

Operation Manual

NAVIGATION AV SYSTEM

AVIC-F77DAB

AVIC-F70DAB

AVIC-F970DAB

AVIC-F970BT

AVIC-F9770DAB

AVIC-F9770BT

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

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

Thank you for buying this Pioneer product.

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



Important

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

01 Introduction

- Manual overview **10**
 - How to use this manual **10**
 - Conventions used in this manual **10**
 - Terms used in this manual **10**
- Notes on internal memory **11**
 - Before removing the vehicle battery **11**
 - Data subject to erasure **11**
 - Resetting the microprocessor **11**

02 Basic operation

- Checking part names and functions **12**
- Protecting your product against theft **13**
 - Removing the detachable faceplate **13**
 - Attaching the detachable faceplate **13**
- Notes on using the LCD panel **14**
- Adjusting the LCD panel angle **14**
- Inserting/ejecting/connecting media **14**
 - Inserting and ejecting a disc **15**
 - Inserting and ejecting an SD memory card **15**
 - Connecting and disconnecting an iPod **16**
 - Plugging and unplugging a USB storage device **16**
- Startup and termination **16**
- On first-time startup **16**
- Regular startup **17**
 - A message about the map database **17**
- Turning off the display **17**

- When the Application screen is available **17**
- When the Application screen is not available **17**

How to use the screens **18**

- Switching screens using the touch panel keys **18**
- Switching screens using the hardware buttons **19**

Supported AV source **20**

Displaying the AV operation screen **20**

- Selecting a front source on the AV source selection screen **21**
- Selecting a front source on the source list **21**
- Selecting a rear source **21**

Turning off the AV source **21**

Changing the display order of source icons **21**

Changing the display order of source keys **22**

Using the touch panel **22**

- Using the common touch panel keys **22**
- Operating list screens **23**
- Operating the time bar **23**
- Operating the on-screen keyboard **23**

On first-time startup of the navigation system **24**

03 How to use the Navigation menu screen

Operating the Navigation menu screen **25**

04 How to use the map

How to read the Map screen **27**

AV information bar **27**

Operating the Map screen **28**

- Changing the scale of the map **28**
- Smart Zoom **28**
- Switching between 2D, 3D, and 2D North up views **28**
- Scrolling the map to the position you want to see **29**

- Control keys on the scrolled map **29**
- Understanding the route guidance **30**
 - Frequently shown route events **30**
- Browsing the data field **31**
 - When the system cannot receive a GPS signal **31**

05 Searching for a destination

- Searching for a location by address **33**
- Searching for Points of Interest (POI) **34**
 - Searching for POIs using preset categories **34**
 - Searching for POIs by categories or directly from the name of the facilities **35**
 - Searching for providers nearby that offer emergency or roadside assistance services **36**
- Selecting a destination from stored locations **37**
- Selecting a destination from stored routes **37**
- Selecting a location you searched for recently **38**
 - History **38**
 - Smart History **38**
- Searching for a location using “Combined Search” **39**
- Searching for a location by the coordinates **40**
- Searching for a location by scrolling the map **40**
- Using the “Map Location” screen **41**

06 Checking and modifying the current route

- Modifying the route **42**
 - Building a route using “Route Planner” **42**
 - Adding waypoints **43**
 - Checking route alternatives **43**
 - Checking detour routes **44**

- Checking route information and preferences **44**
- Cancelling the current route guidance **45**
- Watching the simulation of the route **46**

07 Registering and editing locations and routes

- Storing a location in “Saved Location” **47**
 - Storing your home and your workplace location **47**
 - Storing your favourite locations **47**
 - Editing stored locations **47**
- Storing a route in “Saved Routes” **48**
- Editing the stored route **49**
 - Renaming stored routes **49**
 - Deleting stored routes **49**
- Saving a location as an alert point **49**
- Editing the stored alert points **50**

08 Receiving real-time traffic information (TMC)

- Viewing the traffic list **51**
- Checking the traffic incidents on the map **51**
- When traffic incidents occur on your route **52**
- Turning the traffic information on or off **52**

09 Checking useful information about your trip

- Checking useful information **53**
- Recording your travel history **54**
 - Activating trip logger temporarily **54**
 - Browsing the trip log **54**
 - Setting the trip logger **55**
 - Editing a trip log **55**
- Using the Trip Computer mode **55**
- Calculating the fuel consumption **56**
 - Setting the initial odometer value **56**
 - Entering the fuel consumption information **56**

- Setting the car maintenance schedule **57**

10 Customising preferences of the navigation

- Customising the navigation settings **58**
 - Restoring the default settings **59**
- Information on each option of “Settings” **59**
 - “Route Preferences” settings **59**
 - “Sound” settings **61**
 - “Warnings” settings **62**
 - “Navigation Map” settings **62**
 - “Regional” settings **64**
 - “Display” settings **65**
 - “Traffic” settings **65**
 - “Weather” settings **65**
 - “Fuel” settings **65**
 - “Trip Monitor” settings **65**
 - “Online Services” settings **66**
 - “Usage Reports” settings **66**
- Setting the alert point warnings **66**
- Expanding the use of the navigation functions **67**
 - Be sure to read before you use AVICSYNC function **67**
 - What is the AVICSYNC App? **68**
- Compatibility and connectivity **68**
 - AVICSYNC compatibility **68**
 - Preparations before using the AVICSYNC function **69**
- Getting the map update **69**

11 Registering and connecting a Bluetooth device

- Preparing communication devices **70**
- Registering your Bluetooth devices **70**
 - Searching for nearby Bluetooth devices **70**
 - Pairing from your Bluetooth devices **71**
 - Connecting to a Bluetooth device automatically **72**
 - Deleting a registered device **72**

- Connecting a registered Bluetooth device manually **73**
- Switching visibility **73**
- Entering the PIN code for Bluetooth wireless connection **73**
- Displaying the Bluetooth address **74**
- Clearing the Bluetooth memory **74**
- Updating Bluetooth software **74**
- Displaying the Bluetooth software version **75**

12 Using hands-free phoning

- Displaying the phone menu **76**
 - Touch panel keys **76**
 - Reading the screen **76**
- Making a phone call **77**
 - Direct dialling **77**
 - Calling a number in the phone book **77**
 - Dialling from the history **78**
 - Using the preset dial lists **79**
- Receiving a phone call **79**
 - Answering an incoming call **80**
- Minimising the dial confirmation screen **80**
- Changing the phone settings **81**
 - Answering a call automatically **81**
 - Switching the ring tone **81**
 - Inverting names in the phone book **81**
 - Setting the private mode **81**
 - Adjusting the other party’s listening volume **82**
- Using the voice recognition function **82**
- Notes for hands-free phoning **82**

13 iPod / iPhone or smartphone setup operation

- The basic flow of iPod / iPhone or smartphone setup **84**
- Setting the device connection method **84**
- iPod compatibility **84**
- Android™ device compatibility **85**
- AppRadio Mode Compatibility **85**
- MirrorLink device compatibility **85**

Information on the connections and functions for each device **86**

14 Using the radio

- Using the touch panel keys **89**
- Reading the screen **89**
- Starting procedure **90**
- Selecting a band **90**
- Manual tuning **90**
- Seek tuning **90**
- Selecting a preset channel from the preset channel list **91**
- Storing broadcast frequencies **91**
- Storing the strongest broadcast frequencies **91**
- Tuning into strong frequencies **91**
- Receiving traffic announcements **92**
- Using news programme interruption **93**
- Tuning into alternative frequencies **94**
- Limiting stations to regional programming **95**
- Switching Auto PI seek **95**
 - Activating the Auto PI seek for preset stations **95**
- Switching the sound quality of the FM tuner **96**
- Storing song information to an iPod (iTunes Tagging) **97**
- Operating with the hardware buttons **97**

15 Using the Digital Radio (DAB)

- Using the touch panel keys **98**
- Reading the screen **99**
- Starting procedure **99**
- Selecting a band **99**
- Selecting a channel from the list **99**
- Listening to a recent broadcast **100**
- Manual tuning **100**
- Seek tuning **101**
- Selecting a preset channel from the preset channel list **101**
- Storing broadcast frequencies **101**

- Switching to a channel with good receiving sensitivity automatically **101**
- Switching to a similar channel with good receiving sensitivity automatically **102**
- Receiving traffic announcements **103**
- Operating with the hardware buttons **103**

16 Playing a disc

- Using the touch panel keys (for audio) **104**
- Using the touch panel keys (for video) **104**
- Reading the screen (for audio) **106**
- Reading the screen (for video) **106**
- Starting procedure **107**
- Selecting files from the file name list **107**
- Playing tracks in random order **107**
- Setting a repeat play range **107**
- Switching the media file type **108**
- Searching for the part you want to play **108**
- Operating the DVD menu **108**
- Switching the subtitle language **109**
- Switching the audio language **109**
- Frame-by-frame playback **109**
- Slow motion playback **109**
- Returning to a specified scene **109**
- Resuming playback (Bookmark) **110**
- Operating the DVD menu using touch panel keys **110**
- Switching the multi-angle DVD display **110**
- Selecting the audio output **110**
- Operating with the hardware buttons **111**

17 Playing compressed audio files

- Using the touch panel keys **112**
- Reading the screen **113**
- Starting procedure (for Disc) **114**
- Starting procedure (for USB/SD) **114**
- Switching the browse mode **114**
- Selecting files from the file name list **115**
- Selecting a file from the list related to the song currently playing (link search) **115**
- Playing files in random order **115**
- Setting a repeat play range **116**
- Switching the media file type **116**

Operating with the hardware buttons **116**

18 Playing compressed video files

Using the touch panel keys **117**
 Reading the screen **118**
 Starting procedure (for Disc) **118**
 Starting procedure (for USB/SD) **118**
 Selecting files from the file name list **118**
 Setting a repeat play range **119**
 Frame-by-frame playback **119**
 Slow motion playback **119**
 Switching the media file type **119**
 Operating with the hardware buttons **119**

19 Playing compressed still image files

Using the touch panel keys **120**
 Reading the screen **120**
 Starting procedure **120**
 Selecting files from the file name list **121**
 Playing files in random order **121**
 Setting a repeat play range **121**
 Switching the media file type **121**
 Setting the slideshow interval **121**
 Operating with the hardware buttons **122**

20 Using an iPod

Using the touch panel keys (for audio) **123**
 Using the touch panel keys (for video) **123**
 Reading the screen (for audio) **124**
 Reading the screen (for video) **124**
 Starting procedure **125**
 Setting the shuffle play **125**
 Setting a repeat play range **126**
 Selecting song or video sources from the playlist screen **126**
 Using this product's iPod function from your iPod **127**
 Changing the speed of audiobook playback **127**
 Displaying lists related to the song currently playing (link search) **128**
 Operating with the hardware buttons **128**

Playing back music from a music app other than iPod music, as the iPod source **128**

- Using the touch panel keys **128**
- Reading the screen **129**

21 Playing music output from the Android Auto-compatible device

Using the touch panel keys **130**
 Reading the screen **130**
 Starting procedure **131**

22 Using your iPhone or smartphone applications

Using AppRadio Mode **132**

- Using the touch panel keys (App control side bar) **132**
- Starting procedure **133**
- Using the keyboard **134**
- Adjusting the image size (For smartphone users) **135**
- Displaying the image of your application (iPhone with 30-pin connector) **136**
- Displaying the image of your application (iPhone with Lightning connector) **136**
- Displaying the image of your application (smartphone) **136**

Using Android Auto **137**

- Starting procedure **138**
- Setting the driving position **138**
- Adjusting the volume **138**

Using MirrorLink mode **139**

- Using the touch panel keys (App control side bar) **139**
- Starting procedure **139**

Using the audio mix function **140**

23 Using Aha Radio

Using the touch panel keys **141**
 Reading the screen **142**
 Starting procedure **142**

- For iPhone with a 30-pin connector users **142**
- For iPhone with a Lightning connector users **143**
- For smartphone users **143**
- Operating with the hardware buttons **144**
- 24 Using a Bluetooth audio player**
 - Using the touch panel keys **145**
 - Reading the screen **146**
 - Starting procedure **146**
 - Selecting files from the file name list **147**
 - Playing files in random order **147**
 - Setting a repeat play range **147**
 - Operating with the hardware buttons **147**
- 25 Using an HDMI source**
 - Using the touch panel keys **148**
 - Reading the screen **148**
 - Starting procedure **148**
- 26 Using an AUX source**
 - Using the touch panel keys **149**
 - Reading the screen **149**
 - Starting procedure **149**
 - Setting the video signal **150**
 - Switching the operation screen **150**
- 27 Using AV input**
 - Using the touch panel keys **151**
 - Reading the screen **151**
 - Starting procedure **151**
 - Setting the video signal **152**
- 28 Using MIXTRAX**
 - Touch panel keys **153**
 - Selecting an item to play songs **153**
 - Selecting songs not to be played **153**
 - Specifying the playback portion **154**
 - Setting the flash pattern **154**
- 29 System settings**
 - Navigation info window **155**
 - Setting automatic switching to the navigation screen **155**
 - Setting the FM tuning step **155**
 - Setting the Digital Radio aerial power supply **156**
 - Activating the Bluetooth audio source **157**
 - Setting the ever scroll **157**
 - Setting AV input **157**
 - Setting the rear view camera **158**
 - Setting rear view camera activation **158**
 - Setting the polarity of the rear view camera **159**
 - Setting the reversed image display for the rear view image **159**
 - Setting the camera for Camera View mode **160**
 - Displaying the parking assist guidelines **160**
 - Setting guidelines on the rear view image **161**
 - Setting the second camera input **162**
 - Setting the second camera activation **162**
 - Setting the reversed image setting for the second camera input image **163**
 - Setting the safe mode **163**
 - Turning off the demo screen **164**
 - Selecting the system language **164**
 - Reversing the climate control status display **164**
 - Setting the keyboard language with the application for iPhone **165**
 - Setting the beep sound **165**
 - Adjusting the response positions of the touch panel (touch panel calibration) **165**
 - Setting the dimmer function **166**
 - Setting whether to activate the dimmer function **167**
 - Setting the duration of time for the dimmer function to be active **167**
 - Adjusting the picture **168**

- Displaying the firmware version **169**
- Updating firmware **169**
- Checking sensor learning status and driving status **170**
- Clearing the status **171**
- Checking the connections of leads **171**
- 30 Audio adjustments**
 - Using fader/balance adjustment **173**
 - Using balance adjustment **173**
 - Switching sound muting/attenuation **174**
 - Adjusting source levels **174**
 - Adjusting the filter **176**
 - Adjusting the front and rear speaker output **176**
 - Using the subwoofer output **177**
 - Selecting the listening position **177**
 - Adjusting the speaker output levels finely **178**
 - Adjusting the time alignment **179**
 - Using the automatic sound leveliser **180**
 - Using the equaliser **181**
 - Recalling equaliser curves **181**
 - Customising the equaliser curves **181**
 - Using the auto-adjusted equaliser **182**
 - Adjusting the equaliser curve automatically (Auto EQ) **182**
 - Before operating the Auto EQ function **182**
 - Performing Auto EQ **183**
- 31 Theme menu**
 - Selecting the background display **185**
 - Changing to the background display image stored on the external storage device (USB, SD) **185**
 - Setting the illumination colour **186**
 - Selecting the colour from the preset colours **186**
 - Creating a user-defined colour **187**
 - Selecting the theme colour **187**
 - Selecting the clock image **188**
 - Changing the preinstalled splash screen **188**
 - Changing to the splash screen stored on the external storage device (USB, SD) **188**
 - Replicating the settings **189**
 - Exporting “Theme” settings **189**
 - Importing “Theme” settings **190**
- 32 Setting up the video player**
 - Setting the top-priority languages **191**
 - Setting the subtitle language **191**
 - Setting the audio language **191**
 - Setting the menu language **192**
 - Setting the angle icon display **192**
 - Setting the aspect ratio **193**
 - Setting parental lock **193**
 - Setting the code number and level **193**
 - Displaying your DivX VOD registration code **194**
 - Displaying your DivX VOD deregistration code **195**
 - Automatic playback of DVDs **195**
 - Setting the video signal for the rear view camera **195**
 - Setting the video output format **196**
 - Language code chart for DVDs **197**
- 33 Favourite menu**
 - Creating a shortcut **198**
 - Selecting a shortcut **198**
 - Removing a shortcut **198**
- 34 Displaying the operation status of vehicle equipment**
 - Displaying obstacle detection information **199**
 - Displaying the operating status of the climate control panel **199**
- 35 Common operations**
 - Setting the time and date **201**

- Storing song information to an iPod (iTunes Tagging) **201**
- Setting the “Sound Retriever” function **202**
- Changing the wide screen mode **202**

36 Other functions

- Selecting the video for the rear display **204**
- Setting the anti-theft function **204**
 - Setting the password **204**
 - Entering the password **205**
 - Deleting the password **205**
 - Forgotten password **206**
- Restoring this product to the default settings **206**
 - Restoring the default settings **206**

Appendix

- Troubleshooting **207**
- Error messages **209**
- Positioning technology **215**
 - Positioning by GPS **215**
 - Positioning by dead reckoning **215**
 - How do GPS and dead reckoning work together? **215**
- Handling large errors **216**
 - When positioning by GPS is impossible **216**
 - Conditions likely to cause noticeable positioning errors **217**
- Route setting information **219**
 - Route search specifications **219**
- Handling and care of discs **219**
 - Built-in drive and care **220**
 - Ambient conditions for playing a disc **220**
- Playable discs **220**
 - DVD-Video and CD **220**
 - AVCHD recorded discs **221**
 - Playing DualDisc **221**
 - Dolby Digital **221**
- Detailed information for playable media **221**
 - Compatibility **221**
 - Media compatibility chart **224**

- Bluetooth **228**
- SDHC **228**
- WMA/WMV **228**
- DivX **228**
- AAC **229**
- Google, Google Play, Android™, and Android Auto **229**
- MirrorLink **229**
- MIXTRAX **229**
- Detailed information regarding connected iPod devices **229**
 - iPod and iPhone **229**
 - Lightning **230**
 - App Store **230**
 - iOS **230**
 - iTunes **230**
- Using app-based connected content **230**
 - Aha Radio **230**
- HDMI **231**
- MHL **231**
- IVONA Text-to-Speech **231**
- Notice regarding video viewing **231**
- Notice regarding DVD-Video viewing **231**
- Notice regarding MP3 file usage **231**
- Notice regarding open source licences **231**
- Map coverage **231**
- Using the LCD screen correctly **232**
 - Handling the LCD screen **232**
 - Liquid crystal display (LCD) screen **232**
 - Maintaining the LCD screen **232**
 - LED (light-emitting diode) backlight **232**
- Display information **233**
 - Phone menu **233**
 - System menu **233**
 - Theme menu **234**
 - Audio menu **235**
 - Video Setup menu **235**
 - Bluetooth menu **236**
- Specifications **237**

Manual overview

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

The screen examples shown in this manual are those for AVIC-F77DAB. The screens may vary according to the models.

How to use this manual

Finding the operation procedure for what you want to do

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

Finding the operation procedure from a menu name

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

Conventions used in this manual

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

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

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

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

F70DAB **F970DAB** **F970BT**

Terms used in this manual

“Front display” and “Rear display”

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

“Video image”

“Video image” in this manual indicates moving images of DVD-Videos, Video-CDs, ROM-Videos, DivX®, iPod, and any equipment that is connected to this product, such as general-purpose AV equipment.

Introduction

“External storage device (USB, SD)”

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

“SD memory card”

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

“iPod”

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

Notes on internal memory

Before removing the vehicle battery

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

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

Data subject to erasure

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

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

Resetting the microprocessor

CAUTION

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

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

The microprocessor must be reset under the following conditions:

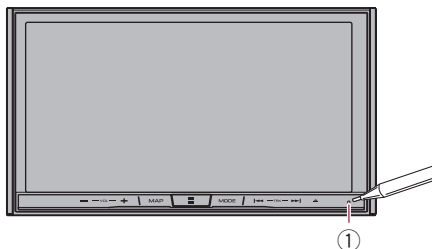
- Prior to using this product for the first time after installation.
- If this product fails to operate properly.
- If there appears to be problems with the operation of the system.
- If your vehicle position is shown on the map with a significant positioning error.

1 Turn the ignition switch OFF.

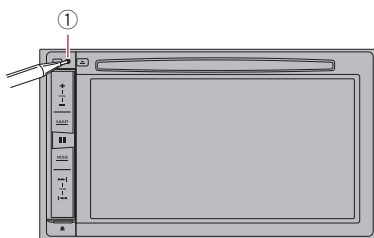
2 Press the **RESET** button with a pen tip or other pointed implement.

Settings and recorded contents are reset to the factory settings.

F77DAB F70DAB



F970DAB F970BT F9770DAB F9770BT

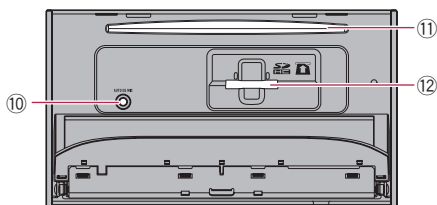
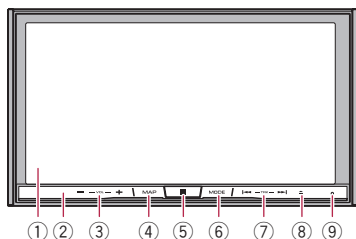


① **RESET** button

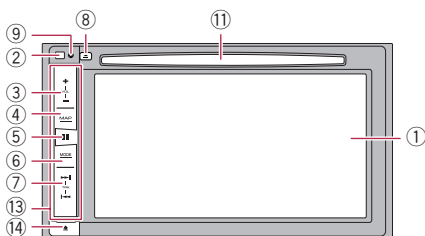
Checking part names and functions

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

F77DAB F70DAB



F970DAB F970BT F9770DAB F9770BT



① LCD screen

② Remote control sensor

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

③ VOL (+/-) button

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

④ MAP button

- Press to display the Map screen.
 - ➡ For details of the operations, refer to *How to use the screens* on page 18.
- Press and hold to display the rear view camera image.
 - This function is available only when "Back Camera Input" or "2nd Camera Input" is set to "On".

⑤ HOME button

- Press to display the Top menu screen.
 - ➡ For details of the operations, refer to *How to use the screens* on page 18.
- Press and hold to activate the voice recognition function.
 - ➡ For details, refer to *Using the voice recognition function* on page 82.

⑥ MODE button

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

⑦ TRK button

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

⑧ ▲ button

⑨ RESET button

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

Basic operation

- ⑩ **Auto EQ microphone input jack**
Use to connect a microphone for acoustical measurement (sold separately).
- ⑪ **Disc-loading slot**
Insert a disc to play.
➔ For details, refer to *Inserting and ejecting a disc* on page 15.
- ⑫ **SD card slot**
➔ For details, refer to *Inserting and ejecting an SD memory card* on page 15.
- ⑬ **Detachable faceplate**
- ⑭ **🏠 button**
Press to remove the detachable faceplate from this product.
➔ For details, refer to *Removing the detachable faceplate* on page 13. □

Protecting your product against theft

F970DAB F970BT F9770DAB F9770BT

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

⚠ CAUTION

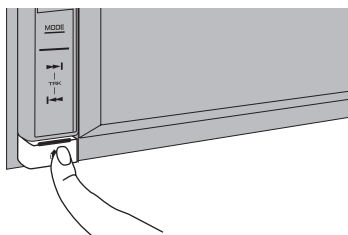
- Do not expose the detachable faceplate to excessive shock or disassemble it.
- Never grip the buttons tightly or use force when removing or attaching the detachable faceplate.
- Keep the detachable faceplate out of reach of small children to prevent them from placing it in their mouths.
- After removing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

- When removing or attaching the detachable faceplate, do so after turning off the ignition switch (ACC OFF).

Removing the detachable faceplate

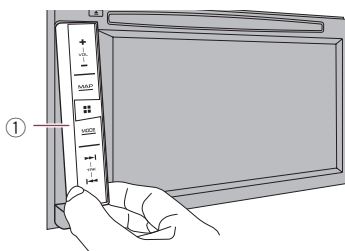
- This product cannot be operated while the detachable faceplate is removed from this product.

1 Press the 🏠 button.



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

2 Gently grip the bottom of the detachable faceplate and slowly pull it outward.




① Detachable faceplate

Attaching the detachable faceplate

1 Slide the detachable faceplate all the way into this product.

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

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

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


Notes on using the LCD panel

F77DAB F70DAB

WARNING

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

CAUTION

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

Adjusting the LCD panel angle

F77DAB F70DAB

1 Press the button.

The following screen appears.



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



Laying the panel down.




Returning the panel to the upright position.

3 Touch the following key.





Returns to the previous screen.

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

Inserting/ejecting/connecting media

CAUTION

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

Basic operation

Inserting and ejecting a disc

Inserting a disc

F77DAB F70DAB

1 Press the **▲** button.

The following screen appears.



2 Touch the following key.



Opens the LCD panel.

3 Insert a disc into the disc-loading slot.

The disc is loaded, and the LCD panel closes.

