navigation Mode]</b>	Enable or disable off-road navigation.
[On-road]	The route is planned towards the destination along the roads on the map.
[Off-road]	The route is planned towards the destination in a straight line, not along the roads on the map.
<b>[Motorways]</b>	Set to off to avoid prioritising motorways for calculating the route.
	<p><b>NOTE</b></p> <p>This function is useful when you want to avoid motorways such as when driving a slow car or towing another vehicle.</p>



Menu Item	Description
<b>[Period Charge]</b>	<p>Set to off to avoid prioritising toll roads for calculating the route.</p> <p>This function is useful when you want to avoid toll roads with restricted time access that require you to purchase a separate pass or vignette to extend the length of time allotted for use.</p> <p><b>NOTE</b></p> <p>This option can be enabled or disabled separately from the pre-use toll road usage option.</p>
<b>[Per-use Toll]</b>	<p>Set to off to avoid prioritising per-use charged toll roads for calculating the route.</p> <p><b>NOTE</b></p> <p>This function is useful when you want to avoid toll roads where there is a per-use charge.</p>
<b>[Ferries]</b>	Set to off to avoid prioritising ferries for calculating the route.
<b>[Car Shuttle Trains]*</b>	Set to off to avoid prioritising car shuttle trains for calculating the route.
<b>[Carpool Lanes]</b>	Set to off to avoid prioritising carpool and HOV lanes for calculating the route.
<b>[Unpaved Roads]</b>	Set to off to avoid prioritising unpaved roads for calculating the route.

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

## [Sound]

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

Menu Item	Description
<b>[Voice]</b>	Adjust the volume of the guidance sounds (verbal instructions).
<b>[Alert Beeps]</b>	Adjust the volume of the non-verbal alert sounds (beeps).
<b>[Ding]</b>	Adjust the volume of the sound (ding) that precedes the verbal instructions.
<b>[Voice Guidance]</b>	Enable or disable voice guidance.
<b>[Announce Streets and Roads in Native Language Area]*</b>	Select whether to have the navigation system announce the street names in the native language of the area, only the road numbers, or only the manoeuvres.

Menu Item	Description
<b>[Announce Streets and Roads in Foreign Language Area]*</b>	Select whether to have the navigation system read the street names in a foreign country, only the road numbers, or only the manoeuvres.
<b>[Early Indication of Manoeuvres]</b>	Select whether you want an immediate announcement for the next manoeuvre or to receive the information when the manoeuvre is near.
<b>[Verbosity Level]</b>	Set the verbosity of the voice instructions. (How much information is given and how often the prompts occur.)
[Minimal]	Given once right before the next manoeuvre.
[Medium]	Given once as the vehicle approaches the next manoeuvre and it is repeated right before the manoeuvre.
[Verbose]	Given once relatively far from the next manoeuvre, it is repeated as the vehicle approaches the next manoeuvre, and it is repeated again right before the actual manoeuvre.
<b>[Announce Route Summary]*</b>	Select whether to have the navigation system announce by voice a quick summary of the route whenever a route is calculated.
<b>[Announce Country Info]*</b>	Select whether to read out information about the country you have just entered when crossing country borders.
<b>[Announce Traffic Info]*</b>	Select whether to have the navigation system announce by voice the traffic information whenever a traffic incident on your route is received.
<b>[Announce System Messages]*</b>	Select whether to read out the message when a system message appears.

\* Enabled only when a TTS-voice is selected for the voice language.

## [Warnings]

Enables or disables warnings and sets up the warning function.

### Important

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

Menu Item	Description
<b>[Speed Warning]</b>	Set the type of speed and alert warnings.
[Warn When Speeding]	Select whether to receive visible and/or audible warnings.
[Disabled]	No warnings will go off.

Menu Item	Description
[Visual]	Visible warnings will go off when exceeding the speed limit.
[Audio and Visual]	Audible and visible warnings will go off when exceeding the speed limit.
[Speed Limit Always Visible]	Select whether to see the speed limit sign on the map all the time. The colour of the speed limit sign changes as exceeding the speed limit when selected.
[Outside Towns: ***% of the Speed Limit]	Set the percentage of the speed limit warning message in rural areas.
[Within Towns: ***% of the Speed Limit]	Set the percentage of the speed limit warning message in urban areas.
<b>[Alert Points]</b>	This setting allows you to receive a warning when approaching alert points like school zones or railroad crossings (page 51).
[Alert Point Warnings]	Set to on to enable to adjust a variety of alert warnings.
[Alert Types]	Set the type of alert point.
[Speed Camera Types]*	Set the type of speed camera.
<b>[Warning Road Signs]</b>	Touch this key to turn on or off warnings and to set the distance from the hazard to receive the warning at. These can be set individually for the different warning types.




\* When you are driving in France, [Dangerous Zone] is displayed instead of [Speed Camera Types].

### ► Setting the alert point warnings

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

#### Important

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

- 1 Touch  then touch .
- 2 Touch , and then touch [Settings].
- 3 Touch [Warnings].
- 4 Touch [Alert Points].
- 5 Touch [Alert Point Warnings] to turn it on.
- 6 Touch the item you want to set from [Alert Types] or [Speed Camera Types].

**NOTE**

When you are driving in France, [Speed Camera Types] is not available and [Dangerous Zone] becomes available instead. If [Dangerous Zone (HVA)] is set to on, alert points that you set are also alerted as dangerous zones. You can also set the distance of the pre-alert zone in [Pre-Alert Zone] and turn the sound alert on or off in [Sound alert].

**7 Touch any of the items to change the setting.****8 Touch [Warning Type] and then touch one of the options.**

[Disabled]	The system does not warn you of the alert points for this category.
[Visual]	You will receive a visible warning while you are approaching the points in this category.
[Audio and Visual]	You will receive audible and visible warnings while you are approaching the points in this category.

**NOTE**

If you select [Audio and Visual] in the warning type setting, you can change the reception timing of the audio alert. If you select [Only When Speeding], the audio alert is only played when you exceed the given speed limit. If you select [When Approaching], the audio alert is always played when approaching one of these alert points. In order to draw your attention, the alert is different when you exceed the speed limit.

**[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.

Menu Item	Description
<b>[Map Display]</b>	See the effect when you change a setting.
[Viewpoint] [Far] [Normal] [Close] [Manual]	Adjust the basic zoom and tilt levels to your needs. Some preset levels are available. If you select [Manual], you can store adjusted map scales and view angles.
[Colour Mode] [Auto] [Day] [Night]	Switches 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.
[Day Map Colour]	Select the colour scheme used in the daytime map.
[Night Map Colour]	Select the colour scheme used in the nighttime map.
[Landmarks]	Shows or hides 3D landmarks which are 3D artistic or block representations of prominent or well-known objects.
[Buildings]	Shows or hides 3D city models which are 3D artistic or block representations of complete city building data containing actual building sizes and actual positions on the map.

Menu Item	Description
[3D Terrain]	Shows or hides the 3D elevation of the surrounding terrain.
[Track Logs]	Turns on or off track log saving which saves the sequence of the locations you go through on your journeys.
[Place Markers]	Select which POI icons to show on the map while navigating.
<b>[Data Fields]</b>	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 (page 19). [First], [Second] and [Third] selects items displayed in the data fields shown when the route exists. [Without Route] selects the items displayed in the data fields shown when a route does not exist.
<b>[Route Progress Bar]</b>	Turns on or off 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.
<b>[Offer Motorway Services]</b>	Select whether to stop by a petrol station or a restaurant during your journey (page 18).
<b>[Services Displayed]</b>	Select the service types displayed for the motorway exits or service stations. Choose from the POI categories.
<b>[Automatic Overview]</b>	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.
<b>[Signposts]</b>	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.
<b>[Junction View]</b>	If you are approaching a motorway exit or a complex junction and the necessary information is available, the map is replaced with a 3D view of the junction.
<b>[Tunnel View]</b>	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.

Menu Item	Description
<b>[Offer Congestion Detour on Highways]</b>	<p>When you slow down while driving on a motorway due to a traffic jam, this navigation system offers you a detour using the next exit. The message shows you the distance to the exit and the difference in the distance and estimated time compared to the original route. You can choose from one of the following options:</p> <ul style="list-style-type: none"> <li>• Touch [Dismiss] or just ignore the message if you want to keep the original route.</li> <li>• Touch [Preview] to see an overview of the original route and the detour to make the decision. You can accept the detour as shown in the preview, or increase the motorway segment bypassed before accepting.</li> <li>• Turn to the suggested new direction.</li> </ul>
<b>[Offer Real Time Alternative Routes]</b>	<p>Alternative routes can be suggested when driving on normal roads. This navigation system will select a different turn in the upcoming junction and offer you a different route for the next section of the route. You cannot, however, modify the offered detour.</p>
<b>[Offer Parking Around Destination]</b>	<p>Parking at the destination may not be easy to find in city areas. As you approach the destination, this navigation system can offer parking category places near your destination. Touch <b>[P]</b> to open a top-down map with the destination and the offered parking places. The route is calculated by selecting one of the parking places.</p>
<b>[Offer Hints Upon Detour]</b>	<p>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.</p>

### [Regional]

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

Menu Item	Description
<b>[Language]</b>	<p>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.</p>

Menu Item	Description
[Voice Language]	Displays the current voice guidance profile. By touching the key, you can select a new voice guidance language from the list of available languages and speakers. Touch any of these keys to hear a sample voice prompt.
[Units and Formats]	Set the various units to be used by this system. <b>NOTE</b> This system may not support all the listed units in some voice guidance languages.
[Time Zone]	By default, the time zone is taken from the map information and adjusted according to your current location. <b>NOTE</b> If a setting other than [Automatic Time Zone] is selected, [Time Zone] (the option to set the time difference manually) and [Daylight Saving Time] (the option to turn on or off daylight saving time) can also be set.
[Automatic Time Zone]	The time zone setting changes automatically.
[Manual Time Zone]	The present setting value for the time difference and daylight saving time that you set are used.
[Manual Time Zone if Auto Unavailable]	The time zone setting changes automatically if automatic change is available. Otherwise, the present setting value that you set is used.
[Manual Time Zone in Current Zone]	The present setting value that you set is used in the current time zone. If your vehicle moves to another time zone, the time zone setting changes automatically.
[Daylight Saving Time]	Set daylight saving time as applying or not unless [Automatic Time Zone] is set.

### [Camper Settings]

(This function may not be able to be available on some models.)

This setting is only available when [Camper] is selected in the [Route Preferences] setting.

Edits the name, estimated maximum speed, and the other extended settings of the camper van profile.

Menu Item	Description
[Name]	Edit the vehicle name.
[Max. Speed]	Set the maximum speed by dragging the cursor.

Menu Item	Description
<b>[Use Extended Settings]</b>	Set to on to enable more settings for the parameters ([Length], [Width], [Height], etc.).
<b>[Confirm Parameters for Each Route Planning]*</b>	Set to on to display the list of vehicle parameters appears before route calculation.
<b>[Length]*</b>	Set the length of the vehicle by entering the number.
<b>[Width]*</b>	Set the width of the vehicle by entering the number.
<b>[Height]*</b>	Set the height of the vehicle by entering the number.
<b>[Axles]*</b>	Select the number of the axles.
<b>[Maximum Allowed Weight]*</b>	Set the maximum allowed weight of the vehicle by entering the number.
<b>[Actual Weight]*</b>	Set the actual weight of the vehicle by entering the number.
<b>[Tunnel Restriction (ADR)]*</b>	Select a level of tunnel restriction if the vehicle carries dangerous material.

\* Available when [Use Extended Settings] is enabled.

## [Display]

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

Menu Item	Description
<b>[Menu Animations]</b>	When animation is turned on, the keys on the menus and keyboard screens are animated. Screen transitions are also animated.
<b>[Day Skin Theme]</b>	Select the style and colours of the navigation menu used in the daytime.
<b>[Night Skin Theme]</b>	Select the style and colours of the navigation menu used in the nighttime.

## [Traffic]

Enables or disables the traffic information feature.

Menu Item	Description
<b>[Traffic]</b>	Enable or disable the TMC receiver that can receive real-time traffic information.
<b>[Use Traffic Info]</b>	Select whether to have traffic incidents be taken into consideration when the route is calculated.



Menu Item	Description
<b>[Show Traffic Info]</b>	Select whether to show icons relevant to traffic incidents and lines indicating the traffic flow on the map.
[Off]	No traffic icons or lines indicating the traffic flow are shown.
[Colour]	Only the lines indicating traffic flow are shown on the map.
[Colour And Icon]	Icons for the relevant traffic incidents and lines indicating the traffic flow are shown on the map.
<b>[Show Free Traffic Flow As Well]</b>	Select whether to receive information on smooth traffic flow.
<b>[Offer Detour if it Saves at Least:]</b>	Set the minimum time to be saved when having the system suggest a detour route. If the estimated time saved by the planned detour avoiding the traffic incidents is more than the set time, the system suggests the new detour route. Otherwise, the new route is not suggested.
<b>[Confirm Detours Manually]</b>	Enable or disable the manual confirmation of every recalculation.

### **[Trip Monitor]**

Turns automatic trip log saving on or off and checks the current size of the trip database.

Menu Item	Description
<b>[Enable Auto-Saving]</b>	Set whether automatic trip logging is activated or not (page 43).
<b>[Save Track Log]</b>	Track logs, the sequence of the positions given by the GPS receiver, can be saved together with trip logs. You can activate the track logger whenever the trip logger is activated (page 43).

### **[Start Configuration Wizard]**

Modifies the basic software parameters used during the initial setup process.

### **[SyncTool]**

Starts the synchronisation tool, which makes it possible to update your maps (page 58).




## Updating the map

You can update existing content, purchase additional maps and activate extra services on your product. To update the content, download the update on your USB memory storage by using the computer to which the Naviextras Toolbox is installed. Then, transfer the data from connected USB memory storage to your navigation system by using [SyncTool] on this product. For details, access the following URL and refer to "HOW TO UPDATE?" GUIDE.

<https://pioneer.naviextras.com>

# Bluetooth®

## Bluetooth connection

- 1 Turn on the Bluetooth function on the device.
- 2 Touch .
- 3 Touch  then .
- The Bluetooth screen appears.
- 4 Touch [Connection].  
The unit starts to search for available devices, then displays them in the device list.
- 5 Touch the Bluetooth device name.  
After the device is successfully registered, a Bluetooth connection is established by the system. Once the connection is established, the device name is displayed on the list.

### NOTES

- If twenty devices are already paired, [Memory Full] is displayed. Delete a paired device first (page 60).
- If your device supports SSP (Secure Simple Pairing), a six-digit number appears on the display of this product. Touch [Yes] to pair the device.
- If a PIN code input is required, enter a PIN code. (The default PIN code is "0000".)

### TIP




The Bluetooth connection can also be made by detecting this product from the Bluetooth device. Before registration, make sure that [Visibility] in the [Bluetooth] menu is set to [On] (page 60). For details on Bluetooth device operations, refer to the operating instructions supplied with the Bluetooth device.

## Bluetooth settings

- 1 Touch .
- 2 Touch  then .

### ⚠ CAUTION

Never turn this product off and disconnect the device while the Bluetooth setting operation is being processed.

Menu Item	Description
[Connection]	<p>Connect, disconnect, or delete registered Bluetooth device manually.</p> <p>Touch  to delete registered device.</p> <p>To connect a registered Bluetooth device manually, touch the name of the device.</p> <p>To disconnect the device, touch the name of the connected device in the list.</p> <p>You can also connect or disconnect the registered Bluetooth device by touching .</p> <p>When there is no device available for connection in the list, the unit starts to search for available devices, then displays them in the list.</p> <p><b>NOTE</b></p> <p>Connect the Bluetooth device manually in the following cases:</p> <ul style="list-style-type: none"> <li>• Two or more Bluetooth devices are registered, and you want to manually select the device to be used.</li> <li>• You want to reconnect a disconnected Bluetooth device.</li> <li>• Connection cannot be established automatically for some reason.</li> </ul>
[Auto Connect] [On] [Off]	Select [On] to connect the last connected Bluetooth device automatically.
[Visibility] [On] [Off]	Select [On] to make this product visible to the other device.
[PIN Code Input]	<p>Change the PIN code for Bluetooth connection.</p> <p>The default PIN code is "0000".</p> <p><b>1</b> Touch [0] to [9] to input the pin code (up to 8 digits).</p> <p><b>2</b> Touch .</p>
[Device Information]	Displaying the device name and address of this product.
[Bluetooth Memory Clear]	Touch [Clear] then [OK] to clear the Bluetooth memory.

## Hands-free phoning

To use this function you need to connect your mobile phone to this product via Bluetooth in advance (page 59).



### CAUTION

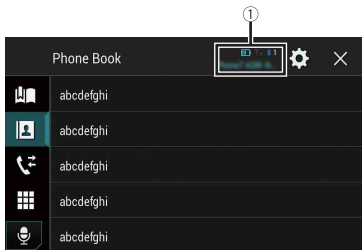
For your safety, avoid talking on the phone as much as possible while driving.









### NOTE

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

## Making a phone call

- 1 Touch .
- 2 Touch .  
The phone menu screen appears.
- 3 Touch one of the call icons on the phone menu screen.



<p>①</p>	<p><b>The following items are displayed.</b></p> <ul style="list-style-type: none"> <li>• Name of the current mobile phone</li> <li>• List number of the current mobile phone</li> <li>• Reception status of the current mobile phone</li> <li>• Battery status of the current mobile phone</li> </ul>
	<p><b>Using preset dial list (page 62)</b></p>
	<p><b>Using phone book</b> Select a contact from the phone book. Touch the desired name on the list then select the phone number.</p> <p><b>TIPS</b></p> <ul style="list-style-type: none"> <li>• The contacts on your phone will be automatically transferred to this product.</li> <li>• Update the phone book manually.</li> </ul> <p><b>NOTE</b> [Visibility] of the [Bluetooth] screen should be on (page 60).</p>
	<p><b>Using call history</b> Make a phone call from the received call , dialled call , or missed call .</p>
	<p><b>Direct phone number input</b> Enter the number keys to enter the phone number then touch  to make a call.</p>



Switches to the voice recognition function (page 63).

### ► To end the call

- 1 Touch

## Using the preset dial lists

### ► Registering a phone number

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

- 1 Touch

- 2 Touch

- 3 Touch or .

On the [Phone Book] screen, touch the desired name to display the contact's phone number.

- 4 Touch .

### ► Dialling from the preset dial list

- 1 Touch .

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

The dial screen appears and dialling starts.

### ► Deleting a phone number

- 1 Touch .

- 2 Touch .

- 3 Touch .

- 4 Touch .

- 5 Touch [Yes].


## Receiving a phone call

- 1 Touch to answer the call.

Touch to end the call.

### TIPS

- Touch while getting a call waiting, switch to the talking person.


- Touch  while getting a call waiting to reject the call.


## Voice recognition function


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

### NOTES

- When an iPhone running iOS 6.1 or higher is used, Siri Eyes Free Mode is available with this product.
- For using this function with a smartphone, the device must be compatible with Android Auto. For using the voice recognition function with a smartphone, launch Android Auto beforehand.

1 Touch .

2 Touch .


3 Touch .

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

### TIP

You can also launch the voice recognition function by touching  button.

## Minimising the dial confirmation screen

1 Touch .


### TIP

To display the dial confirmation screen, touch  again.

### NOTES

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

## Phone settings



1 Touch .

2 Touch  then .

Menu Item	Description
[Auto Answer] [On] [Off]	Select [On] to answer an incoming call automatically.
[Ring Tone] [On] [Off]	Select [On] if the ring tone does not come out from the car speakers.
[Invert Name]	Select [Yes] to change the order of the first and last names in the phone book.

## Setting the private mode

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

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

## Adjusting the other party's listening volume

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

- 1 Touch  to switch between the three volume levels.

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

### ► Making and receiving calls

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

### ► The received call and 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 1 000 phone book entries on your mobile phone, not all entries may download completely.
- Depending on the phone, this product may not display the phone book correctly.
- If the phone book in the phone contains image data, the phone book may not be transferred correctly.
- Depending on the mobile phone, phone book transfer may not be available.

## Bluetooth audio

Before using the Bluetooth audio player, register and connect the device to this product (page 59).

### NOTES

- Depending on the Bluetooth audio player connected to this product, the available operations with this product may be limited to the following two levels:
  - A2DP (Advanced Audio Distribution Profile): Only playing back songs on your audio player is possible.
  - A2DP and AVRCP (Audio/Video Remote Control Profile): Playing back, pausing, selecting songs, etc., are possible.
- Depending on the Bluetooth device connected to this product, the available operations with this product may be limited or differ from the descriptions in this manual.
- While you are listening to songs on your Bluetooth device, refrain from operating the phone function as much as possible. If you try operating, the signal may cause noise for song playback.
- When you are talking on the Bluetooth device connected to this product via Bluetooth, it may pause playback.

**1** Touch .

**2** Touch  then .

The system setting screen appears.

**3** Touch [AV Source Settings].

**4** Confirm that [Bluetooth Audio] is turned on.

**5** Touch .

**6** Touch .

The AV source screen appears.

**7** Touch [Bluetooth Audio].

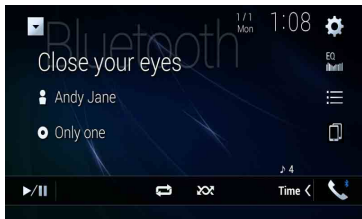
The Bluetooth audio playback screen appears.



## Bluetooth audio playback screen 1



	<b>Switches between playback and pause.</b>
	<b>Skips files forwards or backwards.</b> <ul style="list-style-type: none"> <li>• By touching  then touch  or , you can also skip files forwards or backwards.</li> <li>• By touching  then touch and hold  or , you can also perform fast reverse or fast forwards.</li> </ul>
	<b>Selects a file or folder from the list to playback.</b> <p><b>NOTE</b> This function is available only when the AVRCP version of the Bluetooth device is 1.4 or higher.</p>
	<b>Switches among the Bluetooth devices when the devices are connected to this product via Bluetooth.</b>

## Bluetooth audio playback screen 2






	<b>Sets a repeat play range.</b>
	<b>Plays files in random order.</b>

# Wi-Fi®

You can connect your Wi-Fi certified mobile device to this product via Wi-Fi connection.

## Wi-Fi connection

- 1 Turn on the Wi-Fi function on the device.
- 2 Touch  then swipe left on the screen.
- 3 Touch  then .
- 4 Touch [Wi-Fi Settings].
- 5 Set [Wi-Fi] to [ON].
- 6 Check the password in the [Password] menu.
- 7 Touch [Device Information] and check the [Network Name].
- 8 Select the network name displayed in [Device Information] on the mobile device.
- 9 Input the password displayed in [Password] on the mobile device.

## Wi-Fi settings

- 1 Touch .
- 2 Touch  then .
- 3 Touch [Wi-Fi Settings].

### NOTE

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

The menu items vary according to the source.

Menu Item	Description
[Wi-Fi] [ON] [OFF]	Switches Wi-Fi connection on or off.
[Device Information]	Displays the network name and MAC address of this product.

## Wi-Fi audio

Before using the Wi-Fi audio player, connect the device to this product via Apple CarPlay (page 95) or Android Auto wirelessly (page 99).

**1** Touch  then touch .

**2** Touch [Wi-Fi Audio].

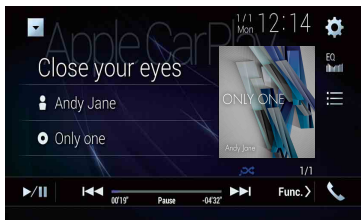
The Wi-Fi audio playback screen appears.

### NOTES

- [Wi-Fi Audio] is displayed as [Android Auto] when the Android Auto is in use.
- [Wi-Fi Audio] is displayed as [Apple CarPlay] when the Apple CarPlay is in use.

## Basic operation

### Wi-Fi audio screen (Example: Apple CarPlay)



Wi-Fi audio with Apple CarPlay operation is same as the iPod source function. For details of the operation, refer to the iPhone operation (page 88).

# AV source

## Supported AV source

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

- Radio
- Digital Radio
- USB

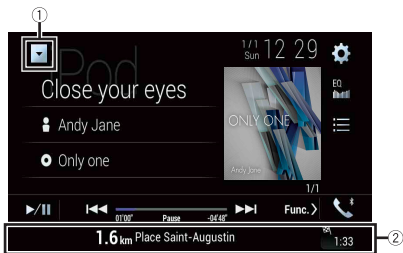
The following sources can be played back or used by connecting an auxiliary device.




- iPod
- Bluetooth audio
- Wi-Fi audio
- AV input (AV)
- AUX
- Wireless Mirroring

## Displaying the AV operation screen

- 1 Touch  then touch the AV operation key.



The AV operation screen appears.





	<b>Displays the source list.</b>
	<b>Shows the navigation information.</b> This is not displayed for some sources.
	<b>Recalls equaliser curves (page 120).</b>

## Selecting a source

### Source on the AV source selection screen

- 1 Touch  then touch .
- 2 Touch the source icon.  
When you select [Source OFF], the AV source is turned off.

### Source on the source list



- 1 Touch  then touch the AV operation key.
- 2 Touch .
- 3 Touch the source key.  
When you select [Source OFF], the AV source is turned off.

## Changing the display order of source




### NOTE

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

### Changing the display order of source icons

- 1 Touch  then touch .
- 2 Touch and hold the source icon and drag the icon to the desired position.





### Changing the display order of source keys

- 1 Touch  then touch the AV operation key.
- 2 Touch .
- 3 Touch .
- 4 Drag the source key to the desired position.

## Adjusting the range of favourite source icons area

### NOTE

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

- 1 Touch .
- 2 Touch and hold .  
 appears at the top left of the favourite source icons.
- 3 Drag  to the desired position.  
To finish the adjusting, touch any place of the display except for the favourite source icons area.



# Setup for iPhone or smartphone

When using an iPhone or a smartphone with this product, configure settings of this product according to the device to be connected. This section describes the settings required for each device.

## NOTES

- Operation methods may vary depending on the iPhone model or smartphone and its software version.
- Depending on the software version of iPhone or the version of smartphone OS, it may not be compatible with this unit.
- The setting may not be operable right after it is changed.
- This setting is available only when a hands-free telephone is not used.
- The setting will change after the following processes are automatically executed.
  - The source is turned off.
  - WebLink, Apple CarPlay or Android Auto is exited.
  - The smartphone connection (USB and Bluetooth) is disconnected.



## iPhone

### Compatible iPhone models

- iPhone SE (2nd generation)
- iPhone 11 Pro Max
- iPhone 11 Pro
- iPhone 11
- iPhone XR
- iPhone XS Max
- iPhone XS
- iPhone X
- iPhone 8
- iPhone 8 Plus
- iPhone 7
- iPhone 7 Plus
- iPhone SE (1st generation)
- iPhone 6s
- iPhone 6s Plus

Depending on the iPhone models, it may not be compatible with some AV sources. For details about iPhone compatibility with this product, refer to the information on our website.




**1** Touch .

- 2 Touch  then .
- 3 Touch [Smartphone-related Settings].
- 4 Touch [Smartphone Setup].
- 5 Touch [iPhone/iPod].  
The available function icons are displayed.

## Smartphone (Android™ device)

### Compatible smartphones

Compatibility with all smartphones is not guaranteed. For details about smartphone compatibility with this product, refer to the information on our website.

- 1 Touch .
- 2 Touch  then .
- 3 Touch [Smartphone-related Settings].
- 4 Touch [Smartphone Setup].
- 5 Touch [Others].
- 6 Touch [Android Auto] to use Android Auto.  
Touch [WebLink] to use WebLink.  
The available function icons are displayed.

# Digital Radio

## Digital Radio tuner operations

For improved Digital Radio reception, make sure a Digital Radio aerial with phantom power input (active type) is used. Pioneer recommends using AN-DAB1 (sold separately) or CA-AN-DAB.001 (sold separately).

Current consumption of Digital Radio aerial should be 100 mA or less.

### NOTES

- 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 stations perform broadcast testing.

## MFN support

When some ensembles support the same service component, switches to another ensemble that has better reception automatically.

## Starting procedure

1 Touch  then touch .

2 Touch [Digital Radio].  
The Digital Radio screen appears.














### NOTE


The service list will be automatically updated when the Digital Radio function is started for the first time. If the update succeeds, the station listed at the top of the service list will be automatically tuned in to.

# Basic operation







## Digital Radio screen






	 <b>Recalls the preset channel stored to a key from memory.</b>
	 <b>Stores the current broadcast frequency to a key.</b>
	<b>Displays the preset channel list.</b> Select an item on the list to switch to the preset service.
	<b>Selects the DAB1, DAB2, or DAB3 band.</b>
	 <b>Manual tuning</b> When there are multiple services in the same frequency, switches the services one by one.
	 <b>Seek tuning</b> Skips to the nearest ensemble.
	<b>Stores recent broadcasts to memory automatically (time shift mode).</b> Pause or listen to the stored broadcasts again by touching  . Touch  to resume the live broadcast.
	<b>NOTES</b> <ul style="list-style-type: none"><li>• Stored broadcast is overwritten by the latest broadcast.</li><li>• If the duration that a selection is paused exceeds the length of the memory capacity, playback will resume from the beginning of the selection in memory.</li></ul>

	<p><b>Selects a service component.</b></p> <p>Touch the following category then select each item.</p> <p><b>[Station]:</b> Displays all service components.</p> <p><b>[Program Type]</b> (PTY label): Searches from programme type information.</p> <p><b>[Station Group]</b> (ensemble label): Displays the ensemble list.</p> <p><b>TIP</b></p> <p>If you touch [Update Stations], you can update station list information manually.</p> <p><b>NOTES</b></p> <ul style="list-style-type: none"> <li>• Station list information is automatically updated, when you start to use this source.</li> <li>• When there is any changes in the current station group, station list information automatically updated.</li> </ul>
---	---

#### TIPS

- By touching  then touch  or , you can also switch the preset channels.
- By touching  then touch and hold  or  and releasing it, you can also perform seek tuning.