Ejecting a disc

F77DAB F70DAB

1 Press the **▲** button.

The following screen appears.



2 Touch the following key.



The LCD panel opens, and the disc is ejected.

3 Remove the disc, and press the **▲** button.

The LCD panel closes.

Inserting a disc

F970DAB F970BT F9770DAB F9770BT

● Insert a disc into the disc-loading slot.

Ejecting a disc

F970DAB F970BT F9770DAB F9770BT

● Press the **▲** button.

The disc is ejected.

Inserting and ejecting an SD memory card

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

Inserting an SD memory card

F77DAB F70DAB

1 Press the **▲** button.

The following screen appears.



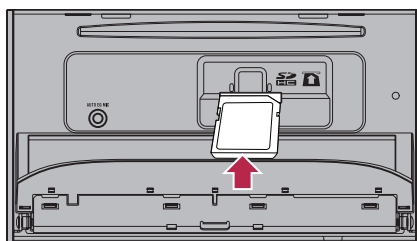
2 Touch the following key.



Opens the LCD panel.

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

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



4 Press the **▲** button.

The LCD panel closes.

Ejecting an SD memory card

F77DAB F70DAB

1 Press the **▲** button.

The following screen appears.



2 Touch the following key.



Opens the LCD panel.

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

The SD memory card is ejected.

4 Pull the SD memory card out straight.

5 Press the **▲** button.

The LCD panel closes.

Connecting and disconnecting an iPod

Connecting your iPod

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

Disconnecting your iPod

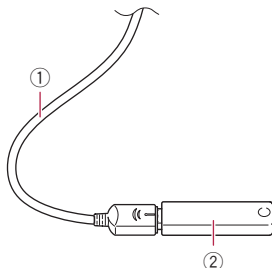
- Pull out the cables after confirming that no data is being accessed.

Plugging and unplugging a USB storage device

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

Plugging in a USB storage device

- Plug a USB storage device into the USB cable.



- ① USB cable
- ② USB storage device

Unplugging a USB storage device

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

Startup and termination

1 Start the engine to boot up the system.

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

2 Turn off the vehicle engine to terminate the system.

This product is also turned off.

On first-time startup

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

1 Start the engine to boot up the system.

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

The “**Select Program Language**” screen appears.

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

Basic operation

3 Touch the following key.



Displays the "Smartphone Setup" screen.

4 Touch the item you want to set.

- For details, refer to *Information on the connections and functions for each device* on page 86.

5 Touch the following key.



F77DAB

F70DAB

F970DAB

F9770DAB

Displays the "DAB ANTENNA POWER SETTING" screen. Proceeds to the next step.

F970BT

F9770BT



Displays the Top menu screen.

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

- **Yes** (default):
Supplies power to a Digital Radio aerial. Select when using the optional Digital Radio aerial (AN-DAB1 or CA-AN-DAB.001) (sold separately) with this product.
- **No**:
Does not supply power. Select when using a passive aerial with no booster.

7 Touch [OK].

The Top menu screen appears.

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

Regular startup

● Start the engine to boot up the system.


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

- The screen shown will differ depending on the previous conditions.

- Enter the password for the anti-theft function if the password entry screen appears.
- The terms appear if the screen displayed last was the navigation screen. Read the terms carefully, checking the details, and then touch [OK] if you agree to the conditions. After you touch [OK], the screen that was displayed just before turning off the ignition switch (ACC OFF) is displayed.

A message about the map database

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

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

Turning off the display

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

When the Application screen is available

● Press and hold the MODE button.


The display turns off.

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

When the Application screen is not available

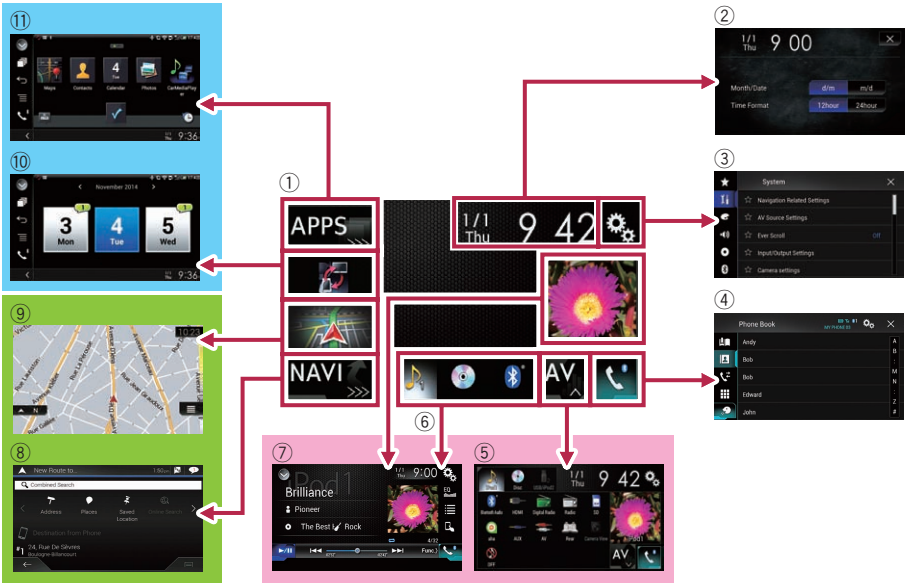
● Press the MODE button.

The display turns off.

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

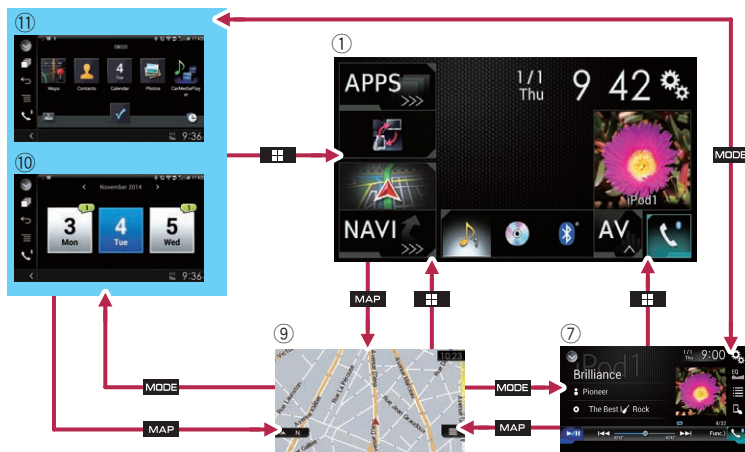
How to use the screens

Switching screens using the touch panel keys



Basic operation

Switching screens using the hardware buttons



① Top menu screen

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

- If you press the **HOME** button, the Top menu screen is displayed.
- "APPS" is displayed when **AppRadio Mode** or **MirrorLink** mode is on.
- "Android Auto" is displayed when **Android Auto** is on (for AVIC-F77DAB and AVIC-F70DAB).

② Time and date setting screen

You can set the time and date settings.

③ Setting menu screen

You can customise the system and audio settings, etc.

④ Phone menu screen

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

⑤ AV source selection screen

You can select the AV source.

⑥ Favourite source icons

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

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

⑦ AV operation screen

You can operate each source.

⑧ Navigation menu screen

You can specify way points and a destination.

⑨ Map screen

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

⑩ Application operation screen

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

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

⑪ Application menu screen

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

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

Supported AV source

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

- Digital Radio (DAB) (*1)
- Radio (FM, MW/LW)
- CD
- ROM (compressed audio or video files)
- DVD-Video
- Video-CD

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

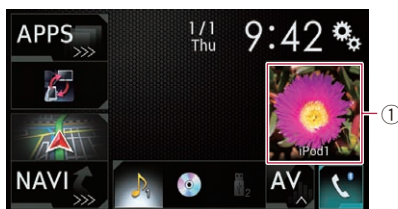
- USB
- SD (*2)
- iPod
- Aha Radio
- Bluetooth audio
- AV input (AV)
- AUX
- HDMI (*3)

- ❑ (*1) Available for AVIC-F77DAB, AVIC-F70DAB, AVIC-F970DAB, and AVIC-F9770DAB
- ❑ (*2) Available for AVIC-F77DAB and AVIC-F70DAB.
- ❑ (*3) Available for AVIC-F77DAB. ❑

Displaying the AV operation screen

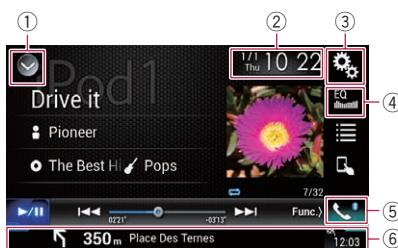
1 Press the HOME button to display the Top menu screen.

2 Touch the AV operation key.



① AV operation key

The AV operation screen appears.



① Displays the source list.

- ➔ For details, refer to *Selecting a front source on the source list* on page 21.

② Displays the Time and date setting screen.

- ➔ For details, refer to *Setting the time and date* on page 201.

③ Displays the Setting menu screen.

④ Recalls equaliser curves.

- ➔ For details, refer to *Using the equaliser* on page 181.

⑤ Displays the Phone menu screen.

- ➔ For details, refer to *Displaying the phone menu* on page 76.

⑥ Shows the navigation information.

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

- ❑ This is not displayed for some sources.
- ❑ This is not displayed when "Navigation info window" is set to "Off".

Basic operation

- ➔ For details, refer to *Navigation info window* on page 155.

Selecting a front source on the AV source selection screen

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

2 Touch the following key.



Displays the AV source selection screen.

3 Touch the source icon you want to select.

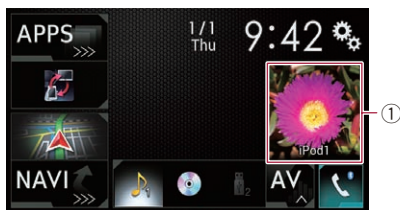
The AV operation screen of the selected source appears.

Selecting a front source on the source list

- This function is not available during a call via this product.

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

2 Touch the AV operation key.



① AV operation key

The AV operation screen appears.

3 Touch the following key.



Displays the source list.

4 Touch the source key you want to select.

The AV operation screen of the selected source appears.

- "Camera View" is available only when "Back Camera Input" or "2nd Camera Input" is set to "On".

Selecting a rear source

You can select a source output to the rear display.

- ➔ For details of the operations, refer to *Selecting the video for the rear display* on page 204.

Turning off the AV source

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

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

2 Touch the following key.



Displays the AV source selection screen.

3 Touch [OFF].

The AV source is turned off.

Changing the display order of source icons

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

- This setting is available only when you stop your vehicle in a safe place and apply the handbrake.
- This function is not available during a call via this product.

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

Basic operation

2 Touch the following key.



Displays the AV source selection screen.

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

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

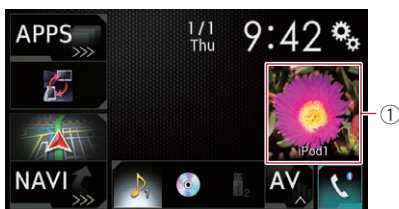
Changing the display order of source keys

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

- This setting is available only when you stop your vehicle in a safe place and apply the handbrake.
- This function is not available during a call via this product.

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

2 Touch the AV operation key.



① AV operation key

The AV operation screen appears.

3 Touch the following key.



Displays the source list.

4 Touch the following key.



The source keys can be moved.

5 Drag the source key to the desired position.

6 Touch the following key.



Returns to the previous screen.

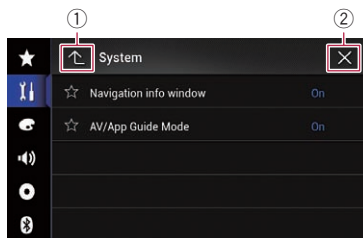
- If the source key is moved, the source icons displayed on the Top menu screen and the AV source screen are also moved.

Using the touch panel

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

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

Using the common touch panel keys



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

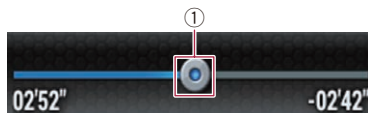
Basic operation

Operating list screens



- ① Touching an item on the list selects the item or narrows down the options.
- ② Appears when all characters are not displayed on the display area.
If you touch the key, the rest of the characters are scrolled for display.
- ③ Appears when items cannot be displayed on a single page only.
Drag the slider bar to view any hidden items. Also, you can drag the list to view any hidden items.

Operating the time bar



- ① You can change the playback point by dragging the key.
 - ❑ Playback time corresponding to the position of the key is displayed while dragging the key.

- ❑ This function is not available when using iPod function with an iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5, or iPod touch (5th generation).
- ❑ This function is not available for some media or sources.

Operating the on-screen keyboard



- ① Displays the characters that are entered. If there is no text in the box, an informative guide with text appears.
- ② Moves the cursor to the right or left for a number of characters equivalent to the number of touches.
- ③ Enters the characters in the text box.
- ④ Deletes the input text to the left of the cursor one letter at a time. Continuing to touch the key deletes all of the text.
- ⑤ Confirms the entry and proceeds to the next step.
- ⑥ Enters a space.
A space equivalent to the number of touches is inserted.
- ⑦ Switches between alphabet and numbers/symbols.
- ⑧ Switches between capital and lower case letters. ❑

On first-time startup of the navigation system

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

- You can change the language and GPS log setting later using [Regional] and [Usage Reports] in the “Settings” screen. Other settings can be restarted later using [Start Configuration Wizard] in the “Settings” screen.

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

2 Touch the following keys.



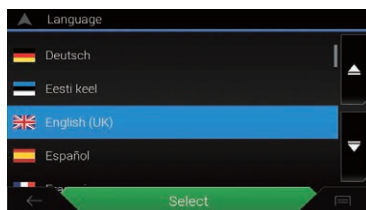
Initiates the initial startup of the navigation system.

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

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

The “Language” screen appears.

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



The “EULA” screen appears.

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

The “Usage Reports” screen appears.

5 Touch [Yes].

If you touch [Yes], the software collects usage information and GPS logs that may be used for improving the application and the quality and coverage of maps.

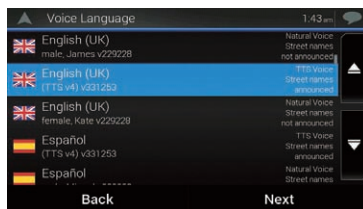
- If you do not wish to activate information collection, touch [No].

The configuration wizard starts.

6 Touch [Next].

The “Voice Language” screen appears.

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



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

The “Route Preferences” screen appears.

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

10 Touch [Activate], then [Next].

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

- ➔ For details, refer to “Online Services” settings on page 66.

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

- ➔ For details, refer to *Expanding the use of the navigation functions* on page 67.

11 Select the connected services you want to use, then touch [Next].

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

How to use the Navigation menu screen

Operating the Navigation menu screen

1 Press the MAP button.

The Map screen appears.

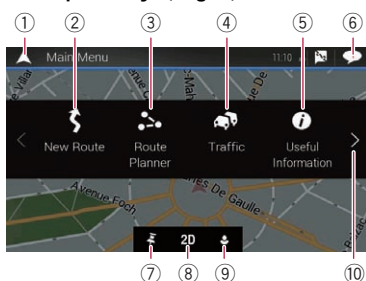
2 Touch the following key.



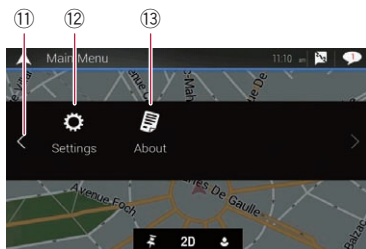
Displays the navigation menu on the Map screen.

The following screen appears.

Touch panel keys (Page 1)



Touch panel keys (Page 2)



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

- ① Returns to the Map screen.
- ② Searches for your destination by the address or coordinates, or searches for the selected place of interest, etc.
 - ➔ For details, refer to Chapter 5.
- ③ Builds your route or edits the route currently set.
 - ➔ For details, refer to *Building a route using "Route Planner"* on page 42.
- ④ Displays the "Traffic Summary" screen.

➔ For details, refer to *Checking the traffic incidents on the map* on page 51.

- ⑤ Displays useful information to support your driving.
 - ➔ For details, refer to Chapter 9.

- ⑥ Displays notifications that contain important information.

- ⑦ Displays the location that you saved as a favourite.

➔ For details, refer to *Selecting a destination from stored locations* on page 37.

- ⑧ Switches among 2D, 3D, and 2D North up view modes.

- ⑨ Displays the "User Profile" 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.


- ⑩ Displays the next page of the navigation menu.

- ⑪ Displays the previous page of the navigation menu.

- ⑫ Configures the navigation-related settings and enables you to access the "SyncTool" screen.

➔ For details, refer to Chapter 10.

- ⑬ Displays the information of your navigation system (the version information, or licences, for example).

- ❑  on the upper right corner of the screen is used for **AVICSYNC App** connection.

➔ Be sure read *Expanding the use of the navigation functions* (page 67) before using the **AVICSYNC** function.

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

How to use the Navigation menu screen



Adds a waypoint.



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.



How to use the map

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

How to read the Map screen



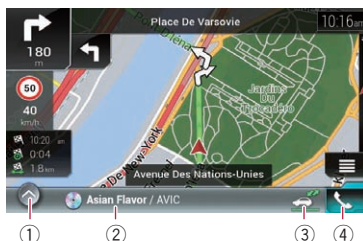
- ❑ The following information marked with an asterisk (*) appears only when a route is set.
- ❑ Depending on the conditions and settings, some items may not be displayed.
- ❑ AV information is displayed at the bottom of the Map screen.
- ❑ You can select whether you want to see the speed limit sign on the map all the time. If you exceed the speed limit, the sign colour will change.
 - ➔ For details, refer to “Warnings” settings on page 62.
- ① Shows the number and name of the street to be used (or next guidance point).*
- ② Shows the next guidance point (manoeuvre).* Both the type of the event (turn, roundabout, exiting motorway, etc.) and its distance from the current position are displayed. A smaller icon shows the type of the second next manoeuvre if it is near the next manoeuvre.
 - ➔ For details, refer to *Frequently shown route events* on page 30.
- ③ Shows the distance to the next guidance point (manoeuvre).*
- ④ Shows the second manoeuvre arrow.*
- ⑤ Indicates the current location of your vehicle. The apex of the triangular mark indicates your

orientation and the display moves automatically as you drive.

- ⑥ Displays the data field. Touching this field displays the “**Trip Computer**” screen. Touch and hold down this key and then select the values that you wish to have displayed to customise the data fields in the corner of the Map screen.
 - ➔ For details, refer to **Data Fields** on page 63.
- ⑦ Shows the name of the street (or city) that your vehicle is travelling on (or in).
- ⑧ Indicates the current route.* The route currently set is highlighted in colour on the map.
- ⑨ Displays the Navigation menu screen.
- ⑩ Indicates the progress to the final destination.* ■

AV information bar

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



- ① Displays the source list.
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② Shows the current status of AV source briefly.
- ③ You can turn on or off the communication between the **AVICSYNC App** and the navigation system by touching the key.
- ④ Displays the Phone menu screen.
 - ➔ For details, refer to *Displaying the phone menu* on page 76. ■

Operating the Map screen

Changing the scale of the map

- ❑ 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.
 - For details, refer to *Switching between 2D, 3D, and 2D North up views* on page 28.

1 Press the MAP button.

The Map screen appears.

2 Pinch or expand the map to zoom out or in.

Touch anywhere on the map during navigation.

3 Touch the following key.



The map returns to the current position.

- ❑ If you press the **MAP** button, the map returns to the current position.
- ❑ For information on the controls when the scrolled map is displayed, refer to *Control keys on the scrolled map* on page 29.

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”.

- Heading up:

The map display always shows the vehicle’s direction as proceeding toward the top of the screen.
- North up:

The map display always has north at the top of the screen.
- ❑ The map orientation is fixed at “Heading up” when the 3D map screen is displayed.

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch the following key.

Each time you touch the key the setting changes.



Indicates 2D Heading up view mode is currently selected.



Indicates 3D Heading up view mode is currently selected.



Indicates 2D North up view mode is currently selected.

4 Touch the following key.



Returns to the Map screen.

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

How to use the map

- ❑ For information on the controls when the scrolled map is displayed, refer to *Control keys on the scrolled map* on page 29.

Scrolling the map to the position you want to see

1 Press the MAP button.

The Map screen appears.

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

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.

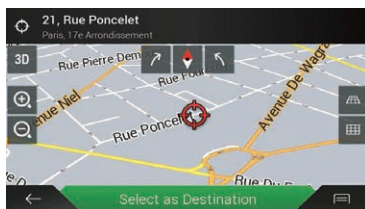
3 Touch the following key.



The map returns to the current position.

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

Control keys on the scrolled map



1 Press the MAP button.

The Map screen appears.

2 Touch anywhere on the map.

The cursor and control keys appear.

3 Touch the following key.



Zooms in.



Zooms out.



Changes the map view mode (the map mode currently selected is shown).



Tilts up.



Tilts down.



Rotates left.



Rotates right.



Cancels map rotation.

- ❑ You can change the vertical view angle of the map in 3D mode only.
 - ➔ For details, refer to *Switching between 2D, 3D, and 2D North up views* on page 28.

4 Touch the following key.




The map returns to the current position.





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

Understanding the route guidance

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

Frequently shown route events

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

Icon	Meaning
	Board ferry.
	Leave ferry.
	Approaching a waypoint.
	Approaching the destination.

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

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

Lane information



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

How to use the map

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


Signposts




Junction view



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

When you set **"Offer Motorway Services"** to **"on"**, the  icon 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.

- ❑ If you want to display other types of POIs for the exits, you can change the icons in **"Services Displayed"**.
- ➔ For details, refer to *"Navigation Map"* settings on page 62. 

Browsing the data field

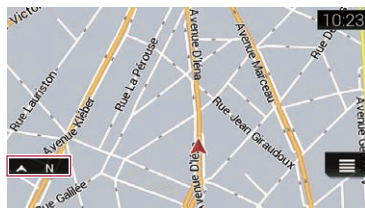
The data fields are different when you are navigating a route and when you have no specified destination. For example, the data field provides the following information.

- When the route is set:

Distance to final destination, time needed to reach the final destination and estimated arrival time are shown.



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



- ❑ Touching and holding the field allows you to display the setting screen for the field.
- ❑ 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 *"Route Preferences"* settings on page 59.

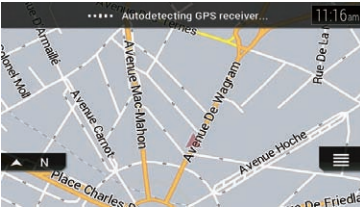
When the system cannot receive a GPS signal

A triangular mark shows the current position of your vehicle.

When a GPS position is available, the triangular mark is displayed in full colour.



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



Searching for a destination

CAUTION

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

- ❑ Some information regarding traffic regulations depends on the time when the route calculation is performed. Thus, the information may not correspond with a certain traffic regulation when your vehicle actually passes through the location in question. Also, the information on the traffic regulations provided applies for a passenger vehicle, and not for a truck or other delivery vehicles. Always follow the actual traffic regulations when driving.
- ❑ [Destination from Phone] and [Online Search] on the "New Route to..." screen can be used when the **AVICSYNC App** connection is established.
 - ➔ Be sure read *Expanding the use of the navigation functions* (page 67) before using the **AVICSYNC** function.

Searching for a location by address

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

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

1 Press the **MAP** button.

The Map screen appears.

2 Touch the following key.



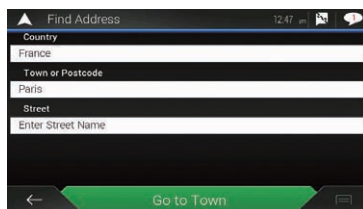
Displays the navigation menu on the Map screen.

3 Touch [New Route].

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

4 Touch [Address].

The "Find Address" screen appears.



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

- **Country:**
By default, your navigation system proposes the country where you are.
If you want to change the area to search set another country.
- **Town or Postcode:**
By default, your navigation system proposes the city/town where you are. You can select the city/town using its postal code instead of its name.
- **Street:**
If the street name is not available, touch [Go to Town] and select the city/town. This way the centre of the selected city/town becomes the destination of the route.
- **Select House Number or Intersection:**
This item will be displayed after you have set a street. If the house number is not available, touch [Go to Street] and select the street. This way the 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] on the "Map Location" screen.


- ➔ For details on the operations in the "Map Location" screen, refer to *Using the "Map Location" screen* on page 41.

After touching **[Select as Destination]**, the **"Route Summary"** screen appears and countdown begins. When the countdown ends, the guidance automatically starts. If the screen is touched anywhere during the countdown, the countdown stops and the screen will stay as it is.

- ➔ For details on the operations in the **"Route Summary"** screen, refer to *Checking route information and preferences* on page 44.

7 Touch **[Start Navigation]**.

Your navigation system starts the route guidance.

- ➔ For details of the route guidance, refer to *Understanding the route guidance* on page 30. 