## DAB settings

- 1 Touch .
- 2 Touch  then .  
The system setting screen appears.
- 3 Touch [AV Source Settings].
- 4 Touch [DAB Settings].

The menu items vary according to the source.



Menu Item	Description
[TA Interrupt]*	Receives the traffic announcement from the last selected frequency, interrupting the other sources.
[DAB+RDS TA]	Receives current traffic information for DAB and RDS (AN-DAB1 has priority) if available.
[RDS TA ONLY]	Receives current traffic information for only RDS if available.

Menu Item	Description
[TA OFF]	Disables this function.
<b>[Service Follow]*</b> [On] [Off]	Searches for another ensemble that supports the same service component with better reception. If no alternative service component can be found or reception remains poor, the unit will automatically switch to an identical FM broadcast. (HARD LINK)
<b>[Soft Link]*</b> [On] [Off]	When HARD LINK is unsuccessful, tunes to another ensemble that supports the similar service component. If no alternative service component can be found or reception remains poor, this function will automatically switch to a similar FM broadcast.  <b>NOTES</b> <ul style="list-style-type: none"> <li>• This setting is available only when [Service Follow] is set to [On].</li> <li>• Only available in areas where SOFT LINK function is supported.</li> <li>• The broadcast content of the switched channel may differ from the content of the original channel.</li> </ul>
<b>[Antenna Power]</b> [On] [Off]	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.  <b>NOTE</b> This setting is available when the source is turned off.

\* This setting is available only when [Digital Radio] is selected as the source.

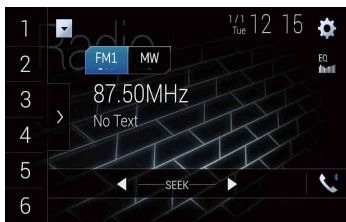
# Radio











## Starting procedure

- 1 Touch  then touch .
- 2 Touch [Radio].  
The Radio screen appears.







## Basic operation

### Radio screen



		<b>Recalls the preset channel stored to a key from memory.</b>
		<b>Stores the current broadcast frequency to a key.</b>
		<b>Displays the preset channel list.</b> Select an item on the list ([1] to [6]) to switch to the preset channel.
		<b>Selects the FM1, FM2, FM3, MW, or LW band.</b>
		<b>Manual tuning</b>
		<b>Seek tuning or non stop seek tuning</b> Releasing the key in a few seconds skips to the nearest station from the current frequency. Keep holding the key for long seconds to perform, performs non stop seek tuning.

**TIPS**

- By touching  then touch  or , you can also switch the preset channels.
- By touching  then touch and hold  or  and releasing it, you can also perform seek tuning.

## Storing the strongest broadcast frequencies (BSM)

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

**NOTES**

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

**1** Touch the preset channel list display key.

**2** Touch  to begin search.

While the message is displayed, the six strongest broadcast frequencies will be stored under the preset channel keys in the order of their signal strength.

### To cancel the storage process

**1** Touch [Cancel].

## Radio settings

**1** Touch .

**2** Touch  then .

The system setting screen appears.

**3** Touch [AV Source Settings].

**4** Touch [Radio Settings].

The menu items vary according to the source.

Menu Item	Description
<b>[Local]</b> [Off] <b>FM:</b> [Level1] [Level2] [Level3] [Level4] <b>MW/LW:</b> [Level1] [Level2]	Local seek tuning allows you to only tune into radio stations with sufficiently strong signals.  <b>NOTE</b> [Level4] for FM and [Level2] for MW/LW are available only with the stations with the strongest signals.



Menu Item	Description
<b>[FM Step]*1</b> [100kHz] [50kHz]	Select the seek tuning step for the FM band. <b>NOTE</b> The tuning step remains at [50kHz] during manual tuning.
<b>[Regional]*2</b> [On] [Off]	Switches whether the area code is checked during the Auto PI search.
<b>[Alternative FREQ]*2</b> [On] [Off]	Allow the unit to retune to a different frequency providing the same station.
<b>[Auto PI]*1</b> [On] [Off]	Searches for the same PI (Programme Identification) code broadcast station from all frequency bands automatically when the broadcasting station contains RDS data. <b>NOTE</b> Even if you set to [Off], the PI search is automatically performed when the tuner cannot get a good reception.
<b>[TA Interrupt]*2</b>	Receives the traffic announcement from the last selected frequency, interrupting the other sources. <b>TIP</b> The selected setting also applies to [TA Interrupt] under [DAB Settings].
[DAB+RDS TA]	Receives current traffic information for DAB and RDS (DAB has priority) if available.
[RDS TA ONLY]	Receives current traffic information for only DAB+RDS TA if available.
[TA OFF]	Disables this function.
<b>[News Interrupt]*2</b> [On] [Off]	Interrupt the currently selected source with news programmes.
<b>[Tuner Sound]*2</b>	Switches the sound quality of the FM tuner.
[Talk]	Gives priority to noise prevention.
[Standard]	Gives no effect.
[Music]	Gives priority to the sound quality.

\*1 This setting is available when the source is turned off.

\*2 This function is available only when you receive the FM band.

# Compressed files

## Plugging/unplugging a USB storage device

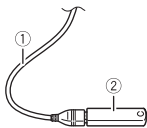
You can play compressed audio, compressed video, or still image files stored in an external storage device.

### Plugging 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.

#### NOTES

- 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.



①	USB cable
②	USB storage device

### Unplugging a USB storage device

- 1 Pull out the USB storage device from the USB cable.

#### NOTES

- Check that no data is being accessed before pulling out the USB storage device.
- Turn off (ACC OFF) the ignition switch before unplugging the USB storage device.

## Starting procedure

- 1 Touch .







**2** Plug the USB storage device into the USB cable (page 82).

**3** Touch [USB].

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

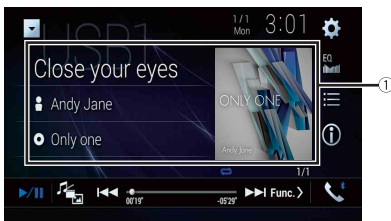
## Basic operation

### TIPS

- By touching  then touch  or , you can also skip files/chapters forwards or backwards.
- By touching  then touch and hold  or  on the audio or video file, you can also perform fast reverse or fast forwards.
- You can set the screen size for the video and image files (page 126).

### Audio source

#### Audio source screen 1



①

#### Displays the link search screen.

Touch the song to play back followed by touching the song information, after switching to Music Browse mode (page 84).

#### TIP

If you touch the artwork, the list of songs in the album is displayed.



#### Switches between playback and pause.



#### Switches the following media file types.



**[Music]:** Compressed audio files

**[Video]:** Compressed video files

**[Photo]:** Image files










#### Skips files forwards or backwards.

	<b>Switches the current music information display.</b>
	<p><b>Selects a file from the list.</b> Touch a file on the list to playback.</p> <p><b>TIP</b> Touching a folder on the list shows its contents. You can play a file on the list by touching it.</p> <p><b>NOTE</b> When you play compressed audio files stored in a USB storage device, you can search for a file using Music Browse (page 84).</p>

## Audio source screen 2




 	<b>Selects the previous folder or the next folder.</b>
  	<b>Sets a repeat play range for all files/the current folder/the current file.</b>
 	<b>Plays files or does not play in random order.</b>

### ▶ Selecting a file using Music Browse mode

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


#### NOTES

- This function is available for the USB storage device only.
- Music Browse mode cannot be held once the power is turned off.

1 Touch .

- 2 Touch the [Tag] tab.
- 3 Touch the desired category to display the file list.
- 4 Touch the item.  
Refine the item until the desired song title or file name is displayed on the list.
- 5 Touch the desired song title or file name to play back.  
If the selection made with Music Browse has been cancelled, you can switch to Music Browse mode again by touching the [Tag] tab on the file/folder list screen and touching the desired track.



**TIP**





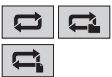




Once the database is created in the USB storage, there is no need to create the database again as long as the same contents are saved. To enter the Music Browse mode directly, touch  and then touch [Tag] before selecting the song.

**Video source****CAUTION**

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




**Video source screen**

①	<b>Hides the touch panel keys.</b> To display the keys again, touch anywhere on the screen.
	<b>Switches between playback and pause.</b>
	<b>Switches the following media file types.</b> <b>[Music]:</b> Compressed audio files <b>[Video]:</b> Compressed video files <b>[Photo]:</b> Image files

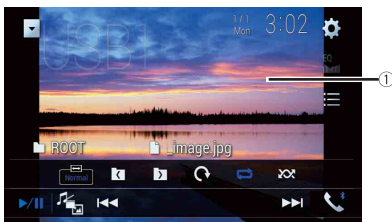
	<p><b>Performs fast reverse or fast forwards.</b> Touch again to change the playback speed.</p>
	<p><b>Stops playback.</b></p>
	<p> <b>Performs slow-motion playback.</b></p>
	<p><b>Sets a repeat play range for all files/the current folder/the current file.</b></p>
	<p><b>Selects a file from the list.</b> Touch a file on the list to playback.</p>
<p><b>TIP</b> Touching a folder on the list shows its contents. You can play a file on the list by touching it.</p>	
	<p> <b>Skips files forwards or backwards.</b></p>
<p> <b>Performs fast reverse or fast forwards.</b></p>	









## Still image source

### TIPS

- Image files are not displayed in the rear display.
- By touching  then touch and hold  or  on the still image file, you can search through 10 image files at a time. If the file currently being played is the first or last file in the folder, the search is not performed.

## Still image screen



①	<p><b>Hides the touch panel keys.</b> To display the keys again, touch anywhere on the screen.</p>
	<p><b>Switches between playback and pause.</b></p>
	<p><b>Switches the following media file types.</b>  <b>[Music]:</b> Compressed audio files  <b>[Video]:</b> Compressed video files  <b>[Photo]:</b> Image files</p>
	<p><b>Skips files forwards or backwards.</b></p>
	<p><b>Selects the previous folder or the next folder.</b></p>
	<p><b>Rotates the displayed picture 90° clockwise.</b></p>
	<p><b>Sets a repeat play range for all files/the current folder.</b></p>
	<p><b>Plays all files in the current repeat play range or does not play them in random order.</b></p>
	<p><b>Selects a file from the list.</b> Touch a file on the list to playback.</p> <p><b>TIP</b> Touching a folder on the list shows its contents. You can play a file on the list by touching it.</p>

# iPhone

**NOTE**

iPhone may be referred to as iPod in this manual.

## Connecting your iPhone

When connecting an iPhone to this product, the settings are automatically configured according to the device to be connected.

**NOTES**

- Depending on the generation or version of the iPhone, some functions may not be available.
- Do not delete the Apple Music app from your iPhone since some functions may not be available.
- When connecting an iPhone, quit all applications before connecting the device.

**1** Connect your iPhone via USB.

**2** Touch  then touch .







**3** Touch [iPod].

**NOTE**

For details on USB connection, refer to the Installation Manual.

## Basic operation

**TIPS**

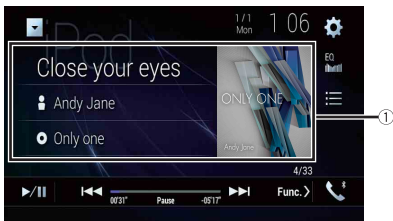
- By touching  then touch  or , you can also skip files forwards or backwards.
- By touching  then touch and hold  or , you can also perform fast reverse or fast forwards.




**NOTE**

Skipping backwards, fast reverse and fast forwards are not available while playing Apple Music Radio.



## Audio source screen 1



<p>①</p>	<p><b>Displays the link search screen.</b> Select a song from the list related to the song currently playing.</p> <p><b>TIP</b> If you touch the artwork, the list of songs in the album is displayed.</p> <p><b>NOTE</b> This function is not available while playing Apple Music Radio.</p>
	<p><b>Switches between playback and pause.</b></p>
	<p><b>Skips files forwards or backwards.</b></p>
	<p><b>Selects a song from the list.</b> Touch the category then the title of the list to playback of the selected list.</p> <p><b>TIPS</b></p> <ul style="list-style-type: none"> <li>• If you use English as the system language, the alphabet search function is available. Touch the initial search bar to use this function.</li> <li>• When you touch Apple Music Radio station in the list screen, Apple Music Radio screen appears (page 90).</li> </ul> <p><b>NOTES</b></p> <ul style="list-style-type: none"> <li>• Depending on the generation or version of the iPhone, some functions may not be available.</li> <li>• Only 16 000 songs in the iPhone are available in the list if the iPhone has more than 16 000 songs. Available songs depend on the iPhone.</li> </ul>

## Audio source screen 2



①

### Changes the audiobook speed.

Normal—Fast—Slow

#### **NOTE**

The audiobook speed icon may not change depending on the connected iPhone.



**Sets a repeat play range for all in the selected list/the current song.**



**Plays songs within the selected list/album randomly.**

## Apple Music Radio source

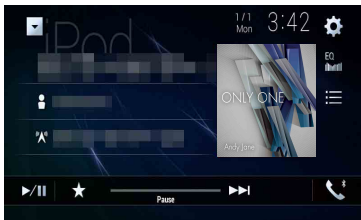
### Important

Apple Music Radio may not be available in your country or region. For details about Apple Music Radio, visit the following site: <https://www.apple.com/music/>

**1** Touch .

**2** Touch Apple Music Radio station in the list screen.

## Apple Music Radio screen



▶/	<b>Switches between playback and pause.</b>
★	<p><b>Displays the pop-up menu for Apple Music Radio.</b></p> <ul style="list-style-type: none"> <li>• Touch [Play More Like This] to play back songs similar to the current song.</li> <li>• Touch [Play Less Like This] to set it not to play back the current song again.</li> <li>• Touch [Add to iTunes Wish List] to add the current song to the iTunes wish list.</li> </ul> <p><b>NOTE</b> This function may not be used depending on your Apple Music account status.</p>
▶▶	<b>Skips tracks forwards.</b>

# WebLink™

WebLink lets you enjoy compatible smartphones apps in the car. You can operate WebLink compatible applications with finger gestures such as tapping, dragging, scrolling, or flicking on the screen of this product.

## NOTES

- The supported finger gestures may vary depending on the WebLink compatible application.
- To use WebLink, you must first install the WebLink Host app on the iPhone or smartphone. For details about the WebLink Host app, visit the following site: <https://www.abaltatech.com/weblink/>
- Be sure to read Using app-based connected content (page 146) before you perform this operation.
- Copyright protected files such as DRM cannot be played.

## WARNING

Certain uses of the iPhone or 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 WebLink


### Important

- Pioneer is not responsible for content or functions accessed via WebLink, which are the responsibility of the application and content providers.
- Availability of non-Pioneer content and services, including apps and connectivity, may change or discontinue without notice.
- When using WebLink with the Pioneer product, available content and functions will be limited while driving.
- WebLink allows access to applications other than those listed, subject to limitations while driving.

## Starting procedure

When connecting an iPhone or a smartphone to this product, settings are required according to the connected device. For details, refer to Setup for iPhone or smartphone (page 73).

### TIPS



- Touch the desired application icon after the WebLink Host app is launched.
- The desired application is launched, and the application operation screen appears.
- Touch  to go back to the top menu screen.

## WebLink



Displays the main menu of the WebLink source screen.



### For iPhone users

- 1 Connect your iPhone to this product via USB.  
Refer to the Installation Manual.
- 2 Touch .
- 3 Touch .
- 4 Touch [WebLink].
- 5 Touch desired icon in the tab.  
The WebLink app is launched.

### For smartphone (Android) users

#### NOTE

The video playback capability depends on the connected Android device.

- 1 Unlock your smartphone and connect it to this product via USB.  
Refer to the Installation Manual.
- 2 Touch .
- 3 Touch .
- 4 Touch [WebLink].
- 5 Touch desired icon in the tab.  
The WebLink app is launched.

## Using the audio mix function

You can output the audio mixing AV source and an application for iPhone or smartphone when WebLink is used.

### NOTE

Depending on the application or AV source, this function may not be available.

**1** Start up the WebLink.

**2** Touch VOL (+/-).

The audio mix menu will be displayed on the screen.

### Android



### iOS



①	<b>Touch to mute. Touch again to cancel mute.</b>
②	<b>Sets whether to switch the sound mix function on or off.</b> <ul style="list-style-type: none"><li>• Left tab: The audio mix function is enabled (mix on) and the App volume is displayed.</li><li>• Right tab: The audio mix function is disabled (mix off). This is not displayed on the AV operation screen.</li></ul>
③	<b>Adjusts the application audio volume.</b>

# Apple CarPlay

You can operate iPhone applications with finger gestures such as tapping, dragging, scrolling, or flicking on the screen of this product.

## Compatible iPhone models

For details about compatibility of iPhone models, refer to the following website.  
<https://www.apple.com/ios/carplay>

### NOTE

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

### WARNING

Certain uses of the iPhone may not be legal while driving in your jurisdiction, so you must be aware of and obey any such restrictions. If in doubt as to a particular function, only perform it while the car is parked. No feature should be used unless it is safe to do so under the driving conditions you are experiencing.

## Using Apple CarPlay

### Important

Apple CarPlay may not be available in your country or region.

For details about Apple CarPlay, visit the following site:

<https://www.apple.com/ios/carplay>

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

## Setting the driving position

To achieve optimum usability of Apple CarPlay, set the driving position setting correctly according to the vehicle. The setting will be applied the next time an Apple CarPlay compatible device is connected to this product.

1 Touch .

2 Touch  then .


The system setting screen appears.

- 3 Touch [Smartphone-related Settings].
- 4 Touch [Driving Position].  
[Left]  
Select for a left-hand drive vehicle.  
[Right]  
Select for a right-hand drive vehicle.

## Starting procedure



When connecting an iPhone to this product, settings are required according to the connected device. For details, refer to Setup for iPhone or smartphone (page 73).

### Wired connection

- 1 Touch .
- 2 Connect an Apple CarPlay compatible device to this product via USB.  
The application screen appears.

### Wireless connection

Before using Apple CarPlay wirelessly, perform the following:

- Attach the GPS aerial to this product.
  - Connect the device to this product via Bluetooth (page 59).
  - Turn on Apple CarPlay in the setting menu of your iPhone.
- 1 Connect an Apple CarPlay compatible device to this product via Wi-Fi (page 68).
  - 2 Touch .
  - 3 Touch .
- The device search screen appears.

#### NOTE

The unit cannot detect the device unless the Bluetooth or Apple CarPlay setting menu is displayed on the iPhone screen.


- 4 Touch a desired device on the screen.  
The unit configures the connection then start the application.

#### TIP

You can also start Apple CarPlay with a desired device by opening the Bluetooth or Apple CarPlay setting menu while displaying the device search or device list screen.



**TIPS**

- When the USB connection with the other device has been made, the message that shows that the new device is available will appear. If you want to switch from the current device to the new one for use in the application, touch [Connect], and then touch [OK].
- You can use Siri function by touching  button once Apple CarPlay is activated.

**NOTES**

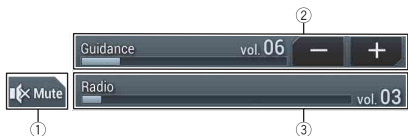
- For details on USB connection, refer to the Installation Manual.
- If an Apple CarPlay compatible device has been connected and another screen is displayed, touch [Apple CarPlay] on the top menu screen to display the Application menu screen.
- The Bluetooth connection with the Apple CarPlay compatible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

## Adjusting the volume

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

### 1 While Apple CarPlay is activated, touch VOL (+/-).

The volume menu will be displayed on the screen.



①	<b>Touch to mute. Touch again to cancel mute.</b>
②	<b>Touch [+] / [-] to adjust the guidance volume.</b> <ul style="list-style-type: none"> <li>• While the guidance voice is output, the guidance volume can be also adjusted by touching VOL (+/-) on the unit.</li> </ul>
③	<b>Displays the main sound volume. To adjust the main sound volume, touch VOL (+/-) on the unit.</b>

**NOTE**

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

# Android Auto™

You can operate Android applications with finger gestures such as tapping, dragging, scrolling, or flicking on the screen of this product.

## Compatible Android devices

For details about compatibility of Android models, refer to the following website.  
<https://support.google.com/androidauto>

## For wireless connections

To wirelessly use Android Auto on your vehicle display, you need a compatible Android smartphone with an active data plan. You can check which smartphones are compatible at [g.co/androidauto/requirements](http://g.co/androidauto/requirements).

### NOTE

The compatible finger gestures vary depending on the application for the smartphone.

### WARNING

Certain uses of the 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 Android Auto

### Important

Android Auto may not be available in your country or region.




For details about Android Auto, please refer to the Google support site:

<https://support.google.com/androidauto>

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

## Setting the driving position

To achieve optimum usability of Android Auto, set the driving position setting correctly according to the vehicle. The setting will be applied the next time an Android Auto compatible device is connected to this product.

- 1 Touch .
- 2 Touch  then .

The system setting screen appears.

- 3 Touch [Smartphone-related Settings].
- 4 Touch [Driving Position].


[Left]  
Select for a left-hand drive vehicle.

[Right]  
Select for a right-hand drive vehicle.

## Starting procedure



When connecting a smartphone to this product, settings are required according to the connected device. For details, refer to Setup for iPhone or smartphone (page 73).

### Wired connection

- 1 Touch .
- 2 **Connect an Android Auto™ compatible device to this product via USB.**  
The application screen appears.  
A Bluetooth connection with the Android Auto compatible device is automatically established and a Bluetooth connection with any other devices are terminated.

### Wireless connection

Before using Android Auto wirelessly, connect the device to this product via Bluetooth (page 59).

- 1 **Connect an Android Auto compatible device to this product via Wi-Fi (page 68).**
- 2 Touch .
- 3 Touch .


The device search screen appears.

#### NOTE

The unit cannot detect the device unless the Bluetooth setting menu is displayed on the smartphone screen.

- 4 **Touch a desired device on the screen.**  
The unit configures the connection then start the application.

**TIPS**

- When the connection with the other device has been made, the message that shows that the new device is available will appear. If you want to switch from the current device to the new one for use in the application, touch [Start].
- When [On] is selected in the [New Android Auto device notify] setting (page 109), the message appears to announce that Android Auto is available if you start WebLink with the Android device. You can start the Android Auto connection by touching [Start] in the message.
- You can use voice recognition function by touching  button once Android Auto is activated.

**NOTES**

- For details on USB connection, refer to the Installation Manual.
- If twenty devices are already paired, the message confirming whether to delete the registered device is displayed. If you want to delete the device, touch [Agree]. If you want to delete other device, touch [Go To Device List] and delete the devices manually in the device list.
- If Android Auto is turned on during a call on a mobile phone other than the Android Auto compatible device, the Bluetooth connection will switch to the Android Auto compatible device after the call.

## Adjusting the volume

You can adjust the guidance volume separately from the main sound volume when Android Auto is used.

### 1 While Android Auto is activated, touch VOL (+/-).

The volume menu will be displayed on the screen.



①	<b>Touch to mute. Touch again to cancel mute.</b>
②	<b>Touch [ + ]/[ - ] to adjust the guidance volume.</b> <ul style="list-style-type: none"> <li>• While the guidance voice is output or voice recognition function is used, the volume can be also adjusted by touching VOL (+/-) on the unit.</li> </ul>
③	<b>Displays the main sound volume. To adjust the main sound volume, touch VOL (+/-) on the unit.</b>

**NOTE**




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

## Setting the auto-launch function

If this function is set to on, Android Auto will launch automatically when an Android Auto compatible device is connected to this product.

### NOTE

Android Auto will launch automatically only when an Android Auto compatible device is correctly connected to this product.

- 1 Touch .
- 2 Touch  then .
- 3 Touch [Smartphone-related Settings].
- 4 Touch [Android Auto Auto-launch] to switch [On] or [Off].

# AUX

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






## **⚠ CAUTION**

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

## **NOTES**

- A Mini-jack AV cable (sold separately) is required for connection. For details, refer to the Installation Manual.
- You can set the screen size for the video image (page 126).

## Starting procedure

- 1 Touch .
- 2 Touch  then .
- 3 Touch [Input/Output Settings].
- 4 Confirm that [AUX Input] is turned on.
- 5 Touch  then touch .
- 6 Touch [AUX].  
The AUX screen appears.

## Basic operation

### AUX screen



①

**Hides the touch panel keys.**

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

**TIP**

You can set the screen size for the video image (page 126).



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






# AV input

You can display the video image output by the device connected or the camera to video input. For details, refer to the Installation Manual.

## CAUTION

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

## Starting procedure

- 1 Touch .
- 2 Touch  then .
- 3 Touch [Input/Output Settings].
- 4 Touch [AV Input].
- 5 Touch [Source] for AV source or [Camera] for camera.
- 6 Touch  then touch .
- 7 Touch [AV] for AV source or [Camera View] for camera.  
The image is displayed on the screen.

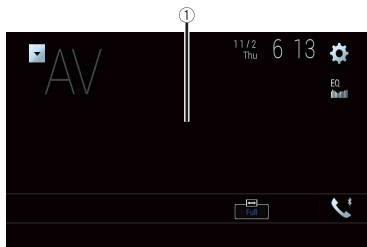
### NOTE

If [Source] is selected, [2nd Camera Input] is automatically set to [Off] (page 110).



## Basic operation

### AV source screen



①

**Hides the touch panel keys.**

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

# Wireless Mirroring

(This function is available only for Android device.)






Wireless Mirroring is a wireless display designed to mirror your mobile device on this product screen via Wi-Fi connection.

## Starting procedure

Wireless Mirroring operations and procedures vary depending on the connected mobile device. Refer to the instruction manual that came with your mobile device.

### CAUTION

For safety reasons, this function is available only when you stop your vehicle in a safe place and apply the handbrake.

- 1 Touch .
- 2 Touch  then .
- 3 Touch [Wi-Fi Settings].
- 4 Confirm that [Wi-Fi] is turned on.
- 5 Touch  then touch .
- 6 Touch [Mirroring].

A connection is configured then the instruction message appears on the display.

### NOTES

- When Apple CarPlay or Android Auto with wireless connection is activated, the connection switching confirmation screen appears. Touch [OK] to proceed to Wireless Mirroring.
- When the Wi-Fi connection is set to [OFF], the connection confirmation screen appears. Touch [Start] to make the connection.

- 7 **Make a Wireless Mirroring connection on the mobile device.**
- 8 Touch [Yes].  
The Wireless Mirroring screen appears.

## Basic operation

### Wireless Mirroring screen (Example)



①

**Displays Full screen.**

[Disconnect]

**Disconnects Wireless Mirroring.**








#### **NOTES**

- The screen shown in the example may differ from the connected mobile device.
- If the Android device is not ready for Miracast UIBC, you cannot perform touch operation.

# Settings

You can adjust various settings in the main menu.

## Displaying the setting screen

- 1 Touch .
- 2 Touch .
- 3 Touch one of the following categories, then select the options.
  -  System settings (page 108)
  -  Theme settings (page 117)
  -  Audio settings (page 120)
  -  Video settings (page 124)
  -  Bluetooth settings (page 59)

## System settings

The menu items vary according to the source.

### [Navigation Related Settings]

Menu Item	Description
<b>[Navigation info window]</b> [On] [Off]	You can set whether to display the guidance information of the navigation on the AV operation screen.
<b>[AV/App Guide Mode]</b> [On] [Off]	You can set whether to automatically switch to the navigation screen from the AV screen or the application screen when your vehicle approaches a guidance point such as a junction.

### [AV Source Settings]

Menu Item	Description
<b>[Radio Settings]</b>	(page 80)
<b>[DAB Settings]</b>	(page 77)
<b>[Bluetooth Audio]</b> [On] [Off]	Setting Bluetooth audio source activation.

## [Smartphone-related Settings]

Menu Item	Description
[Smartphone Setup]	Setting the connected mobile device (page 73).
[Driving Position] [Right] [Left]	Setting the driving position. <ul style="list-style-type: none"> <li>• Apple CarPlay (page 95)</li> <li>• Android Auto™ (page 98)</li> </ul>
[Android Auto Auto-launch] [On] [Off]	Select [On] to automatically launch Android Auto when an Android device is connected to the unit.
[New Android Auto device notify]	Set to [On] to display the message to announce that Android Auto is available when you start WebLink with the Android device. Touch [Start] in the message, and then the Android Auto connection starts. Set to [Off] when you do not want to display the message.

## [Auto Mix (iPhone/iPod)]

Menu Item	Description
[Auto Mix (iPhone/iPod)] [On] [Off]	Select whether to perform mixing the sound output from WebLink and AV source sound automatically.

## [Input/Output Settings]

Menu Item	Description
[AV Input] [Source] [Camera] [Off]	Select AV input source (page 104).
[AUX Input] [On] [Off]	Set to [On] for AUX source (page 102).

## [Camera settings]

A separately sold rear view camera (e.g. ND-BC8) 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.

Camera View mode also allows you to check what is behind you while driving.

## ► Camera for Camera View mode


Camera View can be displayed at all times. Note that with this setting, the camera image is not resized to fit, and that a portion of what is seen by the camera is not viewable. To display the camera image, touch [Camera View] on the AV source selection screen (page 71).