Searching for Points of Interest (POI)

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

Searching for POIs using preset categories

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

1 Press the **MAP** button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch **[New Route]**.

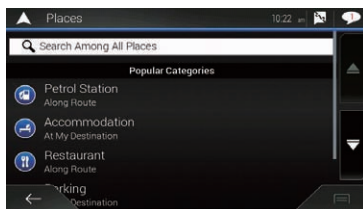
The **"New Route to..."** screen appears.

4 Touch **[Places]**.

The **"Places"** screen appears.

The preset search categories are as follows.

- **Petrol Station**
- **Accommodation**
- **Restaurant**
- **Parking**




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

5 Touch the category you want.

The results appear in a list.

6 Touch the POI you want.

The searched location appears on the Map screen.

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

7 Touch **[Select as Destination]** on the **"Map Location"** screen.

- ➔ For details on the operations in the **"Map Location"** screen, refer to *Using the "Map Location" screen* on page 41.

After touching **[Select as Destination]**, the **"Route Summary"** screen appears and countdown begins. When the countdown ends, the guidance automatically starts. If the screen is touched anywhere during the countdown, the countdown stops and the screen will stay as it is.

Searching for a destination

- ➔ For details on the operations in the "**Route Summary**" screen, refer to *Checking route information and preferences* on page 44.

8 Touch [Start Navigation].

Your navigation system starts the route guidance.

- ➔ For details of the route guidance, refer to *Understanding the route guidance* on page 30.

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

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

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

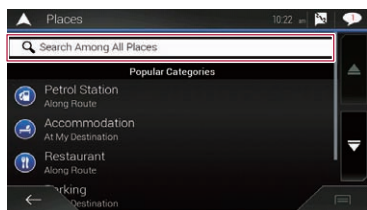
3 Touch [New Route].

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

4 Touch [Places].

The "**Places**" screen appears.

5 Touch [Search Among All Places].



The "**Search by Category**" screen appears.

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

- **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.


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

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

- Touch [**Search by Name**] and enter the name of the place using the keyboard.

8 Touch the POI you want.

The searched location appears on the Map screen.

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

9 Touch [Select as Destination] on the "Map Location" screen.

- ➔ For details on the operations in the "Map Location" screen, refer to *Using the "Map Location" screen* on page 41.

After touching [Select as Destination], the "Route Summary" screen appears and countdown begins. When the countdown ends, the guidance automatically starts. If the screen is touched anywhere during the countdown, the countdown stops and the screen will stay as it is.

- ➔ For details on the operations in the "Route Summary" screen, refer to *Checking route information and preferences* on page 44.

10 Touch [Start Navigation].

Your navigation system starts the route guidance.

- ➔ For details of the route guidance, refer to *Understanding the route guidance* on page 30.

Searching for providers nearby that offer emergency or roadside assistance services

IMPORTANT

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

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

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

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [Useful Information].

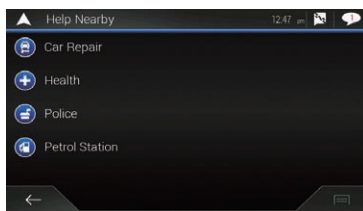
The "Useful Information" screen appears.

4 Touch [Help Nearby].

The "Help Nearby" screen appears.

The preset search categories are as follows.

- Car Repair
- Health
- Police
- Petrol Station




5 Touch the category you want.

The results appear in a list.

6 Touch the POI you want.

The searched location appears on the Map screen.

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

7 Touch [Select as Destination] on the "Map Location" screen.

- ➔ For details on the operations in the "Map Location" screen, refer to *Using the "Map Location" screen* on page 41.


After touching [Select as Destination], the "Route Summary" screen appears and countdown begins. When the countdown ends, the guidance automatically starts. If the screen is touched anywhere during the countdown, the countdown stops and the screen will stay as it is.

Searching for a destination

- ➔ For details on the operations in the “**Route Summary**” screen, refer to *Checking route information and preferences* on page 44.

8 Touch [Start Navigation].

Your navigation system starts the route guidance.

- ➔ For details of the route guidance, refer to *Understanding the route guidance* on page 30. 

Selecting a destination from stored locations

Storing locations you visit frequently saves time and effort.

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

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

- This function is available if locations have been registered in “**Saved Location**”.
 - ➔ For details, refer to *Storing a location in “Saved Location”* on page 47.

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.




Displays the navigation menu on the Map screen.

3 Touch [New Route].

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

4 Touch [Saved Location].

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

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

5 Touch the entry you want.

The searched location appears on the Map screen.

6 Touch [Select as Destination] on the “Map Location” screen.


- ➔ For details on the operations in the “**Map Location**” screen, refer to *Using the “Map Location” screen* on page 41.

After touching [Select as Destination], the “**Route Summary**” screen appears and countdown begins. When the countdown ends, the guidance automatically starts. If the screen is touched anywhere during the countdown, the countdown stops and the screen will stay as it is.

- ➔ For details on the operations in the “**Route Summary**” screen, refer to *Checking route information and preferences* on page 44.

7 Touch [Start Navigation].

Your navigation system starts the route guidance.

- ➔ For details of the route guidance, refer to *Understanding the route guidance* on page 30. 

Selecting a destination from stored routes

Storing routes you use frequently saves time and effort.

- This function is not available if no routes have been registered in “**Saved Routes**”.
 - ➔ For details, refer to *Storing a route in “Saved Routes”* on page 48.

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [New Route].

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

4 Touch to show the next page.

5 Touch [Saved Routes].

The “**Saved Routes**” screen appears.

6 Touch the entry you want.

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

- You can add waypoints or change the final destination on the “**Route Planner**” screen.
- ➔ For details, refer to *Building a route using “Route Planner”* on page 42.

7 Touch [Show Route].

After touching [**Show Route**], the “**Route Summary**” screen appears and countdown begins. When the countdown ends, the guidance automatically starts. If the screen is touched anywhere during the countdown, the countdown stops and the screen will stay as it is.

- ➔ For details on the operations in the “**Route Summary**” screen, refer to *Checking route information and preferences* on page 44.

8 Touch [Start Navigation].

Your navigation system starts the route guidance.

- ➔ For details of the route guidance, refer to *Understanding the route guidance* on page 30. □

Selecting a location you searched for recently

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

History

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.

Displays the navigation menu on the Map screen.

3 Touch [New Route].

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

4 Touch [History].

The list of recent destinations appears.

5 Touch the entry you want.

The searched location appears on the Map screen.

6 Touch [Select as Destination] on the “Map Location” screen.

- ➔ For details on the operations in the “**Map Location**” screen, refer to *Using the “Map Location” screen* on page 41.

After touching [**Select as Destination**], the “**Route Summary**” screen appears and countdown begins. When the countdown ends, the guidance automatically starts. If the screen is touched anywhere during the countdown, the countdown stops and the screen will stay as it is.

- ➔ For details on the operations in the “**Route Summary**” screen, refer to *Checking route information and preferences* on page 44.

7 Touch [Start Navigation].

Your navigation system starts the route guidance.

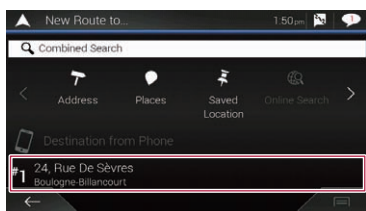
- ➔ For details of the route guidance, refer to *Understanding the route guidance* on page 30.

Smart History

Smart History suggests these previously used locations as destinations based on your navigation habits, using parameters like the current time of day, the day of week, and the current location.

Searching for a destination

Smart History items are shown in the “New Route to...” screen for easy access.



Searching for a location using “Combined Search”

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

- The “Combined Search” function also searches your stored data.

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.

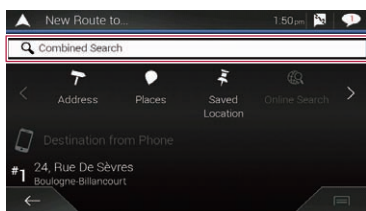


Displays the navigation menu on the Map screen.

3 Touch [New Route].

The “New Route to...” screen appears.

4 Touch [Combined Search].



The “Combined Search” screen appears.

5 Touch the right text box to enter the country and city/town you want search.

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

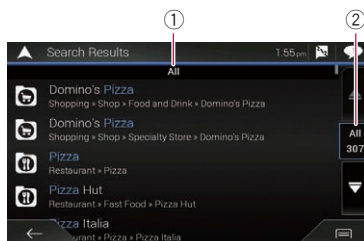


Displays the “Search Results” screen.

7 Touch the entry you want.

The searched location appears on the Map screen.

8 Touch the right of the list to narrow down the search results.



- ① Shows the conditions that are currently selected.
- ② Touch this key to show the other conditions.
 - If you touch a map data provider logo, you can narrow down the list of results by showing the results from the provider.

9 Touch [Select as Destination] on the “Map Location” screen.


- ☞ For details on the operations in the “Map Location” screen, refer to *Using the “Map Location” screen* on page 41.

After touching [Select as Destination], the “Route Summary” screen appears and countdown begins. When the countdown ends, the guidance automatically starts. If the screen is touched anywhere during the countdown, the countdown stops and the screen will stay as it is.

- ☞ For details on the operations in the “Route Summary” screen, refer to *Checking route information and preferences* on page 44.

10 Touch [Start Navigation].

Your navigation system starts the route guidance.

- For details of the route guidance, refer to *Understanding the route guidance* on page 30. 

Searching for a location by the coordinates

Entering a latitude and longitude pinpoints the location.

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.

Displays the navigation menu on the Map screen.




3 Touch [New Route].

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



4 Touch  to show the next page.**5 Touch [Coordinates].**

The “**Coordinates**” screen appears.

6 Enter the latitude value and touch [OK].

- When a value is already entered in the text field, touch  or  to delete the value first.
- You can change the display format of the latitude and longitude to any of the following formats: decimal degrees; degrees and decimal minutes; or degrees, minutes and decimal seconds.
 - When entering the coordinates in UTM format, touch , then [**UTM Coordinates**].

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

- When a value is already entered in the text field, touch  or  to delete the value first.

The searched location appears on the Map screen.

8 Touch [Select as Destination] on the “Map Location” screen.


- For details on the operations in the “**Map Location**” screen, refer to *Using the “Map Location” screen* on page 41.

After touching [**Select as Destination**], the “**Route Summary**” screen appears and countdown begins. When the countdown ends, the guidance automatically starts. If the screen is touched anywhere during the countdown, the countdown stops and the screen will stay as it is.

- For details on the operations in the “**Route Summary**” screen, refer to *Checking route information and preferences* on page 44.

9 Touch [Start Navigation].

Your navigation system starts the route guidance.

- For details of the route guidance, refer to *Understanding the route guidance* on page 30. 

Searching for a location by scrolling the map

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

1 Press the MAP button.

The Map screen appears.

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

The cursor appears.

Searching for a destination

4 Touch [Select as Destination].

After touching [Select as Destination], the "Route Summary" screen appears and count-down begins. When the countdown ends, the guidance automatically starts. If the screen is touched anywhere during the countdown, the countdown stops and the screen will stay as it is.

- For details on the operations in the "Route Summary" screen, refer to *Checking route information and preferences* on page 44.

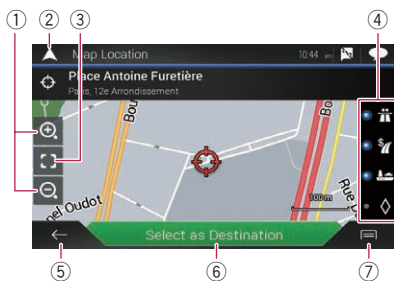
5 Touch [Start Navigation].

Your navigation system starts the route guidance.

- For details of the route guidance, refer to *Understanding the route guidance* on page 30.

Using the "Map Location" screen

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



- If you touch the map, the cursor is placed at that position. Also, you can scroll the map by dragging the map.
- ① Zoom in/zoom out
 - You can also pinch or expand the map to zoom in or out.
- ② Cancels the "Map Location" screen and displays the map of the current position.

- ③ Returns the cursor to the initial position and the map scale to the initial scale.
- ④ Shows the route setting preferences for route calculation. Touch the keys to activate or deactivate the preference.



Calculates the route prioritising the use of motorways when the key is activated.



Calculates the route prioritising the use of per-use charged toll roads when the key is activated.



Calculates the route prioritising the use of ferries when the key is activated.



Calculates the route prioritising the use of carpool and HOV lanes when the key is activated.

- ⑤ Returns to the previous screen.
- ⑥ Sets the cursor position to your destination (or waypoint).
- ⑦ Displays the shortcuts.

- **Detailed Information:**

Shows the detailed information of the point.

- **Save Location:**

Saves the displayed location as your favourite location. The saved location can be easily recalled later.

- **Places Around Cursor:**

Searches for POIs around the displayed location. Touch the POI to show the "Map Location" screen, and also set the POI as the destination (or waypoint).

Modifying the route

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

Building a route using “Route Planner”

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

Editing the list allows you to plan your route easily.

- ❑ Once you set the route, you can edit your route using the menu displayed as “**My Route**”.

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [Route Planner] or [My Route].

4 Touch one of the options.



- ① Destination
- ② Cancels the “**Route Planner**” (or “**My Route**”) screen and displays the map of the current position.
- ③ Adds a new destination and changes the current destination to the last waypoint.

- ④ Inserts a new waypoint.
- ⑤ Touch or to scroll the list.
- ⑥ Waypoint
- ⑦ Returns to the previous screen.
- ⑧ Starting position (The current vehicle position is set as default and [**Current GPS Position**] is displayed.)
 - ➔ For details, refer to *Changing the starting position* on page 43.
- ⑨ Calculates the route and shows the “**Route Summary**” screen.
- ⑩ Displays the options for the location.
 - **Move Up/Move Down:**
Edits the order you want to visit the locations.
 - **Delete:**
Deletes the destination or waypoint.
 - **Save Location:**
Stores the location in “**Saved Location**”.
➔ For details, refer to *Storing a location in “Saved Location”* on page 47.
 - **Change:**
Changes the destination or waypoint to another location.
 - **Show on Map:**
Shows the selected location on the map.
- ⑪ Displays the shortcuts.
 - **Delete All:**
Deletes all waypoints and the destination. Touch [**Continue Without Route**] to cancel the planned route.
 - **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.)
 - **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.)

Checking and modifying the current route

Changing the starting position

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

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [Route Planner] or [My Route].

4 Touch [Current GPS Position].

The pop-up menu appears.

5 Touch [Set Start Point] or [Change Start Point] and then touch [OK].

6 Search for a location.

7 Touch [Set Start Point] or [Change Start Point].

The selected position is set as the starting position for route calculation.

8 Touch [Show Route] or [Continue Without Route].

The system starts route recalculation after [Show Route] is touched, and then the "Route Summary" screen appears. After [Start Navigation] is touched, your navigation system starts the route guidance. After [Continue Without Route] is touched, the current position map appears.

Restoring the current position as the starting position

1 Touch [Route Planner] or [My Route].

2 Touch [Current GPS Position].

The pop-up menu appears.

3 Touch [Back to GPS position] and then touch [Delete Start Point].

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

Adding waypoints

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [Add Waypoint].

4 Search for a location.

5 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.)

6 Touch [Start Navigation].

Your navigation system starts the route guidance.

Checking route alternatives

You can select another route and compare different route alternatives.

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [Detours & Alternatives].

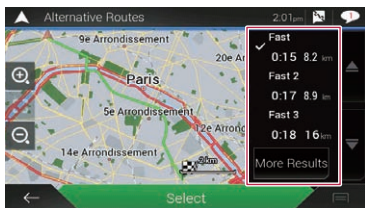
4 Touch [Alternative Routes].

The "Alternative Routes" screen appears.

Checking and modifying the current route

5 Touch any of the conditions you want to display on the map.

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



- ❑ If more than three route alternatives have been found, **[More Results]** appears. Touch **[More Results]** to show the other routes.
 - ➔ For information about route calculation conditions, refer to **Route Planning Method** on page 60.

6 Touch **[Select]**.

The selected route is applied as your current route.

Checking detour routes

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

1 Press the **MAP** button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch **[Detours & Alternatives]**.

4 Touch one of the options.

- **Alternative Routes:** Shows the alternative routes.
 - ➔ For details, refer to *Checking route alternatives* on page 43.

- **Avoid Special Sections:**

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

- **Avoid Specific Road:**

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

- **Avoid Road Ahead:**

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

- **Restore Original Route:**

Cancels the route with avoidances and restores the previous route.

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

Checking route information and preferences

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

1 Press the **MAP** button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch **[Route Summary]**.

The **"Route Summary"** screen appears.

Checking and modifying the current route

4 Touch one of the options.



- ❑ You can scroll the map by dragging the map.
- ① Shows the information for a transit point on the route. Touching the items allows you to see the location on the map. Touch **[Avoid]** and **[Accept]** to set the location as a location to avoid.
- ② Cancels the **"Route Summary"** screen and displays the map of the current position.
- ③ Shows the conditions of the displayed route.
- ④ The screen returns to the initial position and the map scale returns to the initial scale.
- ⑤ Zoom in/zoom out
 - ❑ You can also pinch or expand the map to zoom in or out.
- ⑥ Shows alternative routes.
 - ➔ For details, refer to *Checking route alternatives* on page 43.
- ⑦ Returns to the previous screen.
- ⑧ Shows the total length of the route and approximate required time for the route.
- ⑨ Displays the shortcuts.
 - **Route Preferences:**
Shows the route setting preferences. If you change the preferences, the route is recalculated.
 - **Itinerary:**
Shows all transit points in detail. Touch a transit point to show its position on the map. If you touch **[Avoid]** on the map screen, the route is recalculated

avoiding the transit point (as much as possible).

- **Save Route:**
Saves the displayed route. The saved route can be recalled later.
- **Places Along Route:**
Searches for POIs along the displayed route. Touch the POI to show the **"Map Location"** screen, and also set the POI as a waypoint.
- **Simulation:**
You can run a simulation of the navigation for the current route, as a demonstration.
 - ➔ For details, refer to *Checking route alternatives* on page 43.

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 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

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

The message screen appears.

4 Touch one of the options.

If there are no waypoints on the route, touch **[Cancel Route]** to cancel the route. If there are waypoints on the route, touch **[Cancel Route]** to cancel the route. Touch **[Delete Waypoint]** to delete only the nearest waypoint. In such case, the route is recalculated.

Watching the simulation of the route

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

1 Set a route to your destination.

- ➔ For details, refer to Chapter 5.

2 Press the MAP button.

The Map screen appears.

3 Touch the following key.



Displays the navigation menu on the Map screen.

4 Touch [Route Summary].

The "Route Summary" screen appears.

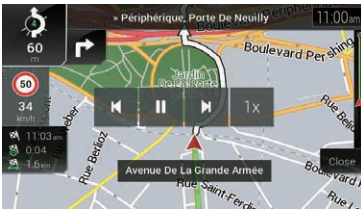
5 Touch the following key.



Displays the shortcuts.

6 Touch [Simulation].

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



- ☐ During simulation, you can use the following control keys (they disappear after a few seconds but you can view them again by touching the map).



Jumps to the previous guidance point (manoeuvre).



Pauses the simulation.



Jumps to the next guidance point (manoeuvre).



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

- Touch [Close] to stop the simulation. ☐

Registering and editing locations and routes

Storing a location in “Saved Location”

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

Storing your home and your workplace location

You can store one home location and one workplace location. You can change the stored information later. Also, routes to stored locations can be calculated easily by touching the corresponding key.

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch the following key.



Displays the “**Saved Location**” screen.

4 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.

5 Search for a location.

- ➔ For details, refer to Chapter 5.

6 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 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch the following key.



Displays the “**Saved Location**” screen.

4 Touch [Add Location].

5 Search for a location.

- ➔ For details, refer to Chapter 5.



6 Touch [Save Location].

7 Enter the name if needed and then touch the following key.



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

The cursor position has been stored.

- You can also store the location without using the “**Saved Location**” screen. When the “**Map Location**” screen is displayed after searching for the location or after scrolling the map, open the shortcuts and then touch [**Save Location**].
- In the on-screen keyboard, touching  or  enables you to store the location as your home or workplace location.

Editing stored locations

Stored locations can be edited later.

Renaming stored locations

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch the following key.



Displays the "Saved Location" screen.

4 Touch the following key.



Displays the shortcuts.

5 Touch [Edit].

The "Select Location to Edit" screen appears.

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

- "Home" and "Work" cannot be renamed. The location can be set again.

7 Enter the name and then touch .

8 Touch [Done].

The "Saved Location" screen appears.

Deleting stored locations

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch the following key.



Displays the "Saved Location" screen.

4 Touch the following key.




Displays the shortcuts.

5 Touch [Edit].

The "Select Location to Edit" screen appears.

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


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

A message will appear asking you to confirm the deletion.

7 Touch [OK].

8 Touch [Done].

The "Saved Location" screen appears.

- You can also delete the stored location without using the "Saved Location" screen. When the "Map Location" screen is displayed after scrolling the map, place the cursor on a stored location which you want to delete and open the shortcuts and then touch [Remove Saved Location]. .

Storing a route in "Saved Routes"

Storing your favourite routes in "Saved Routes" allows you to save the time and effort used on re-entering this information.

1 Set a route to your destination.

- ➔ For details, refer to Chapter 5.

2 Press the MAP button.

The Map screen appears.

3 Touch the following key.



Displays the navigation menu on the Map screen.

Registering and editing locations and routes

4 Touch [Route Summary].

The “Route Summary” screen appears.

5 Touch the following key.



Displays the shortcuts.

6 Touch [Save Route].

The “Save Route” screen appears.

7 Enter the name if needed and then touch the following key.



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



Editing the stored route

Stored routes can be edited later.

Renaming stored routes

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [New Route].

The “New Route to...” screen appears.

4 Touch to show the next page.

5 Touch [Saved Routes].

The “Saved Routes” screen appears.

6 Touch the following key.



Displays the shortcuts.

7 Touch [Edit].

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

9 Enter the name and then touch .

10 Touch [Done].

Deleting stored routes

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [New Route].

The “New Route to...” screen appears.

4 Touch to show the next page.

5 Touch [Saved Routes].

The “Saved Routes” screen appears.


6 Touch the following key.



Displays the shortcuts.

7 Touch [Edit].

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

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

9 Touch [Delete].

10 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.

- To use this function, activate the warnings beforehand and set the alert types.

Registering and editing locations and routes

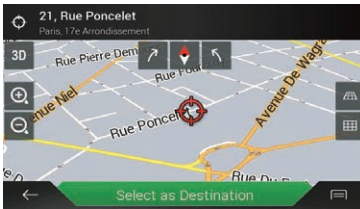
➔ For details, refer to “Warnings” settings on page 62.

1 Press the MAP button.

The Map screen appears.

2 Scroll the map and select a location.


The cursor appears at the selected point.



3 Touch the following key.



Displays the shortcuts.

- To edit a previously saved alert point, touch .

4 Touch [Add Alert Points].

The “Add New Alert Point” screen appears.

5 Set the necessary parameters.

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

6 Touch [Save].

The location is saved as a new alert point.

- ➔ For details, refer to “Warnings” settings on page 62.
- ☐ 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.

Editing the stored alert points

Stored alert points can be edited later.

1 Press the MAP button.

The Map screen appears.

2 Scroll the map to the stored alert point.


3 Touch the following key.



Displays the shortcuts.

4 Touch [Edit Alert Points].

5 Set the necessary parameters.

- If you touch  and then touch [Delete], the selected alert point will be deleted.

6 Touch [Edit].

The alert settings are modified.

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.

- ❑ The online function in **"Traffic"** can be used if you connect an iPhone or a smartphone that has the **AVICSYNC App** installed.
 - ➔ Be sure read *Expanding the use of the navigation functions* (page 67) before using the **AVICSYNC** function.

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 Press the MAP button.

The Map screen appears.

2 Touch the following key.



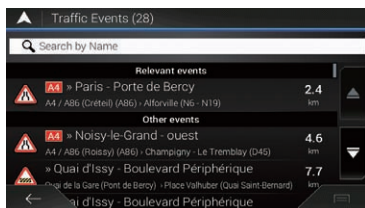
Displays the navigation menu on the Map screen.

3 Touch [Traffic].

The **"Traffic Summary"** screen appears.

4 Touch [Traffic Events].

The **"Traffic Events"** screen appears.



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

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

The Map screen appears.

2 Touch the following key.



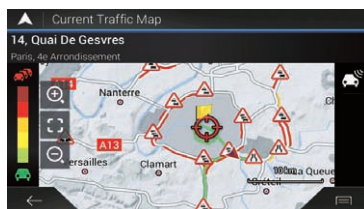
Displays the navigation menu on the Map screen.

3 Touch [Traffic].

The **"Traffic Summary"** screen appears.

4 Touch [Traffic Map].

The **"Current Traffic Map"** screen appears.



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 traffic jam by colour.

When traffic incidents occur on your route

The notification icon shows the status of traffic information reception.



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.

1 Press the MAP button.

The Map screen appears.

2 Touch the relevant traffic event icon.



① Traffic notification icon

The “**Traffic Summary**” screen appears. You can check the details of the traffic incidents. Touch the relevant event to display the location on the map.