### NOTES






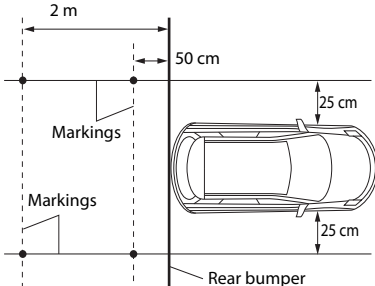
- To set the rear view camera as the camera for Camera View mode, set [Back Camera Input] to [On] (page 110).
- When using the 2nd camera, set [AV Input] to [Camera] (page 104).
- When the camera view of both the rear view camera and 2nd camera are available, the key to switch the display appears. Touch this key to switch the display between the rear view image and 2nd camera image.

### ⚠ 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 the 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 [Reverse Gear Setting].
- If you touch  while the camera image is displayed, the displayed image turns off temporarily.
- When the camera view of both the rear view camera and 2nd camera are available, the key to switch the display appears. Touch this key to switch the display between the rear view image and 2nd camera image.

Menu Item	Description
[Camera View] [On] [Off]	Set to [On] to display camera view at all times. (The same mode is turned on when  is touched on the camera view screen. The setting value is synchronised.)  <b>NOTES</b> <ul style="list-style-type: none"> <li>• To set the rear view camera as the camera for Camera View mode, set [Back Camera Input] to [On] (page 110).</li> <li>• When using the second camera, set [AV Input] to [Camera] or [2nd Camera Input] to [On] (both settings are synchronised) (page 110).</li> </ul> <b>TIP</b> You can also turn this function on by touching [Camera View] on the AV source selection screen or in the source list.
[Back Camera Input] [Off] [On]	Setting the second camera activation (front camera, etc.). Setting rear view camera activation.
[2nd Camera Input] [Off] [On]	Setting the second camera activation (front camera, etc.). This function is synchronised with [AV Input] setting.
[Reverse Gear Setting.] [Battery]	Setting the polarity of the rear view camera. The polarity of the connected lead is positive.

Menu Item	Description
[Ground]	<p>The polarity of the connected lead is negative.</p> <p><b>NOTE</b></p> <p>If the camera polarity setting is wrong, or wrong camera setting is made, touch and hold  to release the rear view camera screen and then change the camera polarity setting to [Battery].</p>
<b>[Parking Assist Guide]</b> [On] [Off]	<p>You can set whether to display the parking assist guidelines on the rear view camera images when backing up your vehicle.</p>
<b>[Parking Assist Guide Adjust]*</b>	<p>Adjusting the guidelines by dragging or touching // / on the screen. Touch [Default] to reset the settings.</p> <p><b>⚠ CAUTION</b></p> <ul style="list-style-type: none"> <li>When adjusting the guidelines, be sure to park the vehicle in a safe place and apply the handbrake.</li> <li>Before getting out of the car to place the markings, be sure to turn the ignition switch off (ACC OFF).</li> <li>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.)</li> <li>The image quality may deteriorate depending on the usage environment, such as at night or in dark surroundings.</li> </ul> <p><b>NOTE</b></p> <p>Using packing tape or similar tape place markings as shown below before setting up the guidelines so that the guidelines can be overlaid to the markings.</p> 

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

**[Wi-Fi Settings]**

Menu Item	Description
[Wi-Fi Settings]	(page 68)

**[Safe Mode]**

Menu Item	Description
[Safe Mode] [On] [Off]	Set the safe mode that regulate operating some functions only when you stop your vehicle in a safe place and apply the handbrake.

**[Demo Mode]**

Menu Item	Description
[Demo Mode] [On] [Off]	Setting the demo mode.

**[System Language]**

Menu Item	Description
[System Language]	Select the system language.
	<p><b>NOTES</b></p> <ul style="list-style-type: none"> <li>• If the embedded language and the selected language setting are not the same, the text information may not display properly.</li> <li>• Some characters may not be displayed properly.</li> </ul>

**[Climate Reverse]**

Menu Item	Description
[Climate Reverse] [On] [Off]	When the optional vehicle bus adapter is connected, the left/right display of the climate control status screen can be reversed if the display does not match that of the vehicle.

**[Restore Settings]**

Touch [Restore] to restore the settings to the default settings.

** CAUTION**

Do not turn off the engine while restoring the settings.



**NOTE**

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

Menu Item	Description
[All Settings]	Almost all settings or recorded content returns to the default.
[Audio Settings]	Restore to default Audio settings. <b>NOTE</b> This setting is available when the source is turned off.
[Theme Settings]	Restore to default Theme settings.
[Bluetooth Settings]	Restore to default Bluetooth settings.





**[Beep Tone]**

Menu Item	Description
[Beep Tone] [On] [Off]	Select [Off] to disable the beep sound when the button is touched or the screen is touched.

**[Dimmer Settings]****NOTE**

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

Menu Item	Description
[Dimmer Trigger]	Setting the dimmer brightness.
[Auto]	Switches the dimmer to on or off automatically according to your vehicle's headlight turning on or off.
[Manual]	Switches the dimmer to on or off manually.
[Time]	Switches the dimmer to on or off at the time you adjusted.
[Day/Night]	Setting the dimmer duration by day or night. You can use this function when [Dimmer Trigger] is set to [Manual].
[Day]	Turns the dimmer function to off.
[Night]	Turns the dimmer function to on.





Menu Item	Description
<b>[Dimmer Duration]</b>	<p>Adjust the time that the dimmer is turned on or off by dragging the cursors or touching  or .</p> <p>You can use this function when [Dimmer Trigger] is set to [Time].</p> <p><b>TIPS</b></p> <ul style="list-style-type: none"> <li>• Each touch of  or  moves the cursor backwards or forwards in the 15 minute width.</li> <li>• When the cursors are placed on the same point, the dimmer available time is 0 hours.</li> <li>• When the cursor for off time setting is placed on the left end and the cursor for on time setting is placed on the right end, the dimmer available time is 0 hours.</li> <li>• When the cursor for on time setting is placed on the left end and the cursor for off time setting is placed on the right end, the dimmer available time is 24 hours.</li> </ul> <p><b>NOTE</b></p> <p>The time display of the dimmer duration adjusting bar depends on the clock display setting (page 126).</p>

### **[Picture Adjustment]**

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.

To adjust following menu, touch , , ,  to adjust.

Menu Item	Description
<b>[Brightness]</b> [-24] to [+24]	Adjust the black intensity.
<b>[Contrast]</b> [-24] to [+24]	Adjust the contrast.
<b>[Colour]*</b> [-24] to [+24]	Adjust the colour saturation.
<b>[Hue]*</b> [-24] to [+24]	Adjust the tone of colour (which colour is emphasised, red, or green).
<b>[Dimmer Level]</b> [+1] to [+48]	Adjust the brightness of the display.
<b>[Temperature]</b> [-3] to [+3]	Adjust the colour temperature, resulting in a better white balance.

\* With some pictures, you cannot adjust [Hue] and [Colour].

#### NOTES

- When you touch [Rear View] or [2nd Camera], the mode changes to the selected camera mode. By touching [Source], [NAV], or [Apps], you can return to the selected mode.
- The adjustments of [Brightness], [Contrast], and [Dimmer Level] are stored separately when your vehicle's headlights are off (daytime) and on (nighttime).
- [Brightness] and [Contrast] are switched automatically depending on the setting of [Dimmer Settings].
- [Dimmer Level] can be changed the setting or the time to switch it to on or off (page 113).
- The picture adjustment may not be available with some rear view cameras.
- The setting contents can be memorised separately.

#### [System Information]

Menu Item	Description
[Firmware Information]	Displays the firmware version.  <b>TIP</b> You can also check the open source licence of the functions that this product is equipped with by touching [Licence] in this menu.

Menu Item	Description
<b>[Firmware Update]</b>	<p><b>⚠ CAUTION</b></p> <ul style="list-style-type: none"> <li>• The USB storage device for updating must contain only the correct update file.</li> <li>• Never turn this product off, disconnect the USB storage device while the firmware is being updated.</li> <li>• You can only update the firmware when the vehicle is stopped and the handbrake is engaged.</li> <li>• You cannot update the old firmware version once the latest firmware is updated.</li> </ul> <ol style="list-style-type: none"> <li><b>1 Download the firmware update files into your computer.</b></li> <li><b>2 Connect a blank (formatted) USB storage device to your computer then locate the correct update file and copy it onto the USB storage device.</b></li> <li><b>3 Connect the USB storage device to this product (page 82).</b></li> <li><b>4 Turn the source off (page 71).</b></li> <li><b>5 Display the [System] setting screen (page 108).</b></li> <li><b>6 Touch [System Information].</b></li> <li><b>7 Touch [Firmware Update].</b></li> <li><b>8 Touch [Continue].</b></li> </ol> <p>Follow the on-screen instructions to finish updating the firmware.</p> <p><b>NOTE</b></p> <p>If an error message appears on the screen, touch the display and perform the above steps again.</p>
<b>[3D Calibration Status]</b>	<p>Check the sensor learning status, such as the degree of learning. You can also check the current sensor values and the total number of speed pulses.</p> <p>To delete the learned results stored in the sensor, follow the below instructions.</p> <ol style="list-style-type: none"> <li><b>1 Touch [Distance] or [Speed Pulse], and then touch [Yes].</b></li> <li><b>2 Touch [Learning] and then touch [Reset All].</b></li> </ol> <p><b>TIP</b></p> <p>Touch [Reset All] to reset the sensor after changing the installation position or angle.</p> <p><b>NOTE</b></p> <p>If you touch [Reset Distance], all learned results stored in [Distance] are cleared.</p>
<b>[Connection Status]</b>	<p>Check that the leads are properly connected between this product and vehicle.</p>

Menu Item	Description
[GPS Antenna]	Displays the connection status of the GPS aerial ([OK] or [NOK]) and the reception sensitivity.  <b>NOTE</b> If reception is poor, change the installation position of the GPS aerial.
[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 that have received signals (yellow). If signals from more than three satellites are received, the current location can be measured (page 135).
[Installation]	Indicates whether the installation position of this product is correct or not. If installed correctly, [OK] appears. When this product is installed at an extreme angle exceeding the limitation of the installing angle, [NOK(Inst. Angle)] is displayed. If the installation of this product is continually changed and it is not firmly fixed into place, [NOK(Vibration)] is displayed.
[Speed Pulse]	The speed pulse value detected by this product is shown.
[Illumination]	Displays the status of headlights or small lamps of the vehicle.
[Back Signal]	When the gearstick is gearchanged to "R" (reverse position), the signal switches to [High] or [Low]. The signal displayed varies depending on the vehicle.
[Vehicle Bus]	Displays the status of the optional Vehicle Bus adapter.



## Theme settings















### CAUTION

Do not turn off the engine while importing an image from the external storage device.

The menu items vary according to the source.

Menu Item	Description
[Background] [Home] [AV]	Select the wall paper from the preset items in this product or original pictures via the USB storage device.  <b>TIP</b> The wall paper can be set from selections for the top menu screen and AV operation screen.
Preset Display	Selects the desired preset background display.

Menu Item	Description
 (custom)*	<p>Displays the background display image imported from the external storage device.</p> <p>To set the image from an external device, touch  then select the desired image by touching the desired external storage device after connecting the device.</p> <p><b>NOTE</b></p> <p>Background display image must be used within the following formats.</p> <ul style="list-style-type: none"> <li>• JPEG image files (.jpg or .jpeg)</li> <li>• Allowable data size is 10 MB or smaller</li> <li>• Allowable image size is 4 000 pixels × 4 000 pixels or smaller</li> </ul>
 (off)	Hides the background display.
<b>[Illumination]</b>	Select an illumination colour from the colour list or create a defined colour.
Coloured Keys	Select the desired preset colour.
 (custom)	<p>Displays the screen to customise the illumination colour.</p> <p>To customise the defined colour, touch  then touch  or  to adjust the brightness and the level of red, green and blue to create favourite colour.</p> <p>To store the customised colour in the memory, touch and hold [Memo], and the customised colour will be available at the next illumination setting by touching .</p> <p><b>TIP</b></p> <p>You can also adjust the colour tone by dragging the colour bar.</p>
 (rainbow)	Shifts gradually between the preset colours in sequence.
<b>[Theme]</b>	Select the theme colour.
	<p><b>TIP</b></p> <p>You can preview the top menu screen or the AV operation screen by touching [Home] or [AV] respectively.</p>
<b>[Clock]</b>	Select the style of the clock from the preset image.
Preset Images	Select the desired preset style for the clock.
 (off)	Hides the clock display.
<b>[Splash Screen]</b>	Select the splash screen from the preinstalled image in this product or external devices such as USB storage devices.
Preset Images	Selects the desired preset splash screen image.

Menu Item	Description
 (custom)*	Displays the splash screen image imported from the external storage device. To set the image from an external device, touch  then select the desired image by touching the desired external storage device after connecting the device.

\* The external storage device is inserted or plugged in in advance to customise the image (page 82).

## Replicating the settings

You can export settings you have made on the [Theme] screen to a USB storage device. Also, you can import them from an external storage device.

### CAUTION

Do not turn off the engine while exporting or importing the settings.

### NOTES

- If multiple external storage devices that include available data are connected to this product, the order of priority for the targets that the Theme settings are exported to or imported from is as follows:
  - ① USB storage device (USB port 1)
  - ② USB storage device (USB port 2)
- This setting is available only when you stop your vehicle in a safe place and apply the handbrake.

### ► Exporting Theme settings

1 Set the USB storage device (page 82).

2 Touch .

3 Touch  then .

4 Touch [Export].

5 Touch the item you want export.

[Illumination]

[Theme]

[Splash Screen]

[Select All]

6 Touch [Export].

### ► Importing Theme settings

1 Set the external storage device (page 82).

A message confirming whether to import the stored setting data appears.

2 Touch [Import].









## Audio settings

The menu items vary according to the source. Some of the menu items become unavailable when the volume is set to mute or the source is off.

Menu Item	Description
<b>[Graphic EQ]</b> [Super Bass] [Powerful] [Natural] [Vocal] [Flat] [Custom1] [Custom2]	Select or customise the equaliser curve. Select a curve that you want to use as the basis of customising then touch the frequency that you want to adjust. <b>TIPS</b> <ul style="list-style-type: none"><li>• If you touch [Custom1] or [Custom2], the equaliser curve currently stored in [Custom1] or [Custom2] is recalled.</li><li>• If the equaliser curve stored in [Custom1] or [Custom2] is modified, each stored curve will be overwritten.</li><li>• If you trail your 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.</li><li>• If the preset equaliser curve other than [Custom1] or [Custom2] is modified, the curve setting will be overwritten in [Custom1].</li></ul>
<b>[Fader/Balance]</b>	Touch  or  to adjust the front/rear speaker balance. Set [Front] and [Rear] to [0] when using a dual speaker system. Touch  or  to adjust the left/right speaker balance. <b>TIP</b> You can also set the value by dragging the point on the displayed table. <b>NOTE</b> Only the balance can be adjusted when [Network Mode] is selected as the speaker mode.
<b>[Mute Level]</b>	Select mute or attenuate the AV source volume and iPhone or smartphone application volume when the navigation outputs the guidance voice.
[ATT]	The volume becomes 20 dB lower than the current volume.
[Mute]	The volume becomes 0.
[Off]	The volume does not change.