Turning the traffic information on or off

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

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

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch to show the next page.

4 Touch [Settings].

The “**Settings**” screen appears.

5 Touch to show the next page.

6 Touch [Traffic].

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

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

The feature is enabled or disabled.

- ➔ For details, refer to “*Traffic*” settings on page 65.

Checking useful information about your trip

Checking useful information

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

- ❑ The online function in “**Parking**”, “**Weather**” and “**Fuel Prices**” can be used if you connect an iPhone or a smartphone that has the **AVICSYNC App** installed.
 - ➔ Be sure read *Expanding the use of the navigation functions* (page 67) before using the **AVICSYNC** function.

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.

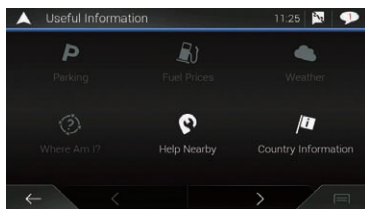


Displays the navigation menu on the Map screen.

3 Touch [Useful Information].

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

4 Touch the desired menu item.



- **Parking:**

Checks for car parks near your current location.

- ❑ For details, refer to the manual for **AVICSYNC** on our website.

- **Fuel Prices:**

Displays recent fuel prices of petrol stations near the current location, along the current route, or in the town.

- ❑ For details, refer to the manual for **AVICSYNC** on our website.

- **Weather:**

Checks the weather forecast for your current location, along your route, around your

destination, as well as for your saved locations.

- ❑ For details, refer to the manual for **AVICSYNC** on our website.

- **Where Am I?:**

Displays a special screen with information about the current position and a key to search for nearby emergency or roadside assistance services.

The screen provides the following information:

- Latitude and longitude (coordinates of the current position in WGS84 format)
- Address details of the current position (when available)
- The nearest city
- Next crossing road/street
- Previous crossing road/street

- ❑ If the current street is displayed below the current position marker on the map, touch it to open the “**Where Am I?**” screen. When you are driving without a planned route, touch the current street or the arrows at the top section of the Map screen to open the “**Where Am I?**” screen.

- ❑ To save the current position as a “**Saved Location**” destination, touch .

- ➔ For details, refer to *Storing a location in “Saved Location”* on page 47.

- ❑ To check the country information of your current position, touch .

- **Help Nearby:**

Checks for POIs in your surroundings.

The preset search categories are as follows.

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

- **Country Information:**

Checks for useful driving information about the selected country (for example, speed limits and maximum blood alcohol level).

- ❑ This information may not necessarily correspond to the actual regulations, etc. Utilise the information for your reference.

Checking useful information about your trip

- **Trip Monitor:**

Checks the statistical data of your trips (for example, start time, end time, average speed, etc.).


➔ For details, refer to *Recording your travel history* on page 54.

- **GPS Information:**

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

- **Fuel Consumption:**

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

➔ For details, refer to *Calculating the fuel consumption* on page 56. 

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:** on page 58.

Activating trip logger temporarily

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

- 1 **Press the MAP button.**

The Map screen appears.

- 2 **Touch the following key.**



Displays the navigation menu on the Map screen.

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

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

- 4 **Touch [Trip Monitor].**

The “**Trip Monitor**” screen appears.

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.

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 **Enable Auto-Saving:** on page 55.

Browsing the trip log

- 1 **Record the trip log.**

- 2 **Press the MAP button.**

The Map screen appears.

- 3 **Touch the following key.**



Displays the navigation menu on the Map screen.

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

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

- 5 **Touch [Trip Monitor].**

The “**Trip Monitor**” screen appears.


To export all trip logs, touch **[Export All]**.

- 6 **Touch any of the items to see the details.**

The screen showing the trip log in detail appears.

To display the trip log on the map, touch **[Visible on Map]** to tick the check box.

Checking useful information about your trip

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

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

Setting the trip logger

1 Record the trip log.

2 Press the MAP button.

The Map screen appears.

3 Touch the following key.



Displays the navigation menu on the Map screen.

4 Touch [Useful Information].

The “Useful Information” screen appears.

5 Touch [Trip Monitor].

The “Trip Monitor” screen appears.

6 Touch and then touch [Trip Monitor Settings].

The setting screen appears.

7 Touch any of the items to change the settings.

- **Enable Auto-Saving:**
Sets whether automatic trip logging is activated or not.
- **Save Track Log:**
Track logs, the sequence of the positions given by the GPS receiver, can be saved together with trip logs. You can activate the track logger whenever the trip logger is activated.
 - “Trip Database Size” indicates the current data size of the trip log (track log included).

Editing a trip log

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [Useful Information].

The “Useful Information” screen appears.


4 Touch [Trip Monitor].

The “Trip Monitor” screen appears.

5 Touch and then touch [Edit].

The “Select Trip to Edit” screen appears.

6 Touch any of the items to edit.

- **Delete:**
Deletes the trip log.
- **Rename:**
Renames the trip log.
- **Change Colour:**
Changes the colour by selecting another colour from the colour table.
 - 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 Press the MAP button.

The Map screen appears.

Checking useful information about your trip

2 Touch the data field key.



The “**Trip Computer**” screen appears.



- If you touch [**Trip Summary**], the details of the current trip are displayed. Touch [**Save Trip**] to store the current trip log.

3 Touch the following key.



Returns to the Map screen.

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

Calculating the fuel consumption

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

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

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 Press the **MAP** button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [**Useful Information**].

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

4 Touch [**Fuel Consumption**].

The “**Fuel Consumption**” screen appears.

5 Touch [**Initial Milometer Value**].

The “**Set Initial Milometer Value**” screen appears.

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 Press the **MAP** button.

The Map screen appears.

Checking useful information about your trip

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [Useful Information].

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

4 Touch [Fuel Consumption].

The “**Fuel Consumption**” screen appears.

5 Touch [Add].

The “**Add Consumption Entry**” screen appears.

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].

The “**View Consumption Entry**” screen appears.

10 Touch [Done].

The entry is created and the fuel consumption is displayed.

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

4 Touch [Fuel Consumption].

The “**Fuel Consumption**” screen appears.

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].

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

Setting the car maintenance schedule

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch [Useful Information].

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

Customising the navigation settings

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

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch to show the next page.

4 Touch [Settings].

The "Settings" screen appears.

- **Route Preferences:**
Sets the type of vehicle you are driving, the road types used in route planning, and the route planning method.
➔ For details, refer to "Route Preferences" settings on page 59.
- **Sound:**
Adjusts the different sound volumes and changes the voice guidance profile.
➔ For details, refer to "Sound" settings on page 61.
- **Warnings:**
Enables or disables warnings and sets up the warning function.
➔ For details, refer to "Warnings" settings on page 62.
- **Navigation Map:**
Fine-tunes the appearance of the Map screen and adjusts how the software helps you navigate with different kinds of route-related information on the Map screen.
➔ For details, refer to "Navigation Map" settings on page 62.
- **Regional:**
Changes the voice guidance language, the application language, and measurement units.
➔ For details, refer to "Regional" settings on page 64.
- **Display:**
Sets separate themes for daytime and nighttime use, adjusts the display backlight, and enables or disables menu animations.
➔ For details, refer to "Display" settings on page 65.
- **Traffic:**
Enables or disables the TMC receiver and sets up the traffic function.
➔ For details, refer to "Traffic" settings on page 65.
- **Weather:**
Enables or disables the online weather forecast option and the automatic download of weather information.
➔ For details, refer to "Weather" settings on page 65.
- **Fuel:**
Enables or disables the online fuel price option and sets up the fuel type.
➔ For details, refer to "Fuel" settings on page 65.
- **Trip Monitor:**
Turns automatic trip log saving on or off and checks the current size of the trip database.
➔ For details, refer to "Trip Monitor" settings on page 65.
- **AVICSYNC**
Displays the connection method for AVICSYNC.
 The setting value is fixed. Use this product as it is.
- **Online Services:**
Enables or disables the connected services.
➔ For details, refer to "Online Services" settings on page 66.
- **Usage Reports:**
Enables or disables the collection of usage information and GPS logs that may be used for improving the application and the quality and coverage of maps.
➔ For details, refer to "Usage Reports" settings on page 66.
- **Start Configuration Wizard:**

Customising preferences of the navigation

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

- **SyncTool:**
Starts the synchronisation tool, which makes it possible to update your maps.
 - ➔ For details, refer to *Getting the map up-to-date* on page 69.

Restoring the default settings

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

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.



Displays the navigation menu on the Map screen.

3 Touch to show the next page.

4 Touch [Settings].

The “Settings” screen appears.

5 Touch the following key.



Displays the shortcuts.

6 Touch [Reset All Settings].

A confirmation message appears.

7 Touch [OK].

The recorded contents are cleared.

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

Information on each option of “Settings”

“Route Preferences” settings

Vehicle


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

- The route is planned based on the selected vehicle type.

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

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

- **Car:**
 - Manoeuvre restrictions and directional constraints are taken into account when planning a route.
 - Roads are used only if access for cars is allowed.
 - Private roads and resident-only roads are used only if they are inevitable to reach the destination.
 - Walkways are excluded from routes.
- **Emergency:**
 - All manoeuvres available at intersections are taken into account.
 - Directional constraints are taken into account in the same way as travel in the opposite direction is allowed at low speeds.
 - Only private roads that need to be used to access the destination are included.
 - Walkways are excluded from routes.
- **Bus:**
 - Manoeuvre restrictions and directional constraints are taken into account when planning a route.
 - Roads are used only if access for buses is allowed.
 - Private roads, resident-only roads and walkways are excluded from routes.
- **Taxi:**

- Manoeuvre restrictions and directional constraints are taken into account when planning a route.
- Roads are used only if access for taxis is allowed.
- Private roads, resident-only roads and walkways are excluded from routes.
- **Lorry:**
 - Manoeuvre restrictions and directional constraints are taken into account when planning a route.
 - Only roads that allow lorry access are included.
 - Private roads, resident-only roads and walkways are excluded from routes.
 - U-turns are not used in routes (turning around on a divided road is not considered a U-turn for the purpose of this system).
- To edit the name and estimated maximum speed of the selected vehicle profile, touch .
- To add a new vehicle profile, touch **[Add Profile]**. Then select one of the vehicle types and set the name and estimated maximum speed.

Route Planning Method

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

- **Fast**
Calculates a route with the shortest travel time to your destination as a priority. Usually the best selection for fast and standard cars.
- **Easy**
Results in a route with fewer turns and no difficult manoeuvres. With this option, you can make this system to take, for example, the motorway instead of a series of smaller roads or streets.
- **Short**
Calculates a route with the shortest distance to your destination as a priority.

Usually practical for slower vehicles. Rarely practical to use to search for shorter routes for normal vehicles regardless of the speed.

- **Economical**

Calculates a route that is quick and saves fuel.

Navigation Mode

You can enable or disable off-road navigation.

- **On-road**

The route is planned towards the destination along the roads on the map.

- **Off-road**

The route is planned towards the destination in a straight line, not along the roads on the map.

Motorways

When this function is turned off, the route is calculated prioritising the avoidance of motorways.

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

Period Charge

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

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

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

Per-use Toll

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

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

Customising preferences of the navigation

Ferries

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

Car Shuttle Trains

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

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

Unpaved Roads

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

- The navigation system avoids unpaved roads by default.

Carpool Lanes

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

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

“Sound” settings

Voice

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

Alert Beeps

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

Ding

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

Voice Guidance

You can enable or disable voice guidance.

- This function is enabled by default.

Announce Streets and Roads in Native Language Area

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

Announce Streets and Roads in Foreign Language Area

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

Early Indication of Manoeuvres

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

Verbosity Level

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

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

Announce Route Summary

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

Announce Country Info

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

Announce Traffic Info

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

Announce System Messages

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

“Warnings” settings

IMPORTANT

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

Speed Warning

• Warn When Speeding

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

The following alert types are available:

- **Audio and Visual:** When selected, audible and visible warnings will go off when you exceed the speed limit.
- **Visual:** When selected, visible warnings will go off when you exceed the speed limit.

• Speed Limit Always Visible

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

• Warn at *** percent of the Speed Limit (Outside Towns)

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

• Warn at *** percent of the Speed Limit (Within Towns)

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

Alert Points

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

- ➔ For details, refer to *Setting the alert point warnings* on page 66.

Warning Road Signs

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

“Navigation Map” settings

Map Display

You can see the effect when you change a setting.

• Viewpoint

You can adjust the basic zoom and tilt levels to your needs. Three levels are available.

• Colour Mode

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

• Day Map Colour

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

• Night Map Colour

You can select the colour scheme used in nighttime map.

• Landmarks

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

- For AVIC-F970DAB, AVIC-F970BT, AVIC-F9770DAB and AVIC-F9770BT, this function becomes effective only when the additional map data is installed.

Customising preferences of the navigation

• Buildings

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

- For AVIC-F970DAB, AVIC-F970BT, AVIC-F9770DAB and AVIC-F9770BT, this function becomes effective only when the additional map data is installed.

• 3D Terrain

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

• Track Logs

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

• Place Markers

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

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

Data Fields

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

- ➔ For details, refer to *Browsing the data field* on page 31.

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

Route Progress Bar

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

Offer Motorway Services

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

- ➔ For details, refer to *Frequently shown route events* on page 30.

Services Displayed

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

Automatic Overview

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

Signposts

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

Junction View

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

Tunnel View

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

Offer Congestion Detour on Highways

When you slow down while driving on a 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:

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

Offer Real-time Route Alternatives

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

Offer Parking Around Destination

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

Offer Hints Upon Detour

If you leave the recommended route and suddenly exit the 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.

“Regional” settings

Language

This key displays the current language of the user interface. By touching the key, you can select a new language from the list of avail-

able languages. This system will restart if you change this setting.

Voice Language

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

Units and Formats

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

- This system may not support all the listed units in some voice guidance languages.
- You can also set other country specific units used to display different values in this system.

Distance

The unit of distance can be changed.

Fuel Economy

The unit of fuel mileage can be changed.

Weight

The unit of weight can be changed.

Coordinate Display Format

The format of the coordinates can be changed.

Currency

The currency unit can be set.

Time Zone

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

- **Automatic Time Zone**
The time zone setting changes automatically.
- **Manual Time Zone**
The present setting value for the time difference and daylight saving time that you set are used.
- **Manual Time Zone if Auto Unavailable**

Customising preferences of the navigation

The time zone setting changes automatically if automatic change is available. Otherwise, the present setting value that you set is used.

- **Manual Time Zone in Current Zone**

The present setting value that you set are used in the current time zone. If your vehicle moves to another time zone, the time zone setting changes automatically.

Time Zone

You can set the time difference.

Daylight Saving Time

You can turn on or off the daylight saving time for this navigation system.

“Display” settings

Menu Animations

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

Day Skin Theme

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

Night Skin Theme

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

“Traffic” settings

Traffic

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

Data Source

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

Show Traffic Info

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

- **Off**

No traffic icons or lines indicating the traffic flow are shown.

- **Colour**

Only the line relevant traffic incidents 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.

Show Free Traffic Flow As Well

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

Offer Detour if it Saves at Least

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

Confirm Detours Manually

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

“Weather” settings

- For details, refer to the manual for **AVICSYNC** on our website.

“Fuel” settings

- For details, refer to the manual for **AVICSYNC** on our website.

“Trip Monitor” settings

Enable Auto-Saving

- ➔ For details, refer to *Setting the trip logger* on page 55.

Save Track Log

➔ For details, refer to *Setting the trip logger* on page 55.

“Online Services” settings

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

❑ For details, refer to the manual for **AVICSYNC** on our website.

➔ For details, refer to *Expanding the use of the navigation functions* on page 67.

Online Traffic

You can enable or disable the online traffic service.

Online Weather

You can enable or disable the online weather forecast service.

Online Parking

You can enable or disable the online parking service.

Online Fuel Prices

You can enable or disable the online fuel price service.

Online Search

You can enable or disable the online search service.

“Usage Reports” settings**Application Usage Information**

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

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

GPS Tracks

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

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

Setting the alert point warnings

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

1 Press the MAP button.

The Map screen appears.

2 Touch the following key.

Displays the navigation menu on the Map screen.

3 Touch  to show the next page.**4 Touch [Settings].**

The “**Settings**” screen appears.

5 Touch [Warnings].

The “**Warnings**” screen appears.

6 Touch [Alert Points].

The “**Alert Points**” screen appears.

7 Touch [Alert Point Warnings] to turn it on.**8 Touch [Alert Types].**

The “**Select Alert Types**” screen appears.

9 Touch any of the items to change the setting.

The warning setting screen of the selected category is shown.

Customising preferences of the navigation

10 Touch [Warning Type] and then touch one of the options.

The following alert types are available:

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

Expanding the use of the navigation functions

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

Be sure to read before you use AVICSYNC function

IMPORTANT

- Premium services for AVICSYNC require a paid subscription in order to be used, and not all services are available in all countries. Please refer to our website for more details.
- Please be aware that you may be charged additional roaming charges by your cellular provider if you use connected services while abroad.
- If the Data Plan for your iPhone or smartphone (Android) does not provide for unlimited data usage, additional charges from your carrier may apply for accessing app-based connected content via networks other than Wi-Fi.
- The information which is sent by content provider, such as search results, regulations, prices, etc. may not necessarily correspond to the actual condition. Utilise the information for your reference.
- To ensure compatibility, always use the latest version of the **AVICSYNC App**.

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.

What is the AVICSYNC App?

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

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

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

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

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

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

<http://www.pioneer.eu/avicsync> 

Compatibility and connectivity

You need to install the free **AVICSYNC App** to your iPhone or smartphone (Android). To use the **AVICSYNC App** function, both iPhone or

smartphone (Android) compatibility with the **AVICSYNC App** and connectivity with the navigation system are required.

AVICSYNC compatibility

AVICSYNC is available for the following models.

(As of November 2014)

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

iPhone models

- iPhone 6 Plus: iOS 8.0.x
- iPhone 6: iOS 8.0.x
- iPhone 5s: iOS 7.0.x, 7.1.x, 8.0.x, 8.1
- iPhone 5c: iOS 7.0.x, 7.1.x, 8.0.x, 8.1
- iPhone 5: iOS 7.0.x, 7.1.x, 8.0.x, 8.1
- iPhone 4s: iOS 7.0.x, 7.1.x, 8.0.x, 8.1
- iPhone 4: iOS 6.x

Smartphone (Android) models

SAMSUNG

- Galaxy S2: Android 4.1.2
- Galaxy S3: Android 4.1.2, 4.3
- Galaxy S4: Android 4.2.2, 4.4.2
- Galaxy Note II: Android 4.1.1
- Galaxy Tab 2: Android 4.0.3

LG

- Nexus 5: Android 4.4.2

ASUS

- Nexus 7 (2013) 4.3

Customising preferences of the navigation

Preparations before using the AVICSYNC function

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

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

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

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

- ➔ For details of the Bluetooth connection, refer to Chapter 11.
- ➔ For details of the USB connections, refer to the Installation Manual.

4 Press the MAP button.

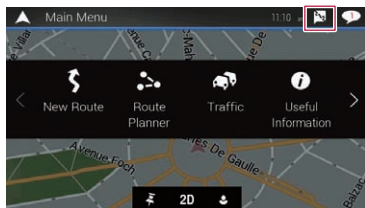
The Map screen appears.

5 Touch the following key.



Displays the navigation menu on the Map screen.

6 Touch on the navigation menu.



7 Touch [Associate New Phone].

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

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

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

10 Purchase connected services via the AVICSYNC App.

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

12 Touch [Online Services].

13 Touch the service that you want to activate.

The menus for the connected service are activated.

Getting the map update

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

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

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

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

- ❑ The **"Bluetooth"** menu is available only when you stop your vehicle in a safe place and apply the handbrake.

Preparing communication devices

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

➔ For details, refer to *Notes for hands-free phoning* on page 82.

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

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

Registering your Bluetooth devices

You need to register your devices featuring Bluetooth wireless technology when you connect it to this product for the first time. A total

of three devices can be registered. Two registration methods are available:

- Searching for nearby Bluetooth devices
- Pairing from your Bluetooth devices
- ❑ If three devices are already paired, **"Memory Full"** is displayed and pairing cannot be performed. In such cases, delete a paired device first.
 - ➔ For details, refer to *Deleting a registered device* on page 72.

Searching for nearby Bluetooth devices

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

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

1 Activate the Bluetooth wireless technology on your devices.

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

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

3 Touch the following keys in the following order.

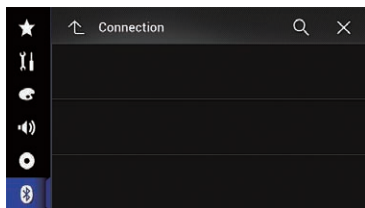


The **"Bluetooth"** screen appears.

4 Touch [Connection].

The following screen appears.

Registering and connecting a Bluetooth device

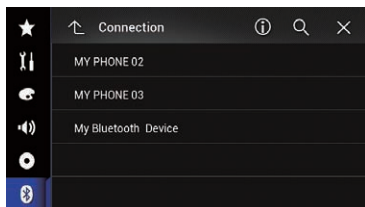


5 Touch the following key.



Starts searching.

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



- ❑ Up to 20 devices will be listed in the order that the devices are found.

6 Wait until your Bluetooth device appears in the list.

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

7 Touch the name of the Bluetooth device you want to register.

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

- ❑ If your device supports SSP (Secure Simple Pairing), a six-digit number appears on the display of this product. Touch [Yes] to pairing the device.
- ❑ If the connection fails, “Error” is displayed. In such cases, try again from the beginning.

- ❑ The PIN code is set to “0000” as the default, but can be changed.
 - ➔ For details, refer to *Entering the PIN code for Bluetooth wireless connection* on page 73.
- ❑ Once the connection is established, the device name is displayed. Touch the device name to disconnect.

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

The profile icons displayed on the registered device list screen light up as follows.



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



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



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

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



Switches between the device names and Bluetooth device addresses.

Pairing from your Bluetooth devices

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

- ❑ Before registration, make sure that “Visibility” in the “Bluetooth” menu is set to “On”.

Registering and connecting a Bluetooth device

➔ For details, refer to *Switching visibility* on page 73.

1 Activate the Bluetooth wireless technology on your devices.

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

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

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

Connecting to a Bluetooth device automatically

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

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

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

2 Touch the following keys in the following order.



The "Bluetooth" screen appears.

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

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

- **Off:**

Turns the automatic connection off.

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

If connection fails, "**Bluetooth auto connection failed. Retry?**" appears.

Touch [**Yes**] to reconnect.

Deleting a registered device

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

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



CAUTION

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

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

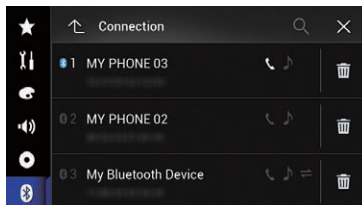
2 Touch the following keys in the following order.



The "Bluetooth" screen appears.

3 Touch [Connection].

The following screen appears.



Registering and connecting a Bluetooth device

4 Touch the following key.



Deletes a paired device.

A confirmation message appears.

5 Touch [Yes].

The device is deleted.

Connecting a registered Bluetooth device manually

Connect the Bluetooth device manually in the following cases:

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

To start the connection manually, carry out the following procedure.

1 Activate the Bluetooth wireless technology on your devices.

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

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

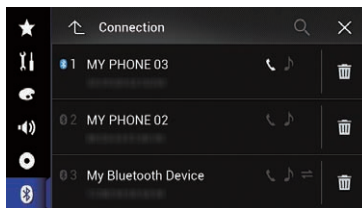
3 Touch the following keys in the following order.



The “Bluetooth” screen appears.

4 Touch [Connection].

The following screen appears.



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

Switching visibility

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

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

2 Touch the following keys in the following order.



The “Bluetooth” screen appears.

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

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

Entering the PIN code for Bluetooth wireless connection

To connect your Bluetooth device to this product via Bluetooth wireless technology, you need to enter a PIN code on your Bluetooth device to verify the connection.

- The default code is “0000”, but you can change it with this function.

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



The “Bluetooth” screen appears.

- 3 Touch [PIN Code Input].
The “PIN Code” screen appears.

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

- 5 Touch the following key.



Stores the PIN code in this product.



Displaying the Bluetooth address

You can check the Bluetooth address of this product.

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



The “Bluetooth” screen appears.

- 3 Touch [Device Information].
The Bluetooth address is displayed. 

Clearing the Bluetooth memory


CAUTION

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

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



The “Bluetooth” screen appears.

- 3 Touch [Bluetooth Memory Clear].
- 4 Touch [Clear].
The confirmation screen appears.
- 5 Touch [OK].
The Bluetooth memory is cleared.
 - If you do not want to clear the memory, touch [Cancel]. 

Updating Bluetooth software

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

- The source is turned off and the Bluetooth connection is disconnected before the process starts.

CAUTION

Never turn this product off while the software is being updated.

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

Registering and connecting a Bluetooth device

2 Touch the following keys in the following order.



The “Bluetooth” screen appears.

3 Touch [BT Software Update].

4 Touch [Start].

The data transfer screen is displayed.