Menu Item	Description
<b>[Source Level Adjuster]</b> [-4] to [+4]	Adjust the volume level of each source to prevent radical changes in volume when switching between sources other than FM. Touch  or  to adjust the source volume after comparing the FM tuner volume level with the level of the source.  <b>TIP</b> If you directly touch the area where the cursor can be moved, the SLA (source level adjustment) setting will be changed to the value of the touched point.  <b>NOTES</b> <ul style="list-style-type: none"> <li>• Settings are based on the FM tuner volume level, which remains unchanged.</li> <li>• This function is not available when the FM tuner is selected as the AV source.</li> </ul>
<b>[Subwoofer]</b> [On] [Off]	Select enable or disable rear subwoofer output from this product.  <b>NOTE</b> If [Off] is selected, the subwoofer adjustment is not available in [Speaker Level], [Time Alignment] and [Crossover].
<b>[Speaker Level]</b> <b>Listening position*1*2</b> [Off] [Front Left] [Front Right] [Front] [All]  <b>Standard Mode*3</b> [Front Left] [Front Right] [Rear Left] [Rear Right] [Subwoofer]  <b>Network Mode*3</b> [High Left] [High Right] [Mid Left] [Mid Right] [Subwoofer]  <b>Speaker output level</b> [-24] to [10]	Adjust the speaker output level of the listening position. <b>1</b> Touch  or  to select the listening position then select the output speaker. <b>2</b> Touch  or  to adjust the selected speaker output level.
<b>[Crossover]</b>	Select a speaker unit (filter) to adjust the HPF or LPF cutoff frequency and the slope for each speaker unit (page 123).
<b>[Subwoofer Settings]</b>	Select the subwoofer phase (page 123).
<b>[Listening Position]*1</b> [Off] [Front Left] [Front Right] [Front] [All]	Select a listening position that you want to make as the centre of sound effects.

Menu Item	Description
<b>[Time Alignment]</b> [On] [Off] <b>Listening position*1*2</b> [Off] [Front Left] [Front Right] [Front] [All] <b>Standard Mode*3*4</b> [Front Left] [Front Right] [Rear Left] [Rear Right] [Subwoofer] <b>Network Mode*3*4</b> [High Left] [High Right] [Mid Left] [Mid Right] [Subwoofer] <b>Distance</b> [0] to [350]	Select or customise the time alignment settings to reflect the distance between the listener's position and each speaker. You need to measure the distance between the head of the listener and each speaker unit. <ol style="list-style-type: none"> <li>1 Touch ◀ or ▶ to select the listening position then select the alignment speaker.</li> <li>2 Touch ◀ or ▶ to input the distance between the selected speaker and listening position.</li> </ol> <p><b>TIP</b> If you touch [TA On], the time alignment is turned off mandatorily.</p> <p><b>NOTE</b> This function is available only when the listening position setting is set to [Front Left] or [Front Right].</p>
<b>[Save Settings]</b>	Save to recall the following current sound settings by touching [OK]: slope, subwoofer phase, speaker level, Graphic EQ, HPF/LPF, listening position, crossover, time alignment. <p><b>TIP</b> When you touch [Cancel], return to the [Audio] setting screen.</p>
<b>[Load Settings]</b>	Load the sound settings. <p><b>NOTE</b> [Sound Setting] is available only when you have already saved the sound settings (page 122).</p>
<b>[ASL]</b>	Set to one of five levels to increase the volume level of the audio depending on the driving speed.
<b>[Bass Boost]</b> [0] to [6]	Adjust the bass boost level.
<b>[Rear Speaker Output]</b> [Rear] [Subwoofer]	Select the rear speaker output. <p><b>NOTES</b></p> <ul style="list-style-type: none"> <li>• This function is available when [Standard Mode] is selected as the speaker mode.</li> <li>• If [Subwoofer] is selected, the rear speaker adjustment is not available in [Speaker Level], [Time Alignment] and [Crossover].</li> </ul>
<b>[Loudness]</b> [Off] [Low] [Mid] [High]	Compensates for deficiencies in the low-frequency and high-frequency ranges at low volume. <p><b>NOTE</b> This function is not available while you make or receive a call using the hands-free function.</p>

Menu Item	Description
<b>[Automatic Level Control]</b>	Corrects automatically the audio level difference between the music files or the sources.
[Off]	Turns the auto level control setting off.
[Mode1]	Corrects a little the audio level difference between the music files or the sources (for the narrow dynamic range audio signal).
[Mode2]	Corrects widely the audio level difference between the music files or the sources (for the wide dynamic range audio signal).
<b>[Sound Retriever]</b> [Off] [Mode1] [Mode2]	Enhances compressed audio and restores rich sound automatically.  <b>TIP</b> [Mode2] has a stronger effect than [Mode1].

- \*1 [All] is not available when [Network Mode] is selected as the speaker mode.
- \*2 If you change the listening position setting, the output levels of all the speakers will change in conjunction with the setting.
- \*3 To use this function, the vehicle's acoustics must be measured in advance.
- \*4 This function is available only when the [Listening Position] setting is set to [Front Left] or [Front Right].

## Adjusting the cutoff frequency value

You can adjust the cutoff frequency value of each speaker.


The following speakers can be adjusted:

**[Standard Mode]:** Front, Rear, Subwoofer.

**[Network Mode]:** High, Mid, Subwoofer.



### NOTES

- Subwoofer settings are available only when [Subwoofer] is [On].
- Rear speaker settings are available only when [Rear Speaker Output] is [Rear].

1 Touch .

2 Touch  then .


3 Touch [Crossover] or [Subwoofer Settings].

4 Touch  or  to switch the speaker.

5 Drag the graph line to set the cutoff position.

6 Drag the lowest point of the graph to set the cutoff slope.

The following items can also be set.

	Switches the subwoofer phase between normal and reverse position.
<b>LPF/HPF</b>	Switches the LPF/HPF setting to [On] or [Off]. When it is turned off, the high-pass filter or low-pass filter of each speaker can also be turned on by touching the graph lines.



## Video settings

The menu items vary according to the source.

### [Time Per Photo Slide]

Menu Item	Description
<b>[Time Per Photo Slide]</b> [5sec] [10sec] [15sec] [Manual]	Select the interval of image file slideshows on this product.

### [Video Signal Setting]

Menu Item	Description
<b>[AV]</b> [Auto] [PAL] [NTSC] [PAL-M] [PAL-N] [SECAM]	Select the suitable video signal setting when you connect this product to an AV equipment.
<b>[AUX]</b> [Auto] [PAL] [NTSC] [PAL-M] [PAL-N] [SECAM]	Select the suitable video signal setting when you connect this product to an AUX equipment.
<b>[Camera]</b> [Auto] [PAL] [NTSC] [PAL-M] [PAL-N] [SECAM]	Select the suitable video signal setting when you connect this product to a rear view camera.

### [Video Output Format]

Menu Item	Description
<b>[Video Output Format]</b> [PAL] [NTSC]	Switches the video output format of the rear display between PAL and NTSC.



# Favourite menu

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.

## NOTE

Up to 12 menu items can be registered in the favourite menu.

## Creating a shortcut

- 1 Touch  then touch .
- 2 Touch the star icon of the menu item.  
The star icon for the selected menu is filled in.

### TIP

To cancel the registration, touch the star icon in the menu column again.

## Selecting a shortcut

- 1 Touch  then touch .
- 2 Touch .
- 3 Touch the menu item.

## Removing a shortcut

- 1 Touch  then touch .
- 2 Touch .
- 3 Touch and hold the favourite menu column.  
The selected menu item is removed from the [Favorites] screen.

### TIP

You can also remove a shortcut by touching and holding the registered menu column.

# Other functions

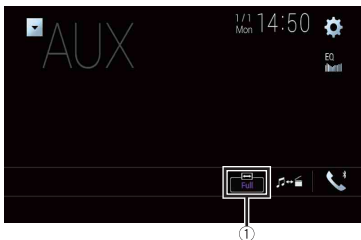
## Setting the time and date

- 1 Touch the current time on the screen.
- 2 Touch one of the items to adjust.
  - You can change the time display format to [12hour] or [24hour].
  - You can change the order of date display format: Day-month, Month-day.

## Changing the wide screen mode

You can set the screen mode for AV screen and image files.

- 1 Touch the screen display mode key.



①

Screen display mode key

- 2 Touch the desired mode.

[Full]	A 4:3 picture is enlarged in the horizontal direction only, enabling you to enjoy an image without any omissions.
[Zoom]	A 4:3 picture is enlarged in the same proportion both vertically and horizontally.
[Normal]	A 4:3 picture is displayed normally, without changing its proportion.
[Trimming]	An image is displayed across the entire screen with the horizontal-to-vertical ratio left as is. If the screen ratio differs from the image, the image may be displayed partly cut off either at the top/bottom or sides.
	<p><b>NOTE</b></p> <p>[Trimming] is for image files only.</p>

**TIPS**

- Different settings can be stored for each video source.
- When a video is viewed in 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.

**NOTES**

- Image files can be set to either [Normal] or [Trimming] in wide screen mode.
- This setting is available only when you stop your vehicle in a safe place and apply the handbrake.

## 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.

**NOTES**

- Video files on the external storage device are not available as a source for the rear display when [Apple CarPlay] is activated.
- Video files on the external storage device are not available as a source for the rear display when [Android Auto] is activated in [Smartphone Setup].

**1** Touch  then touch .

**2** Touch [Rear].

**3** Touch the source you want to show on the rear display.

[Mirror]	The video on the front screen of this product is output to the rear display. <b>NOTE</b> Not all videos or sounds can be output to the rear display.
[USB1]	The video and sound of the USB storage device is output to the rear display. <b>NOTES</b> <ul style="list-style-type: none"> <li>• The port that supports the rear display will only be USB port 1.</li> <li>• Compatible file types are MPEG-4, H.264, WMV, MKV, and FLV only.</li> </ul>
[AV]	The video and/or sound of the AV input source are output to the rear display. <b>NOTE</b> The video image and sound are output only when [AV Input] is set to [Source] (page 104).
[Source OFF]	Nothing is output to the rear display.




## Setting the anti-theft function

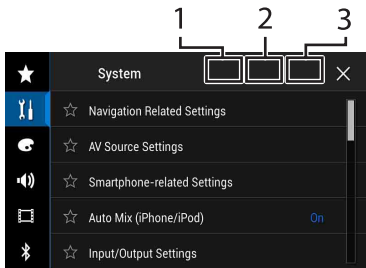
You can set a password for this product. If the back-up lead is cut after the password is set, this product prompts for the password at the time of next boot up.

 **Important**

If you forget your password, contact the nearest authorised Pioneer Service Station.

## Setting the password




- 1 Touch .
- 2 Touch  then .
- 3 Touch 1, followed by 2, and then touch 3.



- 4 Touch [Set Password].
- 5 Enter the password.  
5 to 16 characters can be entered for a password.
- 6 Touch [Go].
- 7 Enter a password hint.  
Up to 40 characters can be entered for a hint.
- 8 Touch [Go].  
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].

## Deleting the password

The current password and password hint can be deleted.

- 1 Touch .
- 2 Touch  then .
- 3 Touch 1, followed by 2, and then touch 3 (page 128).
- 4 Touch [Clear Password].



- 5 Touch [Yes].
- 6 Touch [OK].
- 7 Enter the current password.
- 8 Touch [Go].  
A message indicating that the security setting is cancelled appears.

## Restoring this product to the default settings

You can restore settings or recorded content to the default settings from [Restore Settings] in the [System] menu (page 112).


# Appendix

## Troubleshooting

If you have problems operating this product, refer to this section. The most common problems are listed below, along with likely causes and solutions. If a solution to your problem cannot be found here, contact your dealer or the nearest authorised Pioneer service facility.

### Common problems

**A black screen is displayed, and operation is not possible using the touch panel keys.**

- [Power OFF] mode is on.
  - Touch any button on this product to release the mode.
  - Touch and hold  to release the rear view camera screen and then change the camera polarity setting to [Battery].

### Problems with the AV screen

**The screen is covered by a caution message and the video cannot be shown.**

- The handbrake lead is not connected or the handbrake is not 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] or [AUX Input] setting is incorrect.
  - Correct the settings.

**The audio or video skips.**

- This product is not firmly secured.
  - Secure this product firmly.

**No sounds are produced. The volume level will not rise.**

- Cables are not connected correctly.
  - Connect the cables correctly.

**The icon  is displayed, and operation is impossible.**

- The operation is not compatible with the video configuration.

**The picture is stretched, with an incorrect aspect ratio.**

- The aspect setting is incorrect for the display.
  - Select the appropriate setting for that image.

**iPhone cannot be operated.**

- The iPhone is frozen.
  - Reconnect the iPhone with the USB interface cable for iPhone.
  - Update the iPhone software version.
- An error has occurred.
  - Reconnect the iPhone with the USB interface cable for iPhone.
  - Park your vehicle in a safe place, and then turn off the ignition switch (ACC OFF). Subsequently, turn the ignition switch to on (ACC ON) again.
  - Update the iPhone software version.
- Cables are not connected correctly.
  - Connect the cables correctly.

**Sound from the iPhone cannot be heard.**

- The audio output direction may switch automatically when the Bluetooth and USB connections are used at the same time.

- Use the iPhone to change the audio output direction.


### Problems with the phone screen

#### 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.
  - Perform the connection process.

### Problems with Application screen

#### A black screen is displayed.

- While operating an application, the application was ended on the smartphone side.
  - Touch  to display the top menu screen.
- The smartphone OS may be awaiting screen operation.
  - Stop the vehicle in a safe place and check the screen on the smartphone.

#### The screen is displayed, but operation does not work at all.

- An error has occurred.
  - Park your vehicle in a safe place, and then turn off the ignition switch (ACC OFF). Subsequently, turn the ignition switch to on (ACC ON) again.
  - When an Android device is connected, disconnect the Bluetooth connection from this product and then reconnect it.

#### The smartphone was not charged.

- Charging stopped because the temperature of the smartphone rose

due to prolonged use of the smartphone during charging.

- Disconnect the smartphone from the cable, and wait until the smartphone cools down.
- More battery power was consumed than was gained from charging.
  - This problem may be resolved by stopping any unnecessary services on the smartphone.

#### The status of the vehicle for the forwards and backwards directions are reversed.

- Since part of the vehicle status is sent to the connected device when you use the Android Auto function, this problem occurs when the reverse gear polarity setting of this product is incorrect.
  - Check the polarity and re-select the correct setting.

## 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

#### 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.

**TEMP**

- The temperature of this product is outside the normal operating range.
- Wait until this product returns to a temperature within the normal operating limits.