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

Displaying the Bluetooth software version

If this product fails to operate properly, you may need to consult your dealer for repair. In such cases, you may be asked to specify the software version. Perform the following procedure to check the version on this unit.

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

2 Touch the following keys in the following order.



The “Bluetooth” screen appears.

3 Touch [Bluetooth Version Information].

The version of this product’s Bluetooth module appears. □

⚠ CAUTION

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

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

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

Displaying the phone menu

- ❑ Connect a mobile phone to this product for using hands-free phoning.
 - ➡ For details, refer to Chapter 11.
- ❑ The Phone icon is displayed on the following screens.
 - Top menu screen
 - AV operation screen
 - On the App control side bar on the **AppRadio Mode** and **MirrorLink** mode screens

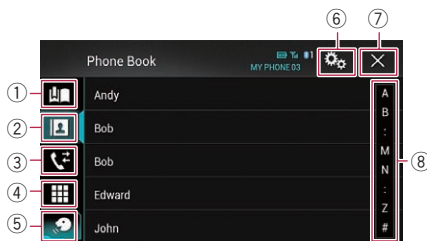
● Touch the following key.



Displays the Phone menu screen.

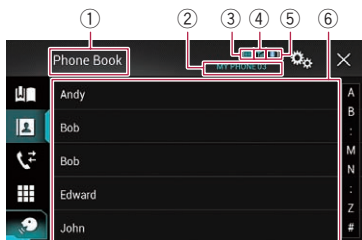
- ❑ The “**Phone Book**” screen appears when using this function for the first time. The screen of the last-used function appears from the next time.

Touch panel keys



- ① Displays the preset dial screen.
- ② Switches to the phone book list.
- ③ Switches to the missed, received and dialled call lists.
- ④ Switches the mode to enter the phone number directly.
- ⑤ Switches to the voice recognition function.
- ⑥ Displays the Setting menu screen.
- ⑦ Closes the screen.
- ⑧ Displays entries in the list by the initial character.

Reading the screen



- ① Menu title
- ② Name of the connected mobile phone
- ③ Battery status of the mobile phone
- ④ Reception status of the mobile phone
- ⑤ Indicates that a Bluetooth telephone is connected.
The list number of the connected device is displayed.
- ⑥ List display area

Using hands-free phoning

Making a phone call

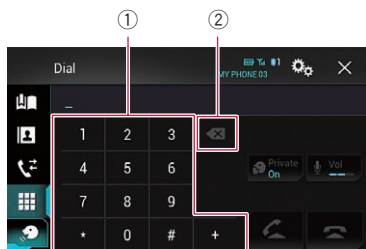
You can make a phone call in many different ways.

Direct dialling

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



The "Dial" screen appears.



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

- 3 Touch the number keys to enter the phone number.
- 4 Touch the following key.



Makes a call.

- 5 Touch the following key.



Ends the call.

The call ends.

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

Calling a number in the phone book

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

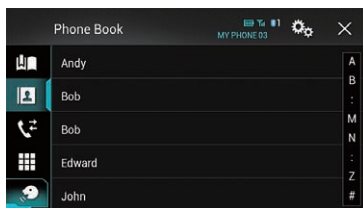
- The contacts on your phone will normally be transferred to this product automatically when the phone is connected. If the contacts are not transferred automatically, you can transfer the contacts using the phone menu of the mobile phone. To transfer the contacts using the phone menu of the mobile phone, set this product visible to other devices.
 - ➔ For details, refer to *Switching visibility* on page 73.

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



The "Phone Book" screen appears.

- 3 Touch the desired name on the list.



The details screen of the phone book appears.

- 4 Touch the phone number you want to dial. The dial screen appears.
- 5 Dialling starts.
 - To cancel the call, touch
- 6 Touch the following key.



Ends the call.

The call ends.

Selecting a number by alphabet search mode

If many phone numbers are registered in the phone book, you can search for phone numbers by alphabet search mode.

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



The "Phone Book" screen appears.

- 3 Drag the Initial Search Bar to find an entry by the initial character of the name.

The alphabet corresponding to the current position on the Initial Search Bar is displayed.

- 4 Release the Initial Search Bar at the desired alphabet.

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

- To refine the search with a different letter, touch [Cancel].
- When the system language is set to Russian, the following key appears. If you want to change the character, touch the following key until the desired character repeatedly.



Changes the character.

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

The details screen of the phone book appears.

- 6 Touch the phone number you want to dial.

The dial screen appears.

- 7 Dialling starts.

- To cancel the call, touch .

- 8 Touch the following key.



Ends the call.

The call ends.

Dialling from the history

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

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



The "History" screen appears.

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



①

- ① Type of call history



Received calls.



Dialled calls.



Missed calls.

Using hands-free phoning

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

The dial screen appears.

4 Dialling starts.

- To cancel the call, touch 

5 Touch the following key.



Ends the call.

The call ends.

Using the preset dial lists

You can dial a number from the preset dial list.

Registering a phone number

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

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

2 Touch the following keys in the following order.



The “Phone Book” or “History” screen appears.

3 Touch the following key.



Registers the phone number to the “Preset Dial” list.

Dialling from the preset dial list

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

2 Touch the following keys in the following order.



The “Preset Dial” screen appears.

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

The dial screen appears.

4 Dialling starts.

- To cancel the call, touch 

5 Touch the following key.



Ends the call.

The call ends.

Deleting a phone number

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

2 Touch the following keys in the following order.



The “Preset Dial” screen appears.

3 Touch the following key.



Deletes the phone number.



Receiving a phone call

You can answer an incoming call to your mobile phone via this product.

Answering an incoming call

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



- ❑ You can set the system to automatically answer incoming calls. If this product is not set to automatically answer incoming calls, answer the calls manually.
 - ➔ For details, refer to *Answering a call automatically* on page 81.
- ❑ The registered name appears if the phone number of the received call is already registered in **"Phone Book"**.

1 Touch the following key.



Answers an incoming call.



Rejects an incoming call.

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

- ➔ For details, refer to *Dialling from the history* on page 78.

2 Touch the following key.



Ends the call.

The call ends. ■

Minimising the dial confirmation screen

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

1 Touch the following key.



The dial confirmation screen is minimised.



2 Touch the following key.



Displays the dial confirmation screen again.



Using hands-free phoning

Changing the phone settings

Answering a call automatically

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

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

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

2 Touch the following keys in the following order.



The “**Bluetooth**” screen appears.

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

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

Switching the ring tone

You can select whether or not to use this product’s ring tone.

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

2 Touch the following keys in the following order.



The “**Bluetooth**” screen appears.

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

- **On** (default):

Turns the ring tone on.

- **Off**:
Turns the ring tone off.

Inverting names in the phone book

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

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

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

2 Touch the following keys in the following order.



The “**Bluetooth**” screen appears.

3 Touch [Invert Name].

The confirmation screen appears.

4 Touch [Yes].

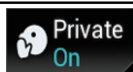
- If the inversion fails, “**Invert Name Error**” appears. In such cases, try again from the beginning.
- Inverting the names of your contacts from this product does not affect the data on your mobile phone.

Setting the private mode

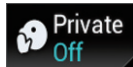
During a conversation, you can switch to private mode (talk directly on your mobile phone).

Using hands-free phoning

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



Talk directly on your mobile device.



Hands-free phoning

Adjusting the other party's listening volume

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

- Touch the following key.



Switches between the three volume levels.

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

Using the voice recognition function

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

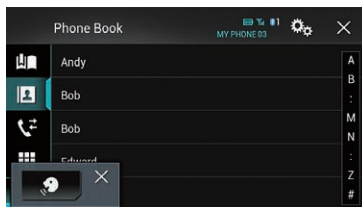
- When an iPhone running iOS 6.1 or higher is used, Siri Eyes Free Mode is available with this product.
- For AVIC-F77DAB and AVIC-F70DAB users For using this function with a smartphone, the device must be compatible with **Android Auto** and "Mode" in "Smartphone Setup" must be set to "Android Auto" beforehand.
 - For details, refer to *Information on the connections and functions for each device* on page 86.

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

- 2 Touch the following keys to start voice control.



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



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

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



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



Cancels the voice recognition function.

Notes for hands-free phoning

General notes

- Connection to all mobile phones featuring Bluetooth wireless technology is not guaranteed.

Using hands-free phoning

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

Registration and connection

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

Making and receiving calls


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

- If the phone number of the received call is not registered in the phone book, the phone number of the received call appears.

The received call and the dialled number histories

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

Phone book transfers

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

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

This section describes the settings required for each device.

The basic flow of iPod / iPhone or smartphone setup

- ① Select the method for connecting your device.
 - For details, refer to *Setting the device connection method* on page 84.
- ② Connect your device to this product.
 - For details of the connections, refer to the Installation Manual.
- ③ If necessary, connect your device to this product via Bluetooth connection.
 - For details of the Bluetooth connection, refer to Chapter 11.



Setting the device connection method

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

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

2 Touch the following keys in the following order.



The “**System**” screen appears.

3 Touch [Input/Output Settings].

4 Touch [Smartphone Setup].

The “**Smartphone Setup**” screen appears.

5 Configure the following settings.

- **Device:** Select the device to be connected.
- **Connection:** Select the connection method.
 - Configure the settings correctly according to the device to be connected and the connection method to be used.
 - For details, refer to *Information on the connections and functions for each device* on page 86.
 - If you change the setting, the confirmation screen appears.
 - Touch **[OK]**.
 - The setting will change after the following processes are automatically executed.
 - The source is turned off.
 - **AppRadio Mode** or **MirrorLink** mode is exited.
 - The smartphone connection (USB and Bluetooth) is disconnected.
 - To cancel, touch **[Cancel]**.
 - The setting cannot be changed for a while after the setting is changed.

iPod compatibility

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

Made for

- iPhone 6 Plus: iOS 8
- iPhone 6: iOS 8
- iPhone 5s: iOS 7.0.3
- iPhone 5c: iOS 7.0.3
- iPhone 5: iOS 7.0.3
- iPhone 4s: iOS 7.0.3
- iPhone 4: iOS 7.0.3
- iPhone 3GS: iOS 6.0.1
- iPod touch (5th generation): iOS 6.0.1
- iPod touch (4th generation): iOS 6.0.1
- iPod touch (3rd generation): iOS 5.1.1
- iPod touch (2nd generation): iOS 4.2.1
- iPod classic 160GB (2009): Ver. 2.0.4

iPod / iPhone or smartphone setup operation

- iPod classic 160GB (2008): Ver. 2.0.1
- iPod classic 80GB: Ver. 1.1.2
- iPod nano (7th generation)
- iPod nano (6th generation): Ver. 1.2
- iPod nano (5th generation): Ver. 1.0.2
- iPod nano (4th generation): Ver. 1.0.4
- iPod nano (3rd generation): Ver. 1.1.3
- ❑ You can connect and control an iPod compatible with this product by using separately sold connector cables.
- ❑ Operation methods may vary depending on the iPod model and the software version of the iPod.
- ❑ Depending on the software version of the iPod, it may not be compatible with this product.
For details about iPod compatibility with this product, refer to the information on our website.

This manual applies to the following iPod models.

iPod with 30-pin connector

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

iPod with Lightning connector

- iPhone 6 Plus
- iPhone 6
- iPhone 5s
- iPhone 5c
- iPhone 5
- iPod touch 5th generation
- iPod nano 7th generation

Android™ device compatibility

- ❑ Operation methods may vary depending on the Android device and the software version of the Android OS.
- ❑ Depending on the version of the Android OS, it may not be compatible with this product.
- ❑ Compatibility with all Android devices is not guaranteed.
- ➔ For details about Android device compatibility with this product, refer to the information on our website.

AppRadio Mode Compatibility

iPod with 30-pin connector

- iPhone 4s
- iPhone 4
- iPod touch 4th generation

iPod with Lightning connector

- iPhone 6 Plus
- iPhone 6
- iPhone 5s
- iPhone 5c
- iPhone 5
- iPod touch 5th generation
- ➔ For details about Android device compatibility with this product, refer to the information on our website.

MirrorLink device compatibility

- ❑ This product is compatible with **MirrorLink** version 1.0.
- ❑ Compatibility with all **MirrorLink** devices is not guaranteed.
- ➔ For details about **MirrorLink** device compatibility with this product, refer to the information on our website.

Information on the connections and functions for each device

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

iPod / iPhone with a 30-pin connector				
Required cable (sold separately)		Cable connection is not required.	CD-IU201V	CD-IU201S
Smartphone Setup	Device	iPhone/iPod	iPhone/iPod	iPhone/iPod
	Connection	Bluetooth	USB	USB
Bluetooth connection		Bluetooth connection is required.	—	—
Connection requirement		—	Connect to USB port 1 for using aha or AVICSYNC App .	Connect to USB port 1 for using aha , AppRadio Mode , or AVICSYNC App .
Available source	iPod (audio)	—	✓	✓
	iPod (video)	—	✓	✓
	aha	✓	✓	✓
	AppRadio Mode	—	—	✓
	AVICSYNC App	✓	✓	✓

iPod / iPhone or smartphone setup operation

iPod / iPhone with a Lightning connector					
Required cable (sold separately)		Cable connection is not required.	CD-IU52	<ul style="list-style-type: none"> CD-IH202 CD-IU52 Lightning Digital AV Adapter 	<ul style="list-style-type: none"> CD-IV202AV CD-IU52 Lightning to VGA Adapter
Smartphone Setup	Device	iPhone/iPod	iPhone/iPod	iPhone/iPod	iPhone/iPod
	Connection	Bluetooth	USB	Digital AV adapter	VGA adapter
Bluetooth connection		Bluetooth connection is required.	—	Bluetooth connection is required.	Bluetooth connection is required.
Connection requirement		—	Connect to USB port 1 for using aha or AVICSYNC App .	—	—
Available source	iPod (audio)	—	✓	— (*1)	— (*1)
	iPod (video)	—	—	— (*1)	— (*1)
	aha	✓	✓	✓	✓
	AppRadio Mode	—	—	✓	✓
	AVICSYNC App	✓	✓	✓	✓
Remarks		—	—	<ul style="list-style-type: none"> This connection and settings are available on AVIC-F70DAB, AVIC-F970DAB, AVIC-F970BT, AVIC-F9770DAB, and AVIC-F9770BT. 	<ul style="list-style-type: none"> This connection and settings are available on AVIC-F70DAB, AVIC-F970DAB, AVIC-F970BT, AVIC-F9770DAB, and AVIC-F9770BT.
(*1) Use AppRadio Mode to play music or videos on an iPod. For using AppRadio Mode , install the CarMediaPlayer app on your iPod. ⌚ For details about the CarMediaPlayer , refer to the information on our website. ⌚ Refer to the CarMediaPlayer manual for more information.					

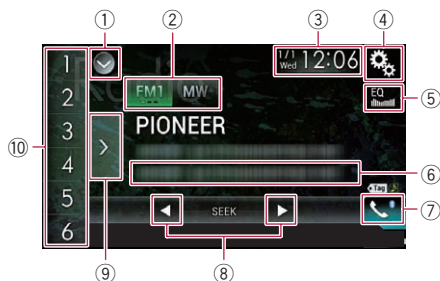
Android, MirrorLink				
Required cable (sold separately)		Cable connection is not required.	CD-MU200	CD-AH200
Smartphone Setup	Device	Others	Others	Others
	Connection	Bluetooth	USB	HDMI
	Mode	—	Android Auto (*1)/ MirrorLink/Off	—
Bluetooth connection		Bluetooth connection is required.	Bluetooth connection is required for using aha or Android Auto .	Bluetooth connection is required.
Connection requirement		—	Connect to USB port 2 for using MirrorLink , Android Auto or AVICSYNC App .	—
Available source	aha	✓ (*2)	✓	✓ (*2)
	AppRadio Mode	—	—	✓
	MirrorLink	—	✓ (*2)	—
	Android Auto	—	✓ (*1) (*2)	—
	AVICSYNC App	✓ (*3)	✓ (*3)	✓ (*3)
Remarks		—	<ul style="list-style-type: none"> Select "Android Auto" for "Mode" for using Android Auto. Select "MirrorLink" for "Mode" for using MirrorLink mode. 	<ul style="list-style-type: none"> This connection and settings are available on AVIC-F77DAB.
<p>(*1) For AVIC-F77DAB and AVIC-F70DAB users Available only when an Android Auto-compatible device is connected. The AVICSYNC App function automatically turns off when an Android Auto-compatible device is connected with this product for the first time. From the next time a compatible device is connected, Android Auto cannot be used while the AVICSYNC App function is on.</p> <p>(*2) Not available when the AVICSYNC App function is turned on.</p> <p>(*3) Turn on the AVICSYNC App function for using AVICSYNC App.</p>				



Using the radio

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

Using the touch panel keys



- ① **Displays the source list.**
 - For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Selects a band.**
 - For details, refer to *Selecting a band* on page 90.
- ③ **Displays the Time and date setting screen.**
 - For details, refer to *Setting the time and date* on page 201.
- ④ **Displays the Setting menu screen.**
- ⑤ **Recalls equaliser curves.**
 - For details, refer to *Using the equaliser* on page 181.
- ⑥ **Stores song information to an iPod.**
 - For details, refer to *Storing song information to an iPod (iTunes Tagging)* on page 201.
- ⑦ **Displays the Phone menu screen.**
 - For details, refer to *Displaying the phone menu* on page 76.
- ⑧ **Performs manual tuning or seek tuning.**
 - For details, refer to *Manual tuning* on page 90.
 - For details, refer to *Seek tuning* on page 90.
- ⑨ **Displays the preset channels.**

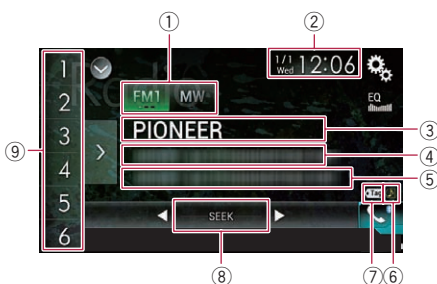
➤ For details, refer to *Selecting a preset channel from the preset channel list* on page 91.

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

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

➤ For details, refer to *Storing broadcast frequencies* on page 91. ■

Reading the screen



- ① **Band indicator**

Shows the tuned band: FM1, FM2, FM3 or MW/LW.
- ② **Current time and date**
- ③ **Programme service name indicator**

Shows the programme service name (station name) of the current station.

 - When "MW/LW" is selected, the frequency will be displayed instead.
- ④ **Radio text display area**

Displays the radio text currently being received.

 - When "MW/LW" is selected, nothing is displayed.
- ⑤ **Song information**



Shows the title of the current song and/or the artist name for the current song (when available).

 - When "MW/LW" is selected, nothing is displayed.
- ⑥ **iTunes® tagging song status indicator**

Using the radio

Shows the status of the song information stored in this product.


- The icon is displayed on all operation screens of AV sources.

Indicator	Meaning
	Appears when the song information tag is stored in this product.
	Appears when the song information tag is being transferred to an iPod.

⑦ iTunes® tagging indicator

Indicates songs that are capable of iTunes tagging.

- The icon is displayed on all operation screens of AV sources.

Indicator	Meaning
	Appears when this product receives an iTunes song tag that can be stored and then downloaded to an iPod for later purchase.
	Flashes when this product is storing song tag information.

⑧ Frequency-seek indicator

⑨ Preset number indicator

- Highlights the selected preset item.

Starting procedure

1 Display the AV source selection screen.

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

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



The "Radio" screen appears.

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

- ➔ For details, refer to *Using the touch panel keys* on page 89.

Selecting a band



● Touch the following key.

	Switches between the following FM bands: FM1, FM2 and FM3.
	Switches to the MW/LW band.

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

Manual tuning



● Touch the following keys to tune manually.

	Moves down one step at a time.
	Moves up one step at a time.

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

Seek tuning

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

	Scans frequencies until it finds a broadcast strong enough for good reception. You can cancel seek tuning by touching either key briefly.
	If you keep holding either key, you can skip broadcasting frequencies. Seek tuning will start when you release the key.



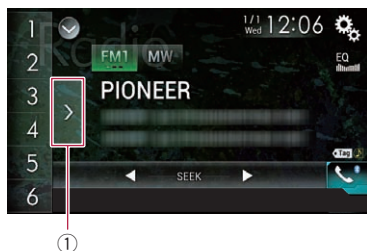
Using the radio

Selecting a preset channel from the preset channel list

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

➤ For details, refer to *Storing broadcast frequencies* on page 91.

1 Touch the preset channel list display key.



① Preset channel list display key

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

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

Storing broadcast frequencies

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

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

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

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

- ❑ Up to 18 FM stations, six for each of the three FM bands, as well as six MW/LW stations, can be stored in memory. ❑

Storing the strongest broadcast frequencies

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

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

1 Touch the preset channel list display key.

The preset channel list appears.

2 Touch [BSM] to start a search.

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

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

Tuning into strong frequencies

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

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

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

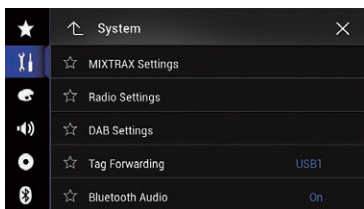
2 Touch the following keys in the following order.



The “**System**” screen appears.

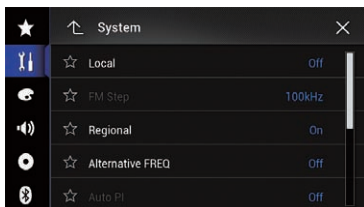
3 Touch [AV Source Settings].

The following screen appears.



4 Touch [Radio Settings].

The following screen appears.



5 Touch [Local].

The pop-up menu appears.

6 Touch the item you want to set.

FM

- **Off** (default):
Turns the seek tuning setting off.
- **Level1**:
Sets the level of sensitivity for FM to level 1.
- **Level2**:
Sets the level of sensitivity for FM to level 2.
- **Level3**:
Sets the level of sensitivity for FM to level 3.
- **Level4**:
Sets the level of sensitivity for FM to level 4.

MW/LW

- **Off** (default):

Turns the seek tuning setting off.

- **Level1**:
Sets the level of sensitivity for MW/LW to level 1.
- **Level2**:
Sets the level of sensitivity for MW/LW to level 2.
- ☐ The FM “**Level4**” (MW/LW “**Level2**”) setting allows reception of only stations with the strongest signals, while lower settings allow reception of those with weaker signals. ☐

Receiving traffic announcements

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

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

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

2 Touch the following keys in the following order.

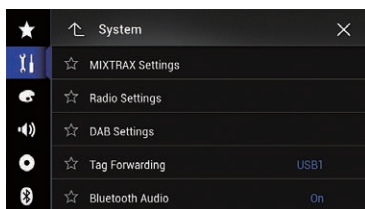


The “**System**” screen appears.

3 Touch [AV Source Settings].

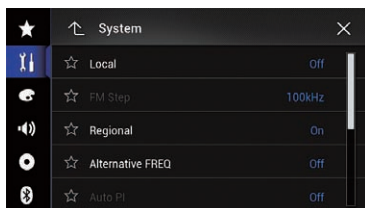
The following screen appears.

Using the radio



4 Touch [Radio Settings].

The following screen appears.



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

F77DAB **F70DAB** **F970DAB** **F9770DAB**

- **TA OFF** (default):
Does not receive traffic announcements automatically.
- **DAB+RDS TA**:
Receives traffic announcements automatically from DAB or RDS stations.
- **RDS TA ONLY**:
Receives traffic announcements automatically from RDS stations only.

F970BT **F9770BT**

- **Off** (default):
Does not receive traffic announcements automatically.
 - **On**:
Receives traffic announcements automatically.
- The selected setting also applies to "TA Interrupt" under "DAB Settings" in AVIC-F77DAB, AVIC-F70DAB, AVIC-F970DAB, and AVIC-F9770DAB.

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

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

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

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

Using news programme interruption

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

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

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

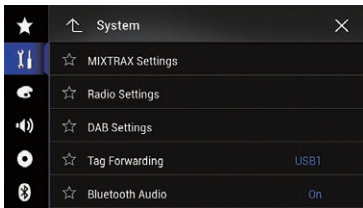
2 Touch the following keys in the following order.



The "System" screen appears.

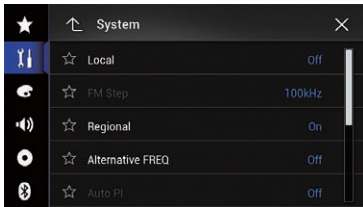
3 Touch [AV Source Settings].

The following screen appears.




4 Touch [Radio Settings].

The following screen appears.



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

- **Off** (default):
Deactivates the news programme interruption function.
 - **On**:
Activates the news programme interruption function.
- You can cancel the news programme by changing the source. 

Tuning into alternative frequencies

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

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

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

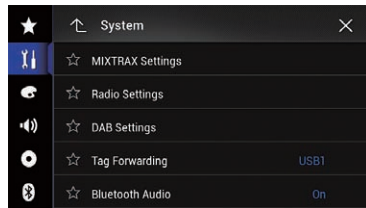
2 Touch the following keys in the following order.



The "System" screen appears.

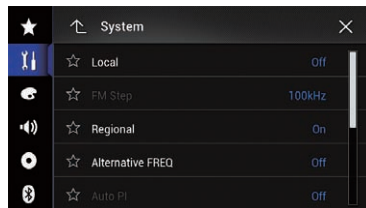
3 Touch [AV Source Settings].

The following screen appears.



4 Touch [Radio Settings].

The following screen appears.



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

- **On** (default):
Turns the alternative frequencies function on.
 - **Off**:
Turns the alternative frequencies function off.
- Only RDS stations are tuned in during seek tuning or BSM when AF is on.
- When you recall a preset station, the tuner may update the preset station with a new frequency from the station's AF list. No preset number appears on the display if the RDS data for the station received differs from that for the originally stored station.

Using the radio

- Sound may be temporarily interrupted by another programme during an AF frequency search.
- AF can be turned on or off independently for each FM band.

Limiting stations to regional programming

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

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

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

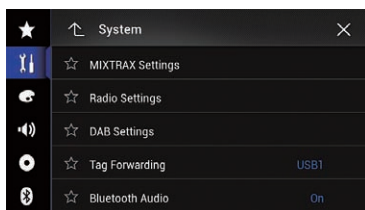
2 Touch the following keys in the following order.



The “**System**” screen appears.

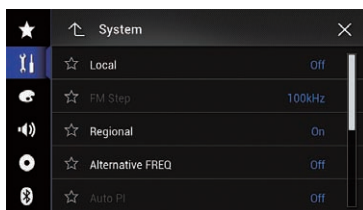
3 Touch [AV Source Settings].

The following screen appears.



4 Touch [Radio Settings].

The following screen appears.



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

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

Switching Auto PI seek

If this product fails to find a suitable alternative frequency, or if you are listening to a broadcast and the reception becomes weak, this product will automatically search for a different station with the same programming.

Activating the Auto PI seek for preset stations

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

- “**Auto PI**” can be set only when the source is turned off.

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

Using the radio

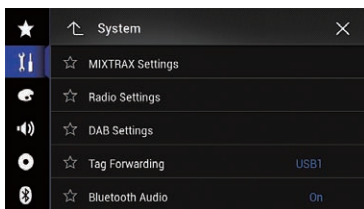
2 Touch the following keys in the following order.



The “System” screen appears.

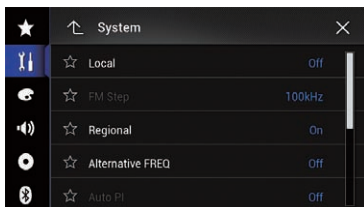
3 Touch [AV Source Settings].

The following screen appears.



4 Touch [Radio Settings].

The following screen appears.



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

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

Switching the sound quality of the FM tuner

You can select the sound quality from the three settings according to the circumstances of use.

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

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

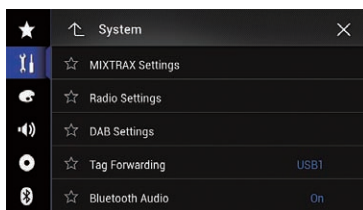
2 Touch the following keys in the following order.



The “System” screen appears.

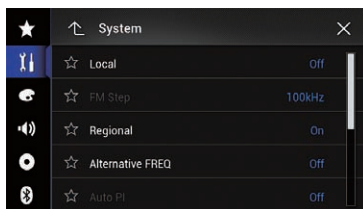
3 Touch [AV Source Settings].

The following screen appears.



4 Touch [Radio Settings].

The following screen appears.



5 Touch [Tuner Sound].

The pop-up menu appears.

6 Touch the item you want to set.

- **Standard** (default):
Switches to the standard settings.
- **Talk**:
Switches to settings that prioritise noise prevention.
- **Music**:
Switches to the settings that give priority to the sound quality.

Storing song information to an iPod (iTunes Tagging)

⇒ For details, refer to *Storing song information to an iPod (iTunes Tagging)* on page 201. □

Operating with the hardware buttons

Press the TRK button.

You can move up or down the preset channels.

Press and hold the TRK button.

You can perform seek tuning. □

F77DAB F70DAB F970DAB F9770DAB

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

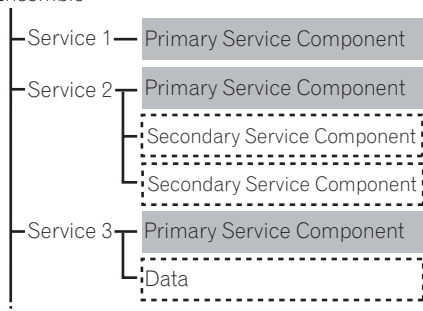
For improved DAB reception, ensure a DAB aerial with phantom power input (active type) is used. Pioneer recommends using "AN-DAB1" or "CA-AN-DAB.001" (active aerial sold separately). Current consumption of DAB aerial should be 100 mA or less.

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

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

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

Ensemble

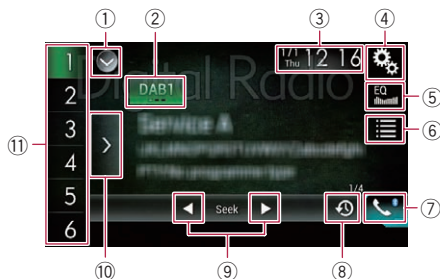


■ : Primary data

▤ : Secondary data

- If an identical service is in multiple ensembles, the strongest broadcast frequency will automatically be tuned in to.

Using the touch panel keys




- Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- Selects a band.**
 - ➔ For details, refer to *Selecting a band* on page 99.
- Displays the Time and date setting screen.**
 - ➔ For details, refer to *Setting the time and date* on page 201.
- Displays the Setting menu screen.**
- Recalls equaliser curves.**
 - ➔ For details, refer to *Using the equaliser* on page 181.
- Selects a channel from the list.**
 - ➔ For details, refer to *Selecting a channel from the list* on page 99.
- Displays the Phone menu screen.**
 - ➔ For details, refer to *Displaying the phone menu* on page 76.
- Enables listening to recent broadcast.**
 - ➔ For details, refer to *Listening to a recent broadcast* on page 100.
- Performs manual tuning or seek tuning.**
 - ➔ For details, refer to *Manual tuning* on page 100.
 - ➔ For details, refer to *Seek tuning* on page 101.
- Displays the preset channels.**
 - ➔ For details, refer to *Selecting a preset channel from the preset channel list* on page 101.

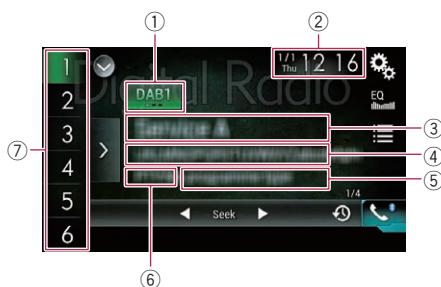
Using the Digital Radio (DAB)


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

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

- For details, refer to *Storing broadcast frequencies* on page 101. 

Reading the screen



- ① **Band indicator**
Shows the tuned band: DAB1, DAB2 or DAB3.
- ② **Current time and date**
- ③ **Current broadcast information**
- Service Component Label
 - Service label
 - Ensemble label
 - “Station Unavailable” is displayed if there is no service broadcasting, and “No Signal” is displayed if no signal has been received.
- ④ **Dynamic label display area**
- Nothing is displayed if there is no data provided.
- ⑤ **Programme type display area**
- “PTY:No programme type” is displayed if the programme type information is not available for the currently tuned station.
 - Nothing is displayed if there is no data provided.
- ⑥ **Service component number**
- ⑦ **Preset number indicator**
Highlights the selected preset item. 

Starting procedure

- Configure the aerial power supply setting according to the DAB aerial to be used beforehand.
 - For details, refer to *Setting the Digital Radio aerial power supply* on page 156.


1 Display the AV source selection screen.

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

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


The “Digital Radio” screen appears.


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

- For details, refer to *Using the touch panel keys* on page 98. 

Selecting a band

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

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

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

Selecting a channel from the list

You can select a channel by searching channel list.

- If no channels are registered in the channel list when the “Digital Radio” is selected as the source, the channels are automatically registered in the list.
- The list will automatically be updated if services or service components change or are added in the current ensemble.

- ❑ If the list is automatically updated while the list is displayed, the updated information will be displayed the next time the list screen is displayed.

1 Touch the following key.



Displays the list screen.

2 Touch the category you want.

You can select a channel from the following categories.

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

3 Touch the item you want.

The channel switches to the selected item.

- ❑ If you touch [Update Stations], you can update the channel list.
- ❑ The Initial Search Bar may appear on the right side of the screen depending on the list. If you drag the bar, you can search by alphabet.

Listening to a recent broadcast

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

● Touch the following key.



Switches to time shift function mode.

The following screen appears.



① Playback and pause

Touching switches between playback and pause.

② Fast reverse or forward

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

③ Returns to live broadcast

- ❑ The time shift function will automatically turn off if traffic announcements are received.

Manual tuning

● Touch the following keys to tune manually.



Moves down one step at a time.



Moves up one step at a time.

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

Using the Digital Radio (DAB)

Seek tuning

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



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



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

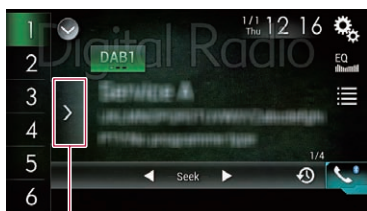


Selecting a preset channel from the preset channel list

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

- ➔ For details, refer to *Storing broadcast frequencies* on page 101.

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



①

- Preset channel list display key

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

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

Storing broadcast frequencies

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

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

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

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

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

Switching to a channel with good receiving sensitivity automatically

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

- This setting is available only when "Digital Radio" is selected as the source.
- After the channel is switched, if the original channel regains good receiving sensitivity, the system switches back to the original channel automatically.

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

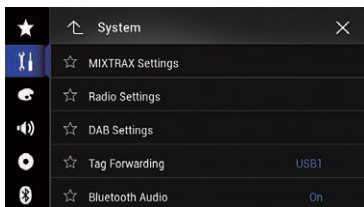
- 2 Touch the following keys in the following order.**



The “System” screen appears.

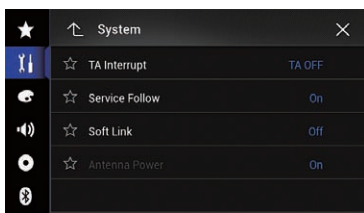
3 Touch [AV Source Settings].

The following screen appears.




4 Touch [DAB Settings].

The following screen appears.



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

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

Switching to a similar channel with good receiving sensitivity automatically

If the tuner cannot get good reception, this product will automatically search for 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 (this function may not be available depending on the service).

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

- This setting is available only when “Service Follow” is set to “On”.
 - ➔ For details, refer to *Switching to a channel with good receiving sensitivity automatically* on page 101.
- The broadcast content of the switched channel may differ from the content of the original channel.

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

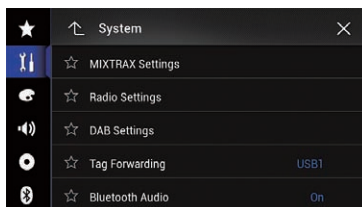
2 Touch the following keys in the following order.



The “System” screen appears.

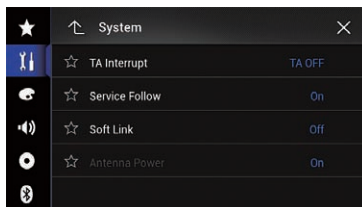
3 Touch [AV Source Settings].

The following screen appears.




4 Touch [DAB Settings].

The following screen appears.



5 Touch [Soft Link] repeatedly until the desired setting appears.

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

Using the Digital Radio (DAB)

Receiving traffic announcements

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

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

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

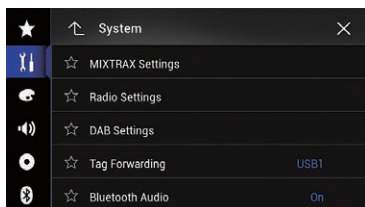
2 Touch the following keys in the following order.



The "System" screen appears.

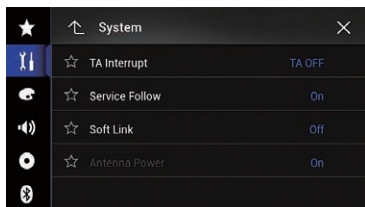
3 Touch [AV Source Settings].

The following screen appears.



4 Touch [DAB Settings].

The following screen appears.



5 Touch [TA Interrupt].

6 Touch the item you want to set.

- **TA OFF** (default):
Does not receive traffic announcements.
 - **DAB+RDS TA**:
Receives traffic announcements automatically from DAB or RDS stations. If traffic announcements from DAB and RDS are received at the same time, traffic announcements from DAB has the priority over RDS.
 - **RDS TA ONLY**:
Receives traffic announcements automatically from RDS stations only.
- The selected setting also applies to "TA Interrupt" under "Radio Settings" in AVIC-F77DAB, AVIC-F70DAB, AVIC-F970DAB, and AVIC-F9770DAB.

Operating with the hardware buttons

Press the TRK button.

You can move up or down the preset channels.

Press and hold the TRK button.

You can perform seek tuning.

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

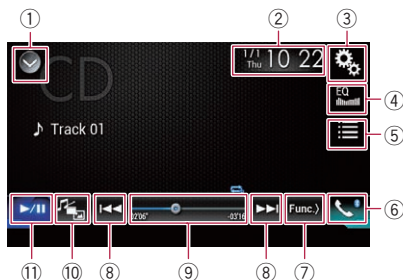
CAUTION

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

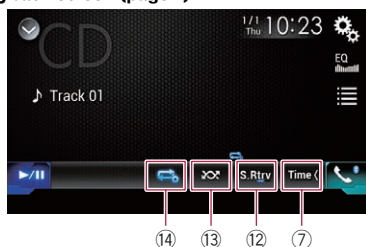
Using the touch panel keys (for audio)

Example: CD

Playback screen (page 1)



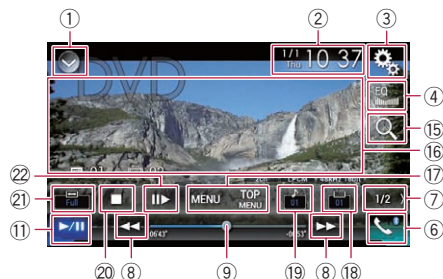
Playback screen (page 2)



Using the touch panel keys (for video)

Example: DVD

Playback screen (page 1)



Playback screen (page 2)



- ① **Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the Time and date setting screen.**
 - ➔ For details, refer to *Setting the time and date* on page 201.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
 - ➔ For details, refer to *Using the equaliser* on page 181.
- ⑤ **Selects a track from the list.**
 - ➔ For details, refer to *Selecting files from the file name list* on page 107.
- ⑥ **Displays the Phone menu screen.**
 - ➔ For details, refer to *Displaying the phone menu* on page 76.
- ⑦ **Switches to the next or previous page of touch panel keys.**
- ⑧ **Skips files forward or backward.**

Playing a disc

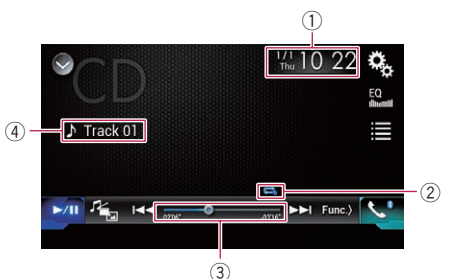
- ⑨ **Changes the playback point by dragging the key.**
 - ➔ For details, refer to *Operating the time bar* on page 23.
- ⑩ **Switches the media file type.**
 - ➔ For details, refer to *Switching the media file type* on page 108.
- ⑪ **Switches between playback and pause.**
- ⑫ **Uses “Sound Retriever” function.**
 - ➔ For details, refer to *Setting the “Sound Retriever” function* on page 202.
- ⑬ **Plays files in random order.**
 - ➔ For details, refer to *Playing tracks in random order* on page 107.
- ⑭ **Sets a repeat play range.**
 - ➔ For details, refer to *Setting a repeat play range* on page 107.
- ⑮ **Searches for the part you want to play.**
 - ➔ For details, refer to *Searching for the part you want to play* on page 108.
- ⑯ **Hides the touch panel keys.**

Touching this area hides the touch panel keys.

 - Touch anywhere on the LCD screen to display the touch panel keys again.
- ⑰ **Displays the DVD menu.**
 - ➔ For details, refer to *Operating the DVD menu* on page 108.
- ⑱ **Switches the subtitle language.**
 - ➔ For details, refer to *Switching the subtitle language* on page 109.
- ⑲ **Switches the audio language.**
 - ➔ For details, refer to *Switching the audio language* on page 109.
- ⑳ **Stops playback.**
- ㉑ **Changes the wide screen mode.**
 - ➔ For details, refer to *Changing the wide screen mode* on page 202.
- ㉒ **Moves ahead one frame (frame-by-frame playback) or slows down playback speed (slow-motion playback).**
 - ➔ For details, refer to *Frame-by-frame playback* on page 109.
 - ➔ For details, refer to *Slow motion playback* on page 109.
- ㉓ **Performs an operation (such as resuming) that is stored on the disc.**
 - ➔ For details, refer to *Returning to a specified scene* on page 109.
- ㉔ **Resumes playback (Bookmark).**
 - ➔ For details, refer to *Resuming playback (Bookmark)* on page 110.
- ㉕ **Displays the DVD menu keypad.**
 - ➔ For details, refer to *Operating the DVD menu using touch panel keys* on page 110.
- ㉖ **Changes the viewing angle (Multi-angle).**
 - ➔ For details, refer to *Switching the multi-angle DVD display* on page 110.
- ㉗ **Selects the audio output.**
 - ➔ For details, refer to *Selecting the audio output* on page 110.

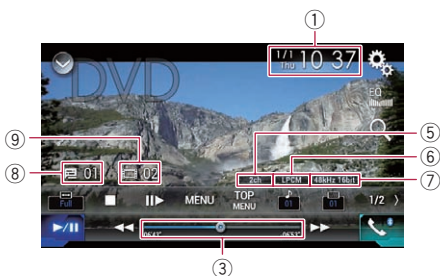
Reading the screen (for audio)

Example: CD

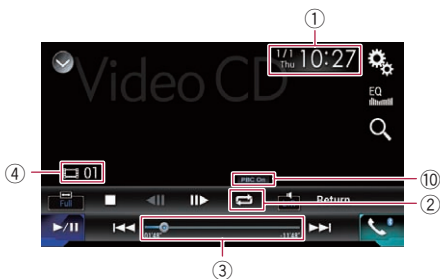


Reading the screen (for video)

Example: DVD



Example: Video-CD



① **Current time and date**

② **Playback condition indicator**

Indicates the current playback condition.

Playing tracks in random order

Indicator **Meaning**



Does not play tracks in random order.



Plays all tracks in the current disc in random order.

Setting a repeat play range

Indicator **Meaning**



Repeats just the current track.



Repeats the current disc.



Repeats just the current chapter.



Repeats just the current title.

③ **Play time indicator**

Shows the elapsed playing time within the current file.

④ **Track number indicator**

Shows the number of the track currently playing (when available).

⑤ **Audio channel indicator**

Shows the current audio channel type, such as "Mch" (Multi-channel).

⑥ **Digital sound format indicator**

Shows which digital sound format (surround sound format) has been selected.

⑦ **Sampling frequency indicator**

Shows the sampling frequency currently playing.

⑧ **Title number indicator**

Shows the title number currently playing.

⑨ **Chapter number indicator**

Shows the chapter number currently playing.

⑩ **PBC ON indicator**

Indicates that a disc with PBC On is being played.

Playing a disc

Starting procedure

1 Display the AV source selection screen.


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

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

The source changes and then playback will start.

- For details, refer to *Inserting and ejecting a disc* on page 15.
- ☐ If the disc is already set, touch [Disc] on the source list or on the AV source selection screen.
 - For details, refer to *Selecting a front source on the source list* on page 21.
 - For details, refer to *Selecting a front source on the AV source selection screen* on page 21.

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

- For details, refer to *Using the touch panel keys (for audio)* on page 104.
- For details, refer to *Using the touch panel keys (for video)* on page 104. 

Selecting files from the file name list

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

1 Touch the following key.



Displays a list of the tracks recorded on the disc.

2 Touch a track on the list to play back.




Playing tracks in random order

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

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



Turns random play on or off.

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

Setting a repeat play range



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

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



Changes the repeat play range.




Audio

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

Video

-  (default):

Repeats all files.

- : Repeats just the current chapter.
- : Repeats just the current title. 

Switching the media file type


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

1 Touch the following key.



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

2 Touch the item you want to set.

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

Searching for the part you want to play

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

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

1 Touch the following key.



Displays the screen for direct number search.


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

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

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

4 Touch the following key.



Registers the numbers and starts playback. 

Operating the DVD menu

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

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

1 Touch the screen to display the touch panel keys.

2 Touch the following key.



Displays the touch panel keys to operate the DVD menu.

MENU

3 Touch the desired menu item.

Playing a disc

Switching the subtitle language

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

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



Changes the subtitle language. You can specify the desired language as the default subtitle language.

➔ For details, refer to *Setting the top-priority languages* on page 191.



Switching the audio language

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

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



Changes the audio language. You can specify the desired language as the default audio language.

➔ For details, refer to *Setting the top-priority languages* on page 191.




Frame-by-frame playback

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

- **Touch [II▶] during pause.**

The video advances one frame each time [II▶] is touched.

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

Slow motion playback

This lets you slow down the playback speed.

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


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

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

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

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

1/16 → 1/8 → 1/4 → 1/2

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

Returning to a specified scene

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

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

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

- **Touch the following key.**

Return

Returns to the specified point and starts playback from there.

- The specified point differs depending on the disc. 

Resuming playback (Bookmark)

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

● Touch the following key.



Bookmarks one point for each of up to five discs.

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

Operating the DVD menu using touch panel keys

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

1 Touch the following keys to select the desired menu item.



Selects the left menu item.




Selects the right menu item.



Selects the upper menu item.





Selects the lower menu item.

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

2 Touch the following key.



Confirms the selected item.

- The way to display the menu differs depending on the disc.
 - If you touch , the touch panel keys disappear and the  icon is displayed. □

Switching the multi-angle DVD display

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

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



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

➔ For details, refer to *Setting the angle icon display* on page 192.



Selecting the audio output

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

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



Changes the audio output setting.

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

Playing a disc

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

Operating with the hardware buttons

Press the TRK button.

You can skip tracks or chapters forward or backward.

Press and hold the TRK button.

You can perform fast reverse or fast forward.

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

➔ For details, refer to *Media compatibility chart* on page 224.

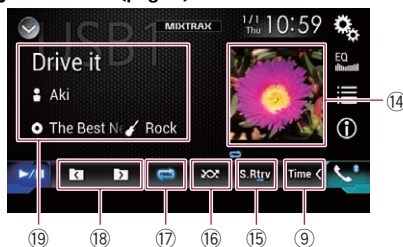
Using the touch panel keys

Example: USB

Playback screen (page 1)



Playback screen (page 2)



- ① **Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the MIXTRAX screen.**
 - ➔ For details, refer to Chapter 28.
- ③ **Displays the Time and date setting screen.**
 - ➔ For details, refer to *Setting the time and date* on page 201.
- ④ **Displays the Setting menu screen.**
- ⑤ **Recalls equaliser curves.**
 - ➔ For details, refer to *Using the equaliser* on page 181.
- ⑥ **Selects a file from the list.**
 - ➔ For details, refer to *Selecting files from the file name list* on page 115.
- Displays a list related to the song currently playing (link search).**
 - ➔ For details, refer to *Selecting a file from the list related to the song currently playing (link search)* on page 115.
- ⑦ **Switches the text display between tag information and file/folder information.**
 - ➔ For details, refer to *Reading the screen* on page 113.
 - ➔ For details, refer to *Switching the browse mode* on page 114.
- ⑧ **Displays the Phone menu screen.**
 - ➔ For details, refer to *Displaying the phone menu* on page 76.
- ⑨ **Switches to the next or previous page of touch panel keys.**
- ⑩ **Skips files forward or backward.**
- ⑪ **Changes the playback point by dragging the key.**
 - ➔ For details, refer to *Operating the time bar* on page 23.
- ⑫ **Switches the media file type.**
 - ➔ For details, refer to *Switching the media file type* on page 116.
- ⑬ **Switches between playback and pause.**
- ⑭ **Displays the album list.**
 - ☐ This function is available only when playing files in an external storage device (USB, SD) in the Music Browse mode.
- ⑮ **Uses "Sound Retriever" function.**
 - ➔ For details, refer to *Setting the "Sound Retriever" function* on page 202.
- ⑯ **Plays files in random order.**
 - ➔ For details, refer to *Playing files in random order* on page 115.
- ⑰ **Sets a repeat play range.**
 - ➔ For details, refer to *Setting a repeat play range* on page 116.
- ⑱ **Selects the previous folder or the next folder.**
- ⑲ **Displays the category list including the selected item.**

Playing compressed audio files

- ❑ This function is available only when playing files in an external storage device (USB, SD) in the Music Browse mode.

Reading the screen

Example: USB



① Current file information

Music Browse mode

- **Song title/File name**

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

- **Artist name**

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

- **Album title/Folder name**

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

- **Genre**

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

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

Folder Browse mode

- **File name**

Shows the name of the file currently playing.

- **Folder name**

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

- ② **Current time and date**

- ③ **Album artwork**

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

- ④ **Playback condition indicator**

Indicates the current playback condition.

Playing files in random order

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




Setting a repeat play range (for Disc)

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

Setting a repeat play range (for Music Browse mode)

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

Setting a repeat play range (for Folder Browse mode)

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

⑤ Play time indicator

Shows the elapsed playing time within the current file.

Starting procedure (for Disc)

1 Display the AV source selection screen.

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

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

The source changes and then playback will start.

- For details, refer to *Inserting and ejecting a disc* on page 15.
- If the disc is already set, touch **[Disc]** on the source list or on the AV source selection screen.
 - For details, refer to *Selecting a front source on the source list* on page 21.
 - For details, refer to *Selecting a front source on the AV source selection screen* on page 21.

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

- For details, refer to *Using the touch panel keys* on page 112.

Starting procedure (for USB/SD)

1 Display the AV source selection screen.

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

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

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

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

The source changes and then playback will start.

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

- For details, refer to *Using the touch panel keys* on page 112.
- Playback is performed in order of folder numbers. Folders are skipped if they contain no playable files. If there are no playable files in folder 01 (root folder), playback starts from folder 02.

Switching the browse mode

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

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

Music Browse mode

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

Playing compressed audio files

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

Folder Browse mode

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

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

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



Switches the display information between the tag information (title, artist name, album title etc.) and the file/folder name information.



Selecting files from the file name list

You can find files to play back using the list of the files and folders stored on a disc or in an external storage device (USB, SD).

1 Touch the following key.



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

- Touch the **"File"** tab to display the file/folder list for an external storage device (USB, SD).
- ### 2 Touch a file on the list to play back.
- Files are played back in file number order.
 - Touching a folder on the list shows its contents. You can play a file on the list by touching it.

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

You can select files to play back using the category list for the files in an external storage device (USB, SD).

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

1 Touch the following key.



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

- If the **"File"** list is displayed, touch the **"Tag"** tab to display the category list.

2 Touch the desired category to display the file list.

The list screen appears.

3 Touch the item that you want to refine.

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

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

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



Playing files in random order

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

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



Turns random play on or off.

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

Setting a repeat play range




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

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





Changes the repeat play range.




Disc

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

Music Browse mode

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

Folder Browse mode

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

Switching the media file type

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

1 Touch the following key.



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

2 Touch the item you want to set.

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

Operating with the hardware buttons

Press the TRK button.

You can skip files forward or backward.

Press and hold the TRK button.

You can perform fast reverse or fast forward. □

Playing compressed video files

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

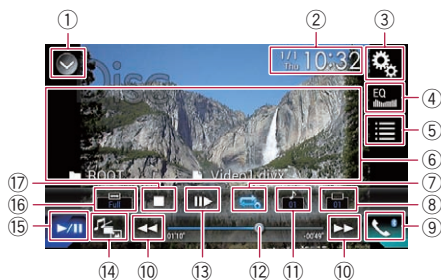
➔ For details, refer to *Media compatibility chart* on page 224.

CAUTION

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

Using the touch panel keys

Example: Disc



- ① **Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the Time and date setting screen.**
 - ➔ For details, refer to *Setting the time and date* on page 201.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
 - ➔ For details, refer to *Using the equaliser* on page 181.
- ⑤ **Selects a file from the list.**
 - ➔ For details, refer to *Selecting files from the file name list* on page 118.
- ⑥ **Hides the touch panel keys.**
 - Touching this area hides the touch panel keys.
 - ☐ Touch anywhere on the LCD screen to display the touch panel keys again.
- ⑦ **Sets a repeat play range.**
 - ➔ For details, refer to *Setting a repeat play range* on page 119.
- ⑧ **Switches the subtitle language.**
 - With DivX featuring multi-subtitle recordings, you can switch between subtitle languages during playback.
- ⑨ **Displays the Phone menu screen.**
 - ➔ For details, refer to *Displaying the phone menu* on page 76.
- ⑩ **Skips files forward or backward.**
- ⑪ **Switches the audio language.**
 - With DivX files that provide audio playback in different languages and different audio systems (Dolby Digital, DTS, etc.), you can switch between languages or audio systems during playback.
- ⑫ **Changes the playback point by dragging the key.**
 - ➔ For details, refer to *Operating the time bar* on page 23.
- ⑬ **Moves ahead one frame (frame-by-frame playback) or slows down playback speed (slow-motion playback).**
 - ➔ For details, refer to *Frame-by-frame playback* on page 119.
 - ➔ For details, refer to *Slow motion playback* on page 119.
- ⑭ **Switches the media file type.**
 - ➔ For details, refer to *Switching the media file type* on page 119.
- ⑮ **Switches between playback and pause.**
- ⑯ **Changes the wide screen mode.**
 - ➔ For details, refer to *Changing the wide screen mode* on page 202.
- ⑰ **Stops playback.** ☐

Reading the screen

Example: Disc



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

Starting procedure (for Disc)

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

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

The source changes and then playback will start.

- ➔ For details, refer to *Inserting and ejecting a disc* on page 15.
- If the disc is already set, touch **[Disc]** on the source list or on the AV source selection screen.
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
 - ➔ For details, refer to *Selecting a front source on the AV source selection screen* on page 21.

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

- ➔ For details, refer to *Using the touch panel keys* on page 117.

Starting procedure (for USB/SD)

1 Display the AV source selection screen.

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

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

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

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

The image is displayed on the screen.

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

- ➔ For details, refer to *Using the touch panel keys* on page 117.
- Playback is performed in order of folder numbers. Folders are skipped if they contain no playable files. If there are no playable files in folder 01 (root folder), playback starts from folder 02.

Selecting files from the file name list

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


1 Touch the following key.



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

Playing compressed video files

2 Touch a file on the list to play back.

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






Setting a repeat play range

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

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




Changes the repeat play range.

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

Frame-by-frame playback

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


- ❑ This function is available while a compressed video file stored on a disc is being played.
- **Touch [II▶] during pause.**
The video advances one frame each time [II▶] is touched.
 - ❑ To return to normal playback, touch [▶/II].
 - ❑ With some discs, images may be unclear during frame-by-frame playback. 

Slow motion playback

This lets you slow down the playback speed.

● Touch [II▶] (external storage device (USB, SD)) or touch and hold [II▶] (disc) during playback.

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

- ❑ There is no sound during slow motion playback.
- ❑ With some discs and external storage devices (USB, SD), images may be unclear during slow motion playback.
- ❑ To return to normal playback, touch [▶/II].
- ❑ Reversed slow motion playback is not possible. 

Switching the media file type


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

1 Touch the following key.



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

2 Touch the item you want to set.


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

Operating with the hardware buttons

Press the TRK button.

You can skip files forward or backward.

Press and hold the TRK button.

You can perform fast reverse or fast forward. 

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

Using the touch panel keys

Example: USB

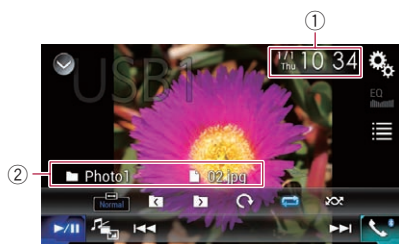


- ① **Displays the source list.**
 - For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the Time and date setting screen.**
 - For details, refer to *Setting the time and date* on page 201.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
 - This key is not available while you are viewing still images stored in an external storage device (USB, SD).
- ⑤ **Selects a file from the list.**
 - For details, refer to *Selecting files from the file name list* on page 121.
- ⑥ **Hides the touch panel keys.**
 - Touch anywhere on the LCD screen to display the touch panel keys again.
- ⑦ **Plays files in random order.**
 - For details, refer to *Playing files in random order* on page 121.
- ⑧ **Displays the Phone menu screen.**
 - For details, refer to *Displaying the phone menu* on page 76.
- ⑨ **Skips files forward or backward.**
- ⑩ **Sets a repeat play range.**
 - For details, refer to *Setting a repeat play range* on page 121.

- ⑪ **Rotates the displayed picture 90° clockwise.**
- ⑫ **Selects the previous folder or the next folder.**
- ⑬ **Switches the media file type.**
 - For details, refer to *Switching the media file type* on page 121.
- ⑭ **Switches between playback and pause.**
- ⑮ **Changes the wide screen mode.**
 - For details, refer to *Changing the wide screen mode* on page 202.

Reading the screen

Example: USB



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

Starting procedure

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

Playing compressed still image files

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

The image is displayed on the screen.

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

- ➔ For details, refer to *Using the touch panel keys* on page 120.
- ☐ Playback is performed in order of folder numbers. Folders are skipped if they contain no playable files. If there are no playable files in folder 01 (root folder), playback starts from folder 02. ☐

Selecting files from the file name list

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

1 Touch the following key.



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

2 Touch a file on the list to play back.

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



Playing files in random order

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

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



Turns random play on or off.

-  (default): Does not play files in random order.
- : Plays all files in the current repeat play range in random order. ☐



Setting a repeat play range

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

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



Changes the repeat play range.

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

Switching the media file type

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

1 Touch the following key.



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

2 Touch the item you want to set.

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

Setting the slideshow interval

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

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

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

2 Touch the following keys in the following order.



The “**Video Setup**” screen appears.

3 Touch [Time Per Photo Slide].

The pop-up menu appears.

4 Touch the item you want to set.

- **10sec** (default):
JPEG images switch at intervals of 10 seconds.
- **5sec**:
JPEG images switch at intervals of 5 seconds.
- **15sec**:
JPEG images switch at intervals of 15 seconds.
- **Manual**:
JPEG images can be switched manually. ❑

Operating with the hardware buttons

Press the TRK button.

You can skip files forward or backward.

Press and hold the TRK button.

You can search 10 JPEG files at a time.

- ❑ If the number of files in the folder (from the file currently being played to the first or last file) is fewer than 10, the first or last file in the folder is automatically played.
- ❑ If the file currently being played is the first or last file in the folder, the search is not performed. ❑

Using an iPod

For iPod with a 30-pin connector users

- ❑ Depending on your iPod, there may not be any output unless you use a USB interface cable for iPod / iPhone (CD-IU201S/CD-IU201V) (sold separately). Be sure to use a USB interface cable for iPod / iPhone (CD-IU201S/CD-IU201V) (sold separately) to connect your iPod.
- iPod audio and/or video sources are enabled if either of the cables is connected.
- ➔ For details of the connections, refer to the Installation Manual.

For iPod / iPhone with a Lightning connector users

- ❑ To use iPod audio source, you must connect your iPod to this product using a USB interface cable for iPod / iPhone (CD-IU52) (sold separately).

However, functions related to iPod video files and **AppRadio Mode** are not available.

- ❑ iPod audio and/or video sources are not available when an iPod with a Lightning connector is connected to this product with a interface cable (CD-IH202/CD-IV202AV) (sold separately).
- ➔ For details of the connections, refer to the Installation Manual.

When you want to play audio and/or video files on your iPod with a Lightning connector, first install **CarMediaPlayer** on your iPod with a Lightning connector and then launch **CarMediaPlayer** while in **AppRadio Mode**.

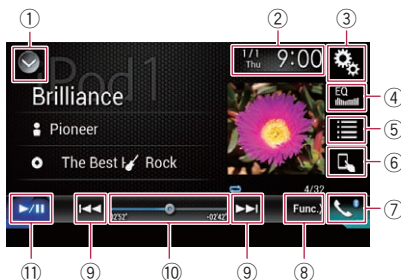
For details about the **CarMediaPlayer**, refer to the information on our website.

CAUTION

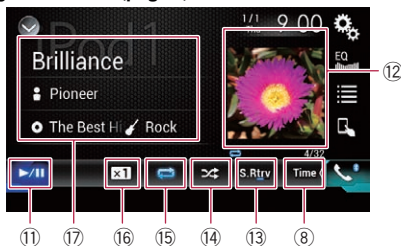
For safety reasons, video images cannot be viewed while your vehicle is in motion. To view video images, you must stop in a safe place and apply the handbrake.

Using the touch panel keys (for audio)

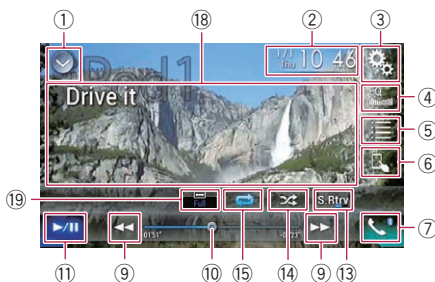
Playback screen (page 1)



Playback screen (page 2)



Using the touch panel keys (for video)



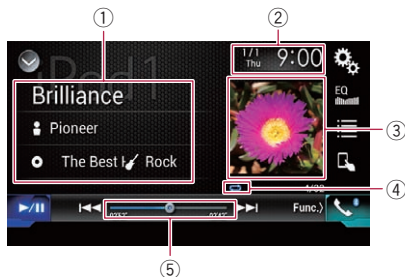
- ① **Displays the source list.**
➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the Time and date setting screen.**

- For details, refer to *Setting the time and date* on page 201.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
 - For details, refer to *Using the equaliser* on page 181.
- ⑤ **Selects a track from the list.**
 - For details, refer to *Selecting song or video sources from the playlist screen* on page 126.
- ⑥ **Switches the control mode to “App Mode”.**
 - For details, refer to *Using this product’s iPod function from your iPod* on page 127.
- ⑦ **Displays the Phone menu screen.**
 - For details, refer to *Displaying the phone menu* on page 76.
- ⑧ **Switches to the next or previous page of touch panel keys.**
- ⑨ **Skips files forward or backward.**
- ⑩ **Changes the playback point by dragging the key.**
 - For details, refer to *Operating the time bar* on page 23.
- ⑪ **Switches between playback and pause.**
- ⑫ **Displays the song list of the album currently playing.**
 - For details, refer to *Displaying lists related to the song currently playing (link search)* on page 128.
- ⑬ **Uses “Sound Retriever” function.**
 - For details, refer to *Setting the “Sound Retriever” function* on page 202.
- ⑭ **Plays files in random order.**
 - For details, refer to *Setting the shuffle play* on page 125.
- ⑮ **Sets a repeat play range.**
 - For details, refer to *Setting a repeat play range* on page 126.
- ⑯ **Changes the audiobook speed.**
 - For details, refer to *Changing the speed of audiobook playback* on page 127.
- ⑰ **Displays the category list including the selected item.**
- ⑱ **Hides the touch panel keys.**
 - Touching this area hides the touch panel keys.
 - ☐ Touch anywhere on the LCD screen to display the touch panel keys again.

⑱ Changes the wide screen mode.

- For details, refer to *Changing the wide screen mode* on page 202. ☐

Reading the screen (for audio)



Reading the screen (for video)




① Current track information

- **Song title**
Shows the title of the song currently being played (when available). “**No Title**” is displayed if there is no corresponding information.
- **Artist name**
Shows the artist name for the song currently being played (when available). “**No Name**” is displayed if there is no corresponding information.
- **Album title**

Using an iPod

Shows the title of the album of the current file (when available). "No Title" is displayed if there is no corresponding information.

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

② Current time and date



③ Album artwork

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



④ Playback condition indicator

Indicates the current playback condition.


Setting the shuffle play

Indicator	Meaning
	Plays back songs or videos in random order within the selected list.
	Selects an album randomly, and then plays back all songs in that album in order.

Setting a repeat play range

Indicator	Meaning
	Repeats all songs or videos in the selected list.
	Repeats just the current song or video.

⑤ Play time indicator

Shows the elapsed playing time within the current file. 

Starting procedure

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

➤ For details, refer to Chapter 13.

1 Display the AV source selection screen.


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

2 Connect your iPod.

- ❑ If connecting an iPhone or iPod touch, quit applications before connecting.
- ❑ If an iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5, or iPod touch (5th generation) is connected, the media library (song information) will be imported from the connected device and saved to this product. Wait until the process completes. The media library will not be imported if an updated media library of the connected device has been imported or the memory of this product is full.

3 Touch [iPod] on the AV source selection screen.

4 Use the touch panel keys on the screen to control your iPod.

- For details, refer to *Using the touch panel keys (for audio)* on page 123.
- For details, refer to *Using the touch panel keys (for video)* on page 123.
- ❑ The video image of the iPod may have noise if the rear display outputs the video image. When noise is produced in the video image of the iPod, turn off the output setting of the rear display.
 - For details of the operations, refer to *Selecting the video for the rear display* on page 204. 



Setting the shuffle play


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

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



Turns random play on or off.

-  Plays back songs or videos in random order within the selected list.
-  Selects an album randomly, and then plays back all songs in that album in order.

- ❑ This icon may not be displayed when an iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5, or iPod touch (5th generation) is used. 




Setting a repeat play range

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

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



Changes the repeat play range.

- : Repeats all songs or videos in the selected list.
- : Repeats just the current song or video.
- ❑ The repeat setting can be turned off when an iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5, or iPod touch (5th generation) is used. 

Selecting song or video sources from the playlist screen

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

- 1 **Touch the following key.**



Displays the list of the category.

The “**ROOT**” screen appears.

- 2 **Touch the following keys to switch the music or video category list.**



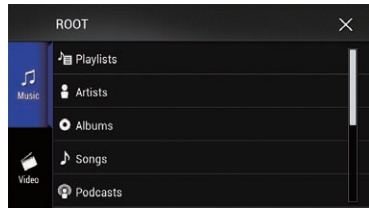
Switches to the music category list.



Switches to the video category list.

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

- 3 **Touch the category you want to search for.**



Category lists (for music):

- Playlists
- Artists
- Albums
- Songs
- Podcasts
- Genres
- Composers
- Audiobooks

Category lists (for video):

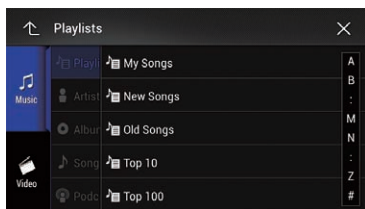
- Video Playlists
- Movies
- Music Videos
- TV Shows
- Video Podcasts
- ❑ Category items that do not correspond to the connected iPod are not displayed.

- 4 **Drag the Initial Search Bar to find a file by the initial character of the file name.**

The alphabet corresponding to the current position on the Initial Search Bar is displayed and the list scrolls as the bar is slid.

Using an iPod

- ❑ The Initial Search Bar is not displayed in the top category list or the song list.




5 Release the Initial Search Bar at the desired alphabet.

The items whose initial character is the selected alphabet are displayed.

6 Touch the title of the list that you want to play.

Repeat this operation until you find the desired song or video.

7 Start playback of the selected list.

- ❑ Depending on the generation or version of the iPod, some functions may not be available.
- ❑ You can play playlists created with the **MusicSphere** application. The application is available on our website.
- ❑ Playlists that you created with the **MusicSphere** application are displayed in abbreviated form. 

Using this product's iPod function from your iPod


You can control this product's iPod function from the connected iPod if the control mode is set to **"App Mode"**. The application screen of the iPod can be displayed on this product, and the music files and video files in the iPod can be played back with this product.

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

1 Touch the following key.



Switches the control mode.

- ❑ The control mode switches to **"App Mode"**. The icon changes to .

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

- ❑ The following functions are still accessible from this product even if the control mode is set to **"App Mode"**. However, the operation will depend on your applications.
 - Playing/pausing
 - Fast forwarding/reversing
 - Tracking up/down
 - Moving up/down to a chapter

3 Touch the following key.



Switches the control mode, to control iPod functions from this product.






Changing the speed of audiobook playback

The playback speed can be changed while playing an audiobook.

● Touch the following key.



Changes the playback speed.

-  (default):
Plays back in normal speed.
- :
Plays back faster than normal speed.
- :
Plays back slower than normal speed.

- ❑ The icon does not change when using this function with an iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5, or iPod touch (5th generation). The setting changes as follows when the icon is touched, even though the icon does not change.
Faster → Slower → Normal → Faster... ❑

Displaying lists related to the song currently playing (link search)

- 1 Touch the artwork to open a list of the names of songs on the album currently playing.
- 2 Touch the name of the song you want to play to start playing that song.
 - ❑ If part of the recorded information is not displayed, a scroll key appears on the right side of list. Touch the scroll key to scroll. ❑

Operating with the hardware buttons

Press the TRK button.

You can skip songs or videos forward or backward.

When a song or video with chapters is played, you can skip a chapter forward or backward.

Press and hold the TRK button.

You can perform fast reverse or fast forward. ❑

Playing back music from a music app other than iPod music, as the iPod source

The app name and the song information are also displayed.

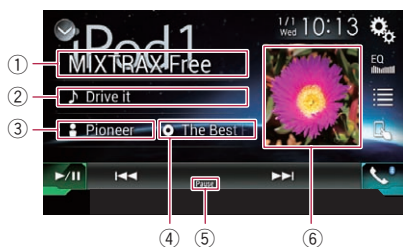
Using the touch panel keys



- ① **Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the Time and date setting screen.**
 - ➔ For details, refer to *Setting the time and date* on page 201.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
 - ➔ For details, refer to *Using the equaliser* on page 181.
- ⑤ **Selects a track from the list.**
 - ➔ For details, refer to *Selecting song or video sources from the playlist screen* on page 126.
- ⑥ **Switches the control mode to “App Mode”.**
 - ➔ For details, refer to *Using this product’s iPod function from your iPod* on page 127.
- ⑦ **Displays the Phone menu screen.**
 - ➔ For details, refer to *Displaying the phone menu* on page 76.
- ⑧ **Skips files forward or backward.**
- ⑨ **Switches between playback and pause.**

Using an iPod

Reading the screen



- ① **App name**
Shows the App name of the currently playing.
- ② **Song title**
Shows the title of the song currently being played (when available). "No Title" is displayed if there is no corresponding information.
- ③ **Artist name**
Shows the artist name for the song currently being played (when available). "No Name" is displayed if there is no corresponding information.
- ④ **Album title**
Shows the title of the album of the current file (when available). "No Title" is displayed if there is no corresponding information.
- ⑤ **Pause indicator**
- ⑥ **Album artwork**
Album art of the current song is displayed if it is available.

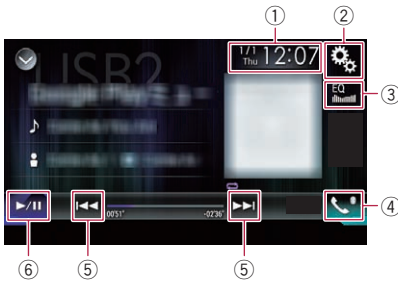
Playing music output from the Android Auto-compatible device

F77DAB F70DAB

If an **Android Auto**-compatible device is connected to this product, you can listen to the music output from the Android device with this product, and control the playback directly from this product.

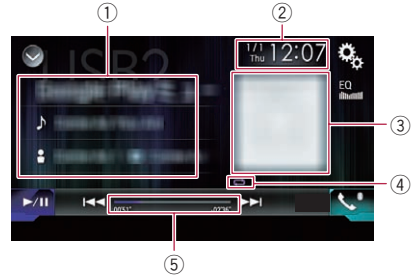
- ❑ This function is available only when **Android Auto** is turned on. Start the **Android Auto** before using this function.
 - ➡ For details, refer to *Using Android Auto* on page 137.

Using the touch panel keys




- ① **Displays the Time and date setting screen.**
 - ➡ For details, refer to *Setting the time and date* on page 201.
- ② **Displays the Setting menu screen.**
- ③ **Recalls equaliser curves.**
 - ➡ For details, refer to *Using the equaliser* on page 181.
- ④ **Displays the Phone menu screen.**
 - ➡ For details, refer to *Displaying the phone menu* on page 76.
- ⑤ **Skips files forward or backward.**
 - ❑ Operations may vary depending on the application used on the **Android Auto**-compatible device.
- ⑥ **Switches between playback and pause.** ❑

Reading the screen





- ① **Current track information**
 - **Application name**
Shows the application name (when available). "No Name" is displayed if there is no corresponding information.
 - **Song title**
Shows the title of the song currently playing (when available). "No Title" is displayed if there is no corresponding information.
 - **Artist name**
Shows the artist name for the song currently being played (when available). "No Name" is displayed if there is no corresponding information.
 - **Album title**
Shows the title of the album of the current file (when available). "No Title" is displayed if there is no corresponding information.
- ② **Current time and date**
- ③ **Album artwork**
Album art of the current song is displayed if it is available.
- ④ **Playback condition indicator**
Indicates the current playback condition.

Setting the shuffle play

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

Playing music output from the Android Auto-compatible device

Setting a repeat play range

Indicator	Meaning
	Repeats all songs in the selected list.
	Repeats just the current song.