**Product overheat, For protection the System will shut down automatically in 1 minute. Re-cycle the ignition to restart the product. If this message keeps showing, please contact your dealer or local service centre**

- 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.

**Positioning is not possible due to hardware error. Please consult your dealer or local authorised service centre.**

- The location display is not possible due to hardware failure.
- Contact your dealer or an authorised Pioneer Station for assistance.

**No GPS antenna. Check connection.**

- GPS reception is lost.
- Check the aerial connection. If the message fails to disappear even after the engine is switched off/on, contact your dealer or an authorised Pioneer Station for assistance.

**GPS antenna problem detected. Contact dealer or service center.**

- GPS aerial lead is short-circuited.
- Contact your dealer or an authorised Pioneer Station for assistance.

**Calibration will start, but may be inaccurate without speed pulse.**

- The speed pulse sensor is not connected correctly.

- Contact your dealer or an authorised Pioneer Station for assistance.

**Sensor error. Please contact your dealer or Pioneer Service Center.**

- An error has occurred with the sensor.
- Contact your dealer or an authorised Pioneer Station for assistance.

**Detected unusual speed pulses.**

- The speed pulse cannot be detected correctly.
- Contact your dealer or an authorised Pioneer Station for assistance.

**Detected changes in the installation angle or position. The in-dash receiver is updating the sensor learning data.**

- Changes in the installation angle or position are detected.
- Wait until the sensor learning finishes.

**Speed pulse wire is not connected. The system will operate in simple hybrid mode.**

- Speed pulse wire is not connected.
- The speed pulse cannot be detected if the speed pulse wire is not connected correctly.

**DAB tuner**

**Check Antenna**

- The aerial connection is incorrect or an unusual voltage has been detected.
- Turn the ignition switch OFF and connect the aerial correctly. After connecting, turn back ON again.

**USB storage device**

**Error-02-9X/-DX**

- Communication failed.
- Turn the ignition switch OFF and back ON.
  - Disconnect the USB storage device.

- Change to a different source. Then, return to the USB storage device.

---

**Unplayable File**

- There is no playable file in the USB storage device.
  - Check that the files in the USB storage device are compatible with this product.
- Security for the connected USB storage device is enabled.
  - Follow the USB storage device instructions to disable security.

---

**Skipped**

- The connected USB storage device contains DRM protected files.
  - The protected files are skipped.

---

**Protect**

- All the files on the connected USB storage device are embedded with DRM.
  - Replace the USB storage device.

---

**Incompatible USB**

- The connected USB storage device is not supported by this product.
  - Disconnect your device and replace it with a compatible USB storage device.

---

**Check USB**

- The USB connector or USB cable has short-circuited.
  - Check that the USB connector or USB cable is not caught in something or damaged.
- The connected USB storage device consumes more than maximum allowable current.
  - Disconnect the USB storage device and do not use it. Turn the ignition switch to OFF, then to ACC or ON and then connect a compliant USB storage device.

---

**HUB Error**

- The connected USB hub is not supported by this product.
  - Directly connect the USB storage device to this product.

---

**No Response**

- This product cannot recognise the connected USB storage device.
  - Disconnect the device and replace it with another USB storage device.

---

**USB1 was disconnected for device protection. Do not re-insert this USB memory into the unit. Please restart the unit. (USB2 was disconnected for device protection. Do not re-insert this USB memory into the unit. Please restart the unit.)**

- 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 iPhone is short-circuited.
  - Confirm that the USB interface cable for 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.

## iPhone

### Error-02-6X/-9X/-DX

- iPhone failure.
  - Disconnect the cable from the iPhone. Once the iPhone's main menu is displayed, reconnect the iPhone and reset it.

### Error-02-67

- The iPhone firmware version is old.
  - Update the iPhone version.

## Bluetooth

### Error-10

- The power failed for the Bluetooth module of this product.
  - Turn the ignition switch to OFF and then to ON.

If the error message is still displayed after performing the above action, please contact your dealer or an authorised Pioneer Service Station.

## Apple CarPlay

### Attempting to connect to Apple CarPlay.

- Communication failed and the system is trying to connect.
- Wait for a while. Then, perform the actions below if the error message is still displayed.
  - Restart the iPhone.
  - Disconnect the cable from the iPhone, and then connect the iPhone again after a few seconds.
  - Turn the ignition switch to OFF and then to ON.

If the error message is still displayed after performing the above action, please contact your dealer or an authorised Pioneer Service Station.

## Android Auto

### Android Auto has stopped.

- The connected device is not compatible with Android Auto.
  - Check if the device is compatible with Android Auto.
- The startup of Android Auto failed for some reasons.
  - Disconnect the cable from the smartphone, and then connect the smartphone again after a few seconds.
  - Restart the smartphone.
  - 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.

- The time set in this product is not correct.
  - Check if GPS signals are received and the time is correctly set.

### Bluetooth pairing failed. Please pair your Android phone manually.

- The Bluetooth pairing failed for some reasons.
  - Pair this product with the device manually.

### To use Android Auto, please stop your car and check your Android phone.

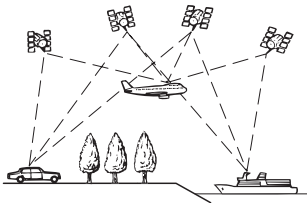
- The default settings are displayed on the screen of the Android Auto compatible device or images are not output from the Android Auto compatible device.
  - Park your vehicle in a safe place, and follow the instructions displayed on the screen. If the error message is still displayed after performing on-screen instructions, please reconnect the device.

## Positioning technology

### Positioning by GPS

The Global Positioning System (GPS) uses a network of satellites orbiting the Earth. Each of the satellites, which orbit at a height of 68 900 000 feet (21 000 km), continually broadcasts radio signals giving time and position information. This ensures that signals from at least three can be picked up from any open area on the ground's surface.

The accuracy of the GPS information depends on how good the reception is. When the signals are strong and reception is good, GPS can determine latitude, longitude and altitude for accurate positioning in three dimensions. But if signal quality is poor, only two dimensions, latitude and longitude, can be obtained and positioning errors are somewhat greater.



### Positioning by dead reckoning

The built-in sensor in the navigation system also calculates your position. The current location is measured by detecting driving distance with the speed pulse, the turning direction with the gyro sensor and inclination of the road with the G sensor.

The built-in sensor can even calculate changes of altitude, and correct the discrepancies in the distance 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?

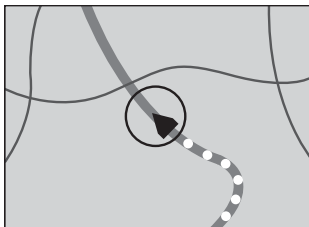
For maximum accuracy, your navigation system continually compares GPS data with your estimated position as calculated from the data of built-in sensor. However, if only the data from the built-in sensor is available for a long period, positioning errors are gradually compounded until the estimated position 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 (page 116).

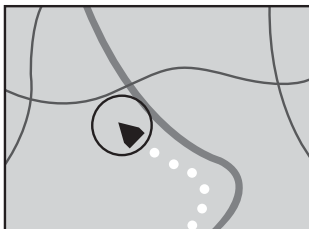
## Map matching

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

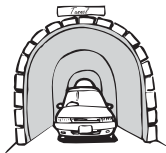
Positioning errors are kept to a minimum by combining GPS, dead reckoning and map matching. However, in some situations, these functions may not work

properly, and the error may become bigger.

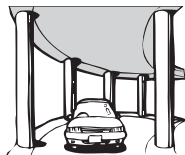
### When positioning by GPS is impossible

- 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.

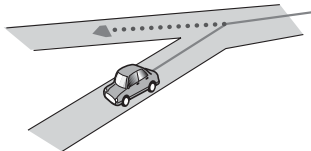
#### NOTE

If a GPS signal has not been received for a long time, your vehicle's actual position and the current position mark on the map may diverge considerably or may not be updated. In such case, once GPS reception is restored, accuracy will be recovered.

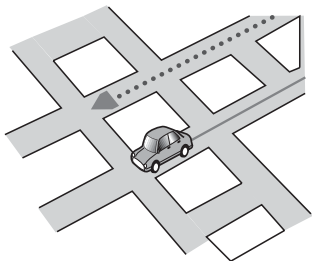
### Conditions likely to cause noticeable positioning errors

For various reasons, such as the state of the road you are 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.

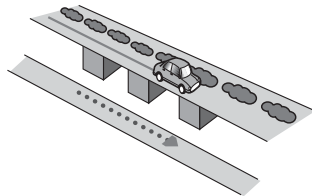
#### If you make a slight turn.



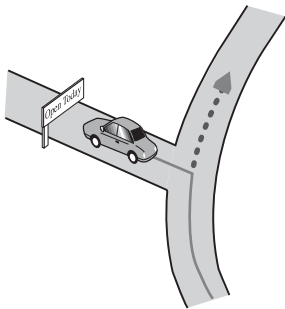
#### If there is a parallel road.



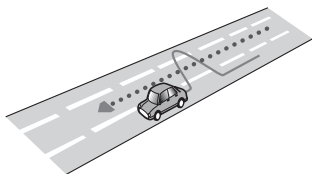
#### If there is another road very nearby, such as in the case of an elevated motorway.



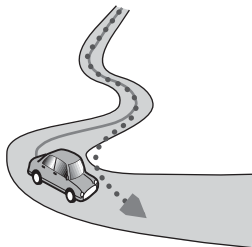
#### If you take a recently opened road that is not on the map.



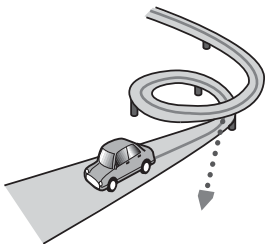
If you drive in zigzags.



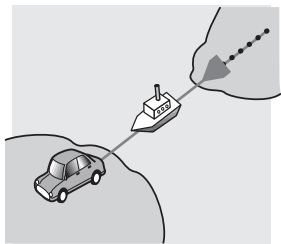
If the road has a series of hairpin bends.



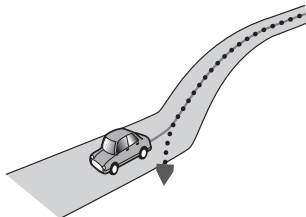
If there is a loop or similar road configuration.



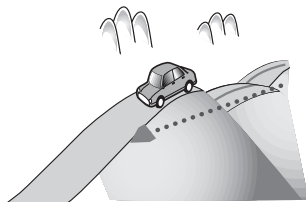
If you take a ferry.



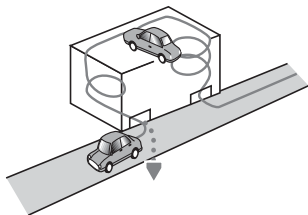
If you are driving on a long, straight road or a gently curving road.



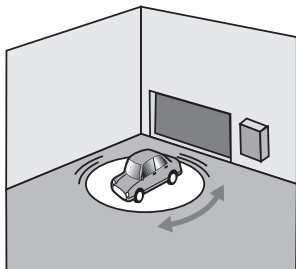
If you are on a steep mountain road with many height changes.



**If you enter or exit a multi-storey car park or similar structure using a spiral ramp.**



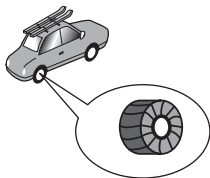
**If your vehicle is turned on a turntable or similar structure.**



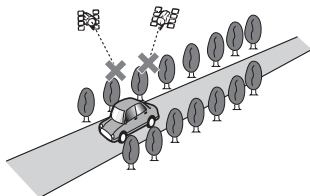
**If your vehicle's wheels spin, such as on a rough track or in snow.**



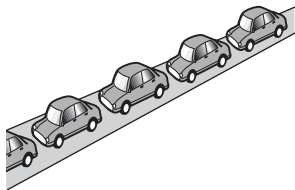
**If you put on chains, or change your tyres for ones with a different size.**



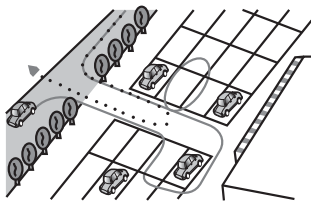
**If trees or other obstacles block the GPS signals for a considerable period.**



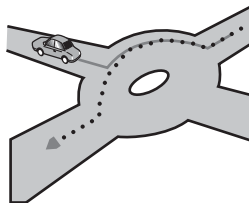
**If you drive very slowly, or in a start-and-stop manner, as in a traffic jam.**



**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.**

## 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.

## Detailed information for playable media

### Compatibility

#### Common notes about the USB storage device

- Do not leave the USB storage device in any location with high temperatures.
- Depending on the kind of the USB storage device you use, this product may not 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 USB storage device with complex folder hierarchies.
- Operations may vary depending on the kind of an USB storage device.
- It may not be possible to play some music files from USB because of file characteristics, file format, recorded application, playback environment, storage conditions, and so on.
- Copyright protected files cannot be played back.

#### USB storage device

- For details about USB storage device compatibility with this product, refer to Specifications (page 148).
- 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.
- 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.

### Media compatibility chart

#### General

- Files may not be played back properly depending on the environment in which

the file was created or on the contents of the file.

- This product may not play back files, depending on the application used to encode the files.
- This product may not operate correctly, depending on the application used to encode WMA files.
- Depending on the version of Windows Media™ Player used to encode WMA files, album names and other text information may not be correctly displayed.
- There may be a slight delay when starting playback of audio files encoded with image data.
- This product is not compatible with packet write data transfer.
- This product can 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.
- Maximum playback time of audio file stored on an USB storage device: 7.5 h (450 minutes)
- This product assigns folder numbers. The user cannot assign folder numbers.

### USB storage device

CODEC FORMAT	MP3, WMA, AAC, WAV, FLAC, H.264, MPEG2, MPEG4, WMV, FLV, MKV, JPEG
FILE SYSTEM	FAT16/32/NTFS
MAX. DIRECTORY	8

MAX. FOLDER No.	FAT16, FAT32: 65 536 NTFS: No limit
MAX. FILE No.	FAT16, FAT32: 65 536 NTFS: No limit

### MP3 compatibility

- 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

SAMPLING FREQUENCY	16 kHz to 48 kHz
TRANSMISSION RATE	CBR(8 kbps to 320 kbps), VBR
ID3 TAG	v1,v1.1,v2.2,v2.3,v2.4

### WMA compatibility

- This product is not compatible with the following: Windows Media™ Audio 9 Professional, Lossless, Voice

SAMPLING FREQUENCY	32 kHz to 48 kHz
TRANSMISSION RATE	CBR(48 kbps to 320 kbps), VBR

### WAV compatibility

- The sampling frequency shown in the display may be rounded.

DECODING FORMAT	LPCM
SAMPLING FREQUENCY	16 kHz to 48 kHz
QUANTIZATION BIT RATE	8 bit, 16 bit

### AAC compatibility

- This product plays back AAC files encoded by iTunes.