- Playback condition indicators may not be displayed depending on the Android device.
- ⑤ **Play time indicator**
Shows the elapsed playing time within the current file.

Starting procedure

- 1 **Start up Android Auto.**
 - For details, refer to *Using Android Auto* on page 137.
- 2 **Press the HOME button to display the Top menu screen.**
- 3 **Touch [USB2] on the AV source selection screen.**
- 4 **Use the touch panel keys on the screen to control the playback.**
 - For details, refer to *Using the touch panel keys* on page 130.
 - The **Android Auto** function may not operate properly if the Bluetooth connection with the **Android Auto**-compatible device is terminated.

⚠ WARNING

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

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

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

Using AppRadio Mode

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

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

➔ For details of **AppRadio Mode** compatible devices, refer to *AppRadio Mode Compatibility* on page 85.

- ❑ In this chapter, iPhone and iPod touch will be referred to as "iPhone".
- ❑ For AVIC-F70DAB, AVIC-F970DAB, AVIC-F970BT, AVIC-F9770DAB, and AVIC-F9770BT users **AppRadio Mode** is only available on an iPhone.
- ❑ The compatible finger gestures vary depending on the application for an iPhone or a smartphone.
- ❑ When an application not compatible with **AppRadio Mode** is started, depending on the application, you can see an image of the application on the screen of this product. However, you will not be able to operate the application.

To use **AppRadio Mode**, install the **AppRadio app** on the iPhone or smartphone beforehand to enable launching of the application on this product. For details about the **AppRadio app**, visit the following site:

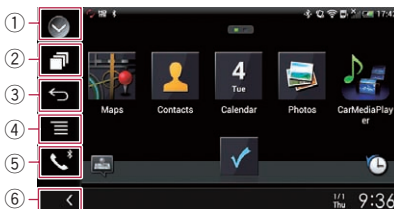
<http://www.pioneer.eu/AppRadioMode>

- ❑ Be sure to read *Using app-based connected content* before you perform this operation.

➔ For details, refer to *Using app-based connected content* on page 230.

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

Using the touch panel keys (App control side bar)



- ① **Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the launcher application screen.**
- ③ **Displays the previous screen.**
 - ❑ When you use an iPhone, this key is not available.
- ④ **Displays the menu screen.**
 - ❑ When you use an iPhone, this key is not available.
- ⑤ **Displays the Phone menu screen.**
 - ➔ For details, refer to *Displaying the phone menu* on page 76.
- ⑥ **Displays the current source.**
 - ❑ In **AppRadio Mode**, App control side bar will appear.

Using your iPhone or smartphone applications

- ❑ If you press the **HOME** button twice, the App control side bar will disappear. Press the **HOME** button twice again, and the App control side bar will appear.

Starting procedure

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

➔ For details, refer to Chapter 13.

The procedure varies depending on the type of device.

For iPhone with a 30-pin connector users

1 Connect your iPhone.

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

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

3 Touch [APPS].

A message, which notifies you that your iPhone can launch the application, appears on the screen.

A message, which asks you whether you want to launch your application, appears on your iPhone.

4 Use your iPhone to launch the application.

The **AppRadio app** is launched.

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

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



- ❑ If you connect your device while an **AppRadio Mode**-compatible application is

already running, the application operation screen will appear on this product.

6 Touch the desired application icon.

The desired application is launched, and the application operation screen appears.

7 Operate the application.

8 Press the HOME button to go back to the Top menu screen.

For iPhone with a Lightning connector users

1 Register your iPhone and connect it to this product via Bluetooth wireless technology.

- ❑ The registered device must be selected as the priority device.
- ➔ For details, refer to *Registering your Bluetooth devices* on page 70.

2 Unlock your iPhone.

3 Connect your iPhone.

- ❑ The cable connection method varies depending on your device.
- ➔ For details of the connections, refer to the Installation Manual.

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

5 Touch [APPS].

The **AppRadio app** is launched, and the **AppRadio Mode** screen (Application menu screen) appears.



- ❑ If you connect your device while an **AppRadio Mode**-compatible application is already running, the application operation screen will appear on this product.

Using your iPhone or smartphone applications

6 Touch the desired application icon.

The desired application is launched, and the application operation screen appears.

7 Operate the application.

8 Press the HOME button to go back to the Top menu screen.

For smartphone users

F77DAB

1 Register your smartphone and connect it to this product via Bluetooth wireless technology.

- ❑ The registered device must be selected as the priority device.
- ➔ For details, refer to *Registering your Bluetooth devices* on page 70.

2 Unlock your smartphone.

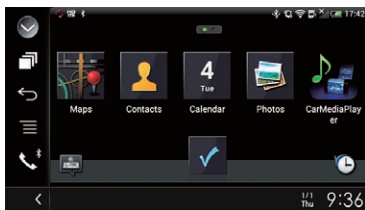
3 Connect your smartphone to this product via the separately sold App Connectivity Kit (CD-AH200).

- ❑ The cable connection method varies depending on your device.
- ➔ For details of the connections, refer to the Installation Manual.

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

5 Touch [APPS].

The **AppRadio app** is launched, and the **AppRadio Mode** screen (Application menu screen) appears.



- ❑ If you connect your device while an **AppRadio Mode**-compatible application is already running, the application operation screen will appear on this product.

6 Touch the desired application icon.

The desired application is launched, and the application operation screen appears.

7 Operate the application.

8 Press the HOME button to go back to the Top menu screen.

Using the keyboard



CAUTION

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

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

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

- ❑ The language preference for the keyboard of this product should be same as the setting on your iPhone.
- If the settings for this product and the iPhone are different, you may be unable to enter characters properly.

1 Set the keyboard language.

- ➔ For details of the operations, refer to *Setting the keyboard language with the application for iPhone* on page 165.

2 Start up the AppRadio Mode.


- ➔ For details, refer to *Starting procedure* on page 133.

3 Touch the text input area on the application operation screen.

A keyboard for entering text appears.

Using your iPhone or smartphone applications



- ① Enters the characters.
- ② Deletes the entered text one letter at a time, beginning at the end of the text.
- ③ Confirms the entry and allows you to proceed to the next step.
- ④ Hides the keyboard and the text can now be entered using the keyboard of the iPhone.
- ⑤ Changes the iPhone keyboard layout.
 - ❑ The iPhone keyboard layouts that can be selected by tapping  depends on the setting for Hardware Keyboard Layout set on your iPhone.
- ⑥ Switches to a keyboard offering numeric characters and symbols.
- ⑦ Converts the case of the keyboard characters.

Adjusting the image size (For smartphone users)

F77DAB

Black dots may appear on the screen when using **AppRadio Mode** with an Android device connected to this product.

CAUTION

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

- ❑ This function can be set under the following conditions:
 - When an Android device is connected to this product using CD-AH200 (sold separately), and when **AppRadio Mode** is available after a Bluetooth connection using SPP (Serial Port Profile) has been established.

- ❑ If this setting has not been set, the setting screen automatically appears in the following cases:
 - When entering **AppRadio Mode** after a Bluetooth connection using SPP (Serial Port Profile) has been established.
 - When a Bluetooth connection using SPP (Serial Port Profile) has been established in **AppRadio Mode**.

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



The “System” screen appears.

- 3 Touch [Input/Output Settings].
- 4 Touch [AppRadio Video Adjustment]. The confirmation screen appears.
- 5 Touch [OK].
- 6 Touch the following keys to adjust the line to fit smartphone image size.



Moves the line to the left.



Moves the line to the right.



Moves the line upward.



Moves the line downward.

- 7 Touch [Preview].
 - ❑ Confirm that the whole image fills the screen.
- 8 Touch [OK].
 - ❑ If you want to adjust the setting again from the beginning, touch [RESET].

Displaying the image of your application (iPhone with 30-pin connector)

You can set an image of an application for iPhone, which is not compatible with **AppRadio Mode**, to be shown on the screen.

- Depending on the type of application, you may not be able to see the image on the screen.
- You can only control the application on the connected device.
- When you touch the display in this function, "Don't Touch" mark appears on the upper right corner of the screen.

1 Connect your iPhone.

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

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

3 Touch [APPS].

A message, which notifies you that your iPhone can launch the application, appears on the screen.

A message, which asks you whether you want to launch your application, appears on your iPhone.

4 Use your iPhone to refuse to launch the application.

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

The black screen appears.

6 Launch an application on your iPhone.

An image of the application appears on the screen.

7 Press the HOME button to return to the Top menu screen.

Displaying the image of your application (iPhone with Lightning connector)

You can set an image of an application for smartphone, which is not compatible with **AppRadio Mode**, to be shown on the screen.

- Depending on the type of application, you may not be able to see the image on the screen.
- When you use this function, do not connect other devices via Bluetooth wireless technology. Be sure to disconnect your Bluetooth device before using this function.
- You can only control the application on the connected device.
- When you touch the display in this function, "Don't Touch" mark appears on the upper right corner of the screen.

1 Connect your iPhone.

- The cable connection method varies depending on your device.
- ➔ For details of the connections, refer to the Installation Manual.

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

3 Touch [APPS].

The image in your iPhone appears on the screen.

4 Launch an application on your iPhone.

An image of the application appears on the screen.

5 Press the HOME button to return to the Top menu screen.

Displaying the image of your application (smartphone)

F77DAB

You can set an image of an application for smartphone, which is not compatible with **AppRadio Mode**, to be shown on the screen.

- Compatibility with all smartphones is not guaranteed.
- When you use this function, do not connect other devices via Bluetooth wireless technology. Be sure to disconnect your Bluetooth device before using this function.
- You can only control the application on the connected device.

Using your iPhone or smartphone applications

- ❑ When you touch the display in this function, “Don’t Touch” mark appears on the upper right corner of the screen.

1 Connect your smartphone to this product via the separately sold App Connectivity Kit (CD-AH200).

- ❑ The cable connection method varies depending on your device.
- ➡ For details of the connections, refer to the Installation Manual.

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

3 Touch [APPS].

The image in your smartphone appears on the screen.

4 Launch an application on your smartphone.

An image of the application appears on the screen.

5 Press the HOME button to return to the Top menu screen. ❑

- ➡ For details, refer to *Setting the device connection method* on page 84.

- Content and functionality of compatible 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, 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.

Using Android Auto

F77DAB F70DAB

You can control applications for a smartphone directly from the screen (**Android Auto**).

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

- ❑ **Android Auto** may not be available in your country or region.
For details about **Android Auto**, please refer to the Google support site:
<http://support.google.com/androidauto>
- ❑ This function is available for the **Android Auto**-compatible device only.
- ❑ The compatible finger gestures vary depending on the application for a smartphone.

To use **Android Auto**, set “Mode” in “**Smartphone Setup**” to “**Android Auto**” beforehand.

Starting procedure

When connecting an **Android Auto**-compatible device to this product, you must select the method for connecting your device. Settings are required according to the connected device.

- ➔ For details, refer to Chapter 13.
- ❑ Turn off the **AVICSYNC App** function for using **Android Auto**.
- ❑ To achieve optimum usability of **Android Auto**, set the driving position setting correctly according to the vehicle.
 - ➔ For details, refer to *Setting the driving position* on page 138.

1 Connect an Android Auto-compatible device to this product via the separately sold USB interface cable for use with Android devices (CD-MU200).

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

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

3 Touch [Android Auto].

The Bluetooth connection with the **Android Auto**-compatible device will automatically be established.

- ❑ If **Android Auto** is turned on during a call on a mobile phone other than the **Android Auto**-compatible device, the Bluetooth connection will be terminated after the call ends.
- ❑ If the **AVICSYNC App** function is not turned off, a message confirming whether to turn off the **AVICSYNC App** function appears.

4 Operate the application.

- ➔ For details on adjusting the volume, refer to *Adjusting the volume* on page 138.
- ❑ The **Android Auto** function may not operate properly if the Bluetooth connection with the **Android Auto**-compatible device is terminated.

Setting the driving position

To achieve optimum usability of **Android Auto**, set the driving position setting correctly according to the vehicle.

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

2 Touch the following keys in the following order.



The “**System**” screen appears.

3 Touch [Driving Position].

4 Touch the item you want to set.

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

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

Adjusting the volume

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

● Touch the VOL (+/-) button.



- ① Touch to mute. Touch again to unmute.
- ② Displays the main sound volume.
- ③ Adjusts the guidance volume/alert sound volume.
Each touch of [+] or [-] increases or decreases the volume level.

Using your iPhone or smartphone applications

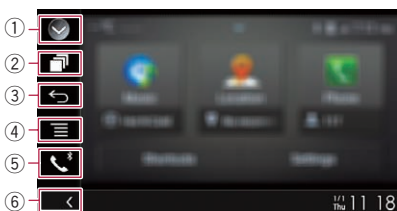
- ❑ You cannot adjust the volume of the main sound on the screen. Touch the **VOL (+/-)** button to adjust the volume of the main sound.
- ❑ The volume menu is displayed for four seconds. If the screen disappears, touch the **VOL (+/-)** button again. The screen reappears.❑

Using MirrorLink mode

When you connect a **MirrorLink** device with compatible applications installed, you can control the applications for the mobile device directly from this product (**MirrorLink** mode). You can view and operate the compatible applications via the display with multi-touch gestures like tapping, dragging, scrolling, and flicking.

- ❑ Multi-touch gestures may be disabled depending on the **MirrorLink** device that is connected.

Using the touch panel keys (App control side bar)



- ① **Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the launcher application screen.**
- ③ **Displays the previous screen.**
 - ❑ Depending on the type of **MirrorLink** device, this key is not available.
- ④ **Displays the menu screen.**
 - ❑ Depending on the type of **MirrorLink** device, this key is not available.
- ⑤ **Displays the Phone menu screen.**

➔ For details, refer to *Displaying the phone menu* on page 76.

- ⑥ **Displays the current source.**
 - ❑ In **MirrorLink** mode, App control side bar will appear.
 - ❑ If you press the **HOME** button twice, the App control side bar will disappear. Press the **HOME** button twice again, and the App control side bar will appear.

Starting procedure

When connecting a **MirrorLink** device to this product, you must select the method for connecting your device. Settings are required according to the connected device.

- ➔ For details, refer to Chapter 13.
- ❑ Turn off the **AVICSYNC App** function for using **MirrorLink** mode.

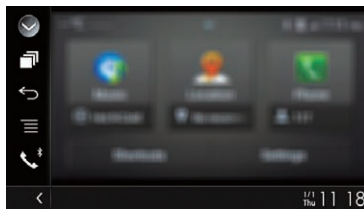
- 1 **Unlock your MirrorLink device.**
- 2 **Connect your MirrorLink device to this product via the separately sold USB interface cable for use with MirrorLink devices (CD-MU200).**

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

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

- 4 **Touch [APPS].**

If the launcher application is installed in the **MirrorLink** device, the application launches. If not, the Application menu screen will appear.



- ❑ If the **AVICSYNC App** function is not turned off, a message confirming whether to turn off the **AVICSYNC App** function appears.

5 Touch the desired application icon.

The desired application is launched, and the application operation screen appears.

- ❑ Some applications may not launch depending on the state of the connected device. If it does not launch, launch the application according to the application startup message.

6 Operate the application.

7 Press the HOME button to go back to the Top menu screen.

Using the audio mix function

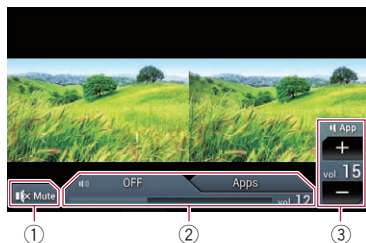
You can output audio mixing AV source and an application for iPhone or smartphone when the **AppRadio Mode** or **MirrorLink** mode is used.


- ❑ When the audio mix function is set to on, the voice guidance of the navigation system is not output. To output the voice guidance of the navigation system, set the audio mix function to off.
- ❑ If the screen is switched to the Map screen when the audio mix function is turned on, the message, "**NOTE: Navigation Sounds are unavailable with the current app & source selections. Do you want to output Navigation Sounds instead of App-based Audio?**" is displayed. To output voice guidance for the navigation system, touch [Yes].

1 Start up the AppRadio Mode or MirrorLink mode.

2 Press the VOL (+/-) button.

The audio mix menu will be displayed on the screen.



- ① Touch to mute. Touch again to unmute.
 - ② Sets whether to switch the sound mix function on or off.
 - Left tab: The audio mix function is enabled (mix on). The App volume is displayed. If you touch the App volume, the volume keys will be displayed.
 - Right tab: The audio mix function is disabled (mix off).
 - ③ Adjusts the application audio volume. Each touch of [+] or [-] increases or decreases the volume level.
- ❑ The AV operation screen and the Application screen can be switched by pressing the **MODE** button.
 - ❑ The right tab is not displayed on the AV operation screen.
 - ❑ You cannot adjust the volume of the main sound on the screen. Press the **VOL (+/-)** button to adjust the volume of the main sound.
 - ❑ The audio mix menu is displayed for four seconds. If the screen disappears, press the **VOL (+/-)** button again. The screen reappears. 

Using Aha Radio

! WARNING

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

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

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

When you connect an iPhone or a smartphone with the Aha Radio installed, you can control, view, and/or listen to Aha Radio content from this product.

- ❑ In this chapter, iPhone and iPod touch will be referred to as "iPhone".
- ❑ For details concerning operations, refer to the Help and Tips section within the Aha Radio application.
- ❑ Aha Radio stations may require initial setup or sign in before the station can be accessed.
- ❑ Be sure to read *Using app-based connected content* before you perform this operation.
 - ➔ For details, refer to *Using app-based connected content* on page 230.

Notes:

- Certain functionality of the Aha Radio service may not be available when accessing the service through this product, including, but not limited to, creating new Aha stations, deleting Aha stations, recording 'shouts' by voice, adjusting Aha Radio App settings, logging into Facebook, creating a Facebook account, logging into Twitter, or creating a Twitter account.
- Aha Radio is a service not affiliated with Pioneer. More information is available at <http://www.aharadio.com/>.
- A specific version of the Aha Radio application must be installed on your iPhone or smartphone to enjoy Aha Radio content on this product.

Because the application for the iPhone or smartphone is not provided by Pioneer, the required version of the application may not yet

be available at the time of purchase of this product.

Availability, version and update information can be found at

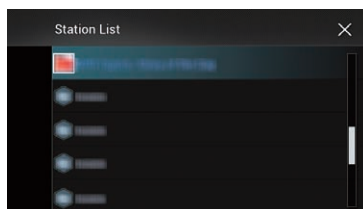
<http://www.pioneer.eu/aharadio>

Using the touch panel keys



- ① **Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the Time and date setting screen.**
 - ➔ For details, refer to *Setting the time and date* on page 201.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
 - ➔ For details, refer to *Using the equaliser* on page 181.
- ⑤ **Selects an Aha Radio station from the list.**

Touching this key displays the list of the available Aha Radio stations. Touch the desired Aha Radio station to change Aha Radio sources.








- ⑥ **Displays the Phone menu screen.**
 - ➔ For details, refer to *Displaying the phone menu* on page 76.

Using Aha Radio

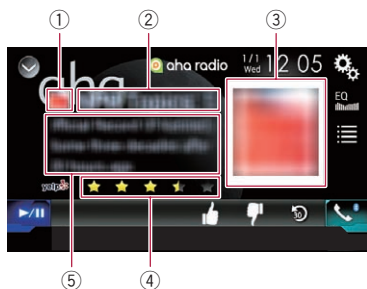
⑦ Performs additional functions of each station or content currently playing.

- The icons displayed vary depending on each station or content.

Indicator	Meaning
	Touching the key discloses the current car location through Aha Radio.
	Touching the key retweets the selected tweets with your Twitter account.
	Touching the key performs fast reverse of the current content for 30 seconds.
	Touching the key "dislikes" the current content. <input type="checkbox"/> Depending on the content, touching  or  cancels "dislikes".
	Touching the key "likes" the current content. <input type="checkbox"/> Depending on the content, touching  or  cancels "likes".
	Touching the key lets you make a call to a phone number registered in the current content using the hands-free function.

⑧ Switches between playback and pause.

Reading the screen



① Station mark

② Station name

Shows the name of the Aha Radio station to which this product is currently tuned.

③ Content image

Displays an image of the current content if available.

④ Rating information

Shows the rated value of the current content displayed if available.

⑤ Current station information

Shows information on the content currently being played.

- The item is blank if there is no corresponding information.

Starting procedure

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

- ➔ For details, refer to Chapter 13.

For iPhone with a 30-pin connector users

1 Unlock your iPhone.

2 Connect your iPhone.

- Connect via USB or Bluetooth.
➔ For details of the Bluetooth connection, refer to *Registering your Bluetooth devices* on page 70.

3 Display the AV source selection screen.

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

4 Touch [aha] on the AV source selection screen.

5 Use the touch panel keys on the screen to control Aha Radio.

- ➔ For details, refer to *Using the touch panel keys* on page 141.

Using Aha Radio

For iPhone with a Lightning connector users

- 1 **Unlock your iPhone.**
- 2 **Connect your iPhone.**

F77DAB

- Connect via USB, Bluetooth, or HDMI and Bluetooth.
 - ➔ For details of the Bluetooth connection, refer to *Registering your Bluetooth devices* on page 70.
- The cable connection method varies depending on your device.
 - ➔ For details of the connections, refer to the Installation Manual.

F70DAB F970DAB F970BT F9770DAB F9770BT

- Connect via USB or Bluetooth.
 - ➔ For details of the Bluetooth connection, refer to *Registering your Bluetooth devices* on page 70.
- The cable connection method varies depending on your device.
 - ➔ For details of the connections, refer to the Installation Manual.

3 Display the AV source selection screen.

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

4 Touch [aha] on the AV source selection screen.

When you touch [aha], this product will start establishing a Bluetooth connection. After the connection is successfully established, the touch panel key on the "aha" screen is activated.

5 Use the touch panel keys on the screen to control Aha Radio.

- ➔ For details, refer to *Using the touch panel keys* on page 141.

For smartphone users

- Turn off the **AVICSYNC App** function for using Aha Radio with a smartphone if the

smartphone is connected with the "HDMI" or "Bluetooth" selected for "Connection" in "Smartphone Setup".

1 Unlock your smartphone.

2 Connect your smartphone.

F77DAB

- Connect via Bluetooth, or HDMI and Bluetooth.
 - ➔ For details of the Bluetooth connection, refer to *Registering your Bluetooth devices* on page 70.
- The cable connection method varies depending on your device.
 - ➔ For details of the connections, refer to the Installation Manual.

F70DAB F970DAB F970BT F9770DAB F9770BT

- Connect via Bluetooth.
 - ➔ For details of the Bluetooth connection, refer to *Registering your Bluetooth devices* on page 70.
- The cable connection method varies depending on your device.
 - ➔ For details of the connections, refer to the Installation Manual.

3 Display the AV source selection screen.

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

4 Touch [aha] on the AV source selection screen.

When you touch [aha], this product will start establishing a Bluetooth connection. After the connection is successfully established, the touch panel key on the "aha" screen is activated.


- If the **AVICSYNC App** function is not turned off, a message confirming whether to turn off the **AVICSYNC App** function appears for smartphones connected with "HDMI" or "Bluetooth" selected for "Connection" in "Smartphone Setup".

5 Use the touch panel keys on the screen to control Aha Radio.

- ➔ For details, refer to *Using the touch panel keys* on page 141. 

Operating with the hardware buttons

Press the TRK button.

You can skip contents forward or backward. 

Using a Bluetooth audio player

You can control a Bluetooth audio player.

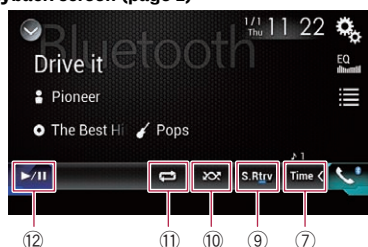
- ❑ Before using the Bluetooth audio player, you must register and connect the device to this product.
 - ➔ For details, refer to *Registering your Bluetooth devices* on page 70.
- ❑ Operations may vary depending on the Bluetooth audio player.
- ❑ Depending on the Bluetooth audio player connected to this product, the available operations with this product may be limited to the following two levels:
 - A2DP (Advanced Audio Distribution Profile): Only playing back songs on your audio player is possible.
 - A2DP and AVRCP (Audio/Video Remote Control Profile): Playing back, pausing, selecting songs, etc., are possible.
- ❑ Since a number of Bluetooth audio players are available on the market, operations with your Bluetooth audio player using this product vary considerably in range. Please refer to the instruction manual that came with your Bluetooth audio player as well as this manual while operating your player on this product.
- ❑ While you are listening to songs on your Bluetooth audio player, please refrain from operating your mobile phone as much as possible. If you try operating your mobile phone, the signal may cause noise for song playback.
- ❑ Even if you switch to another source while listening to a song on your Bluetooth audio player, song playback may continue.
- ❑ Depending on the Bluetooth audio player you connected to this product, operations on this product to control the player may differ from those explained in this manual.
- ❑ When you are talking on a mobile phone connected to this product via Bluetooth wireless technology, song playback from your Bluetooth audio player connected to this product may be paused.
- ❑ You cannot use Bluetooth audio