SAMPLING FREQUENCY	11.025 kHz to 48 kHz
--------------------	----------------------

TRANSMISSION RATE	CBR(16 kbps to 320 kbps)
-------------------	--------------------------

### FLAC compatibility

SAMPLING FREQUENCY	8 kHz to 192 kHz
QUANTIZATION BIT RATE	8 bit, 16 bit, 24 bit

### Audio and video files compatibility

- Files may not be able to be played back depending on the bit rate.
- Only USB storage devices can play back VOB files.

#### .avi

Compatible video codec	MPEG4, H.264, H.263, Xvid
Maximum resolution	1 920 x 1 080
Maximum frame rate	30 fps

#### .mp4

Compatible video codec	MPEG4, H.264, H.263
Maximum resolution	1 920 x 1 080
Maximum frame rate	30 fps

#### .3gp

Compatible video codec	MPEG4, H.264, H.263
Maximum resolution	1 920 x 1 080
Maximum frame rate	30 fps

#### .mkv

Compatible video codec	MPEG4, H.264
Maximum resolution	1 920 x 1 080
Maximum frame rate	30 fps

#### .mov

Compatible video codec	MPEG4, H.264, H.263
Maximum resolution	1 920 x 1 080
Maximum frame rate	30 fps

#### .flv

Compatible video codec	H.264
Maximum resolution	1 920 x 1 080
Maximum frame rate	30 fps

#### .f4v

Compatible video codec	H.264
Maximum resolution	1 920 x 1 080
Maximum frame rate	30 fps

#### .asf

Compatible video codec	WMV/VC-1
Maximum resolution	1 920 x 1 080
Maximum frame rate	30 fps

#### .wmv

Compatible video codec	WMV/VC-1
Maximum resolution	1 920 x 1 080
Maximum frame rate	30 fps

#### .vob

Compatible video codec	MPEG2, H.264
Maximum resolution	1 920 x 1 080
Maximum frame rate	30 fps

## Bluetooth



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## FLAC

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Foundation

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## AAC

AAC is short for Advanced Audio Coding and refers to an audio compression technology standard used with MPEG-2 and MPEG-4. Several applications can be used to encode AAC files, but file formats and extensions differ depending on the application which is used to encode. This



unit plays back AAC files encoded by iTunes.

## WebLink

WebLink™ is a trademark of Abalta Technologies, Inc.

## Waze

Waze is a trademark of Google LLC.

## Google, Android, Google Play

Google, Android and Google Play are trademarks of Google LLC.

## Android Auto

# androidauto

Android Auto is a trademark of Google LLC.

## Detailed information regarding connected iPhone devices

- Pioneer accepts no responsibility for data lost from an iPhone, even if that data is lost while using this product. Please back up your iPhone data regularly.
- Do not leave the iPhone in direct sunlight for extended amounts of time. Extended exposure to direct sunlight can result in iPhone malfunction due to the resulting high temperature.

- Do not leave the iPhone in any location with high temperatures.
- Firmly secure the iPhone when driving. Do not let the iPhone fall onto the floor, where it may become jammed under the brake or accelerator.
- For details, refer to the iPhone manuals.

## iPhone and Lightning



Use of the Made for Apple badge means that an accessory has been designed to connect specifically to the Apple product(s) identified in the badge and has been certified by the developer to meet Apple performance standards.

Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

Please note that the use of this accessory with an Apple product may affect wireless performance.

iPhone and Lightning are trademarks of Apple Inc., registered in the U.S. and other countries.

## App Store

App Store is a service mark of Apple Inc., registered in the U.S. and other countries.

## iOS

iOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license.

## iTunes

iTunes is a trademark of Apple Inc., registered in the U.S. and other countries.

## Apple Music

Apple Music is a trademark of Apple Inc., registered in the U.S. and other countries.

## Apple CarPlay



Apple CarPlay is a trademark of Apple Inc.

Use of the Apple CarPlay logo means that a vehicle user interface meets Apple performance standards. Apple is not responsible for the operation of this vehicle or its compliance with safety and regulatory standards. Please note that the use of this product with iPhone or iPod may affect wireless performance.

## Siri

Works with Siri through the microphone.

## Using app-based connected content



### Important

Requirements to access app-based connected content services using this product:

- Latest version of the Pioneer compatible connected content application(s) for the smartphone, available from the service provider, downloaded to your smartphone.
- A current account with the content service provider.
- Smartphone Data Plan.  
Note: if the Data Plan for your smartphone does not provide for unlimited data usage, additional charges from your carrier may apply for accessing app-based connected content via 3G, EDGE and/or LTE (4G) networks.
- Connection to the Internet via 3G, EDGE, LTE (4G) or Wi-Fi network.
- Optional Pioneer adapter cable connecting your iPhone to this product.

### Limitations:

- Access to app-based connected content will depend on the availability of cellular and/or Wi-Fi network coverage for the purpose of allowing your smartphone to connect to the Internet.
- Service availability may be geographically limited to the region. Consult the connected content service provider for additional information.
- Ability of this product to access connected content is subject to change without notice and could be affected by any of the following: compatibility issues with future firmware versions of smartphone; compatibility issues with future versions of the connected content application(s) for the smartphone; changes to or discontinuation of the connected Content application(s) or service by its provider.
- Pioneer is not liable for any issues that may arise from incorrect or flawed app-based content.
- The content and functionality of the supported applications are the responsibility of the App providers.

- In WebLink, Apple CarPlay and Android Auto, functionality through the product is limited while driving, with available functions determined by the App providers.
- Availability of WebLink, Apple CarPlay and Android Auto functionalities is determined by the App provider, and not determined by Pioneer.
- WebLink, Apple CarPlay and Android Auto allow 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.

## 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 open source licenses

For details about the open source licenses for the functions that this product is equipped with, please visit <http://www.oss-pioneer.com/car/multimedia/>

## Map coverage

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

## Using the LCD screen correctly

### Handling the LCD screen

- When the LCD screen is subjected to direct sunlight for a long period of time, it will become very hot, resulting in possible damage to the LCD screen. When not using this product, avoid exposing it to direct sunlight as much as possible.
- The LCD screen should be used within the temperature ranges shown in Specifications (page 148).
- Do not use the LCD screen at temperatures higher or lower than the operating temperature range, because the LCD screen may not operate normally and could be damaged.
- The LCD screen is exposed in order to increase its visibility within the vehicle. Please do not press strongly on it as this may damage it.
- Do not push the LCD screen with excessive force as this may scratch it.
- Never touch the LCD screen with anything besides your finger when operating the touch panel functions. The LCD screen can scratch easily.

### Liquid crystal display (LCD) screen

- If the LCD screen is near the vent of an air conditioner, make sure that air from the

air conditioner is not blowing on it. Heat from the heater may break the LCD screen, and cool air from the cooler may cause moisture to form inside this product, resulting in possible damage.

- Small black dots or white dots (bright dots) may appear on the LCD screen. These are due to the characteristics of the LCD screen and do not indicate a malfunction.
- The LCD screen will be difficult to see if it is exposed to direct sunlight.
- When using a 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.

## Specifications

### General

- Rated power source:  
14.4 V DC (10.8 V to 15.1 V allowable)
- Earthing system:  
Negative type
- Maximum current consumption:  
10.0 A
- Dimensions (W × H × D):  
Chassis D:  
178 mm × 100 mm × 149.5 mm  
Nose:  
230 mm × 139 mm × 24 mm
- Weight:  
2.0 kg
- NAND flash memory:  
16 GB

### Navigation

- GPS receiver:  
System:  
GPS L1C/Ac, SBAS L1C/A, GLONASS L1OF  
SPS (Standard Positioning Service)
- Reception system:  
72-channel multi-channel reception system
- Reception frequency:  
1 575.42 MHz/1 602 MHz
- Sensitivity:  
-140 dBm (typ)
- Position update frequency:  
Approx. once per second
- GPS aerial:  
Aerial:  
Micro strip flat aerial/right-handed helical polarization
- 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:  
9.0 inch wide/16:9 (effective display area:  
196.20 mm × 117.72 mm)

Pixels:  
800 (Width) × 480 (Height) × 3 (RGB)

Display method:  
TFT Active matrix driving

Colour system:  
PAL/NTSC/PAL-M/PAL-N/SECAM  
compatible

Temperature range:  
-10 °C to +60 °C

## Audio

Maximum power output:

- 50 W × 4 ch/4 Ω
- 50 W × 2 ch/4 Ω + 70 W × 1 ch/2 Ω (for subwoofer)

Continuous power output:  
22 W × 4 (50 Hz to 15 kHz, 5 %THD, 4 Ω  
LOAD, Both Channels Driven)

Load impedance:  
4 Ω (4 Ω to 8 Ω allowable)

Preout output level (max): 4.0 V

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 (2 dB/step)  
<Standard Mode>

HPF:

Frequency:  
25 Hz/31.5 Hz/40 Hz/50 Hz/63 Hz/80  
Hz/100 Hz/125 Hz/160 Hz/200 Hz/250  
Hz

Slope:  
-6 dB/oct, -12 dB/oct, -18 dB/oct, -24  
dB/oct, OFF

Subwoofer/LPF:

Frequency:  
25 Hz/31.5 Hz/40 Hz/50 Hz/63 Hz/80

Hz/100 Hz/125 Hz/160 Hz/200 Hz/250  
Hz

Slope:  
-6 dB/oct, -12 dB/oct, -18 dB/oct, -24  
dB/oct, -30 dB/oct, -36 dB/oct, OFF

Phase: Normal/Reverse

Time alignment:  
0 to 140 step (2.5 cm/step)

Bass boost:  
Gain: +12 dB to 0 dB (2 dB/step)

Speaker level:  
+10 dB to -24 dB (1 dB/step)

<Network Mode>

HPF (High):

Frequency:  
1.25 kHz/1.6 kHz/2 kHz/2.5 kHz/3.15  
kHz/4 kHz/5 kHz/6.3 kHz/8 kHz/10 kHz/  
12.5 kHz

Slope:  
-6 dB/oct, -12 dB/oct, -18 dB/oct, -24  
dB/oct

Phase: Normal/Reverse

HPF (Mid):

Frequency:  
25 Hz/31.5 Hz/40 Hz/50 Hz/63 Hz/80  
Hz/100 Hz/125 Hz/160 Hz/200 Hz/250  
Hz

Slope:  
-6 dB/oct, -12 dB/oct, -18 dB/oct, -24  
dB/oct, OFF

LPF (Mid):

Frequency:  
1.25 kHz/1.6 kHz/2 kHz/2.5 kHz/3.15  
kHz/4 kHz/5 kHz/6.3 kHz/8 kHz/10 kHz/  
12.5 kHz

Slope:  
-6 dB/oct, -12 dB/oct, -18 dB/oct, -24  
dB/oct, OFF

HPF/LPF (Mid):

Phase: Normal/Reverse

Subwoofer:

Frequency:  
25 Hz/31.5 Hz/40 Hz/50 Hz/63 Hz/80  
Hz/100 Hz/125 Hz/160 Hz/200 Hz/250  
Hz

Slope:  
 -6 dB/oct, -12 dB/oct, -18 dB/oct, -24  
 dB/oct, -30 dB/oct, -36 dB/oct, OFF  
 Phase: Normal/Reverse

Time alignment:  
 0 to 140 step (2.5 cm/step)

Bass boost:  
 Gain: +12 dB to 0 dB (2 dB/step)

Speaker level:  
 +10 dB to -24 dB (1 dB/step)

## USB

---

USB standard spec:  
 USB 1.1, USB 2.0 high speed

Max current supply: 1.5 A

USB Class:  
 MSC (Mass Storage Class), iPod (Audio  
 Class, HID Class)

File system: FAT16, FAT32, NTFS

<USB audio>

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:  
 WMA 10 Std, WMA 10 Pro, WMA 9  
 Lossless

AAC decoding format:  
 MPEG-2 AAC-LC, MPEG-4 AAC-LC

FLAC signal format:  
 Ver. 1.3.0

WAV signal format:  
 Linear PCM

<USB image>

JPEG decoding format:  
 JPEG

<USB video>

H.264 video decoding format:  
 Base Line Profile, Main Profile, High  
 Profile

WMV video decoding format:  
 VC-1 SP/MP/AP, WMV 7/8  
 MPEG4 video decoding format:  
 Simple Profile, Advanced Simple Profile  
 (except GMC)

## Bluetooth

---

Version:  
 Bluetooth 4.1  
 Output power:  
 +4 dBm Max. (Power class 2)  
 Frequency band:  
 2 400 MHz to 2 483.5 MHz

## FM tuner

---

Frequency range:  
 87.5 MHz to 108 MHz  
 Usable sensitivity:  
 12 dBf (1.1  $\mu$ V/75  $\Omega$ , mono, S/N: 30 dB)  
 Signal-to-noise ratio:  
 72 dB (IEC-A network)

## MW tuner

---

Frequency range:  
 531 kHz to 1 602 kHz (9 kHz)  
 Usable sensitivity:  
 28  $\mu$ V (S/N: 20 dB)  
 Signal-to-noise ratio:  
 62 dB (IEC-A network)

## LW tuner

---

Frequency range:  
 153 kHz to 281 kHz  
 Usable sensitivity:  
 30  $\mu$ 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 to 13F)  
 Frequency range (L Band):  
 1 452.960 MHz to 1 490.624 MHz (LA to  
 LW)  
 Usable sensitivity:  
 -100 dBm  
 Signal-to-noise ratio: 85 dB

## Wi-Fi

---

Frequency channel:

1, 6, 11 ch (2.4 GHz)

149, 151, 155 ch (5 GHz)

Security:

WPA 2 (personal)

Output power:

+16 dBm Max (2.4 GHz)

+13 dBm Max (5 GHz)

### **NOTE**

Specifications and design are subject to possible modifications without notice due to improvements.

**<https://www.pioneer-car.eu/eur/>**

Visit **[www.pioneer-car.eu/uk/](https://www.pioneer-car.eu/uk/)** (or **[www.pioneer-car.eu/eur/](https://www.pioneer-car.eu/eur/)**) to register your product.  
Visitez **[www.pioneer-car.eu/fr/fr](https://www.pioneer-car.eu/fr/fr)** (ou **[www.pioneer-car.eu/eur/](https://www.pioneer-car.eu/eur/)**) pour enregistrer votre appareil.  
Si prega di visitare il sito **[www.pioneer-car.eu/it/it](https://www.pioneer-car.eu/it/it)** (o **[www.pioneer-car.eu/eur/](https://www.pioneer-car.eu/eur/)**) per registrare il prodotto.  
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Bezoek **[www.pioneer-car.eu/nl/nl](https://www.pioneer-car.eu/nl/nl)** (of **[www.pioneer-car.eu/eur/](https://www.pioneer-car.eu/eur/)**) om uw product te registreren.

To keep up to date with the latest navigational data, you can periodically update your navigation system. For further details, please visit:

**<https://pioneer.naviextras.com>**



**[pioneer.naviextras.com](https://pioneer.naviextras.com)**

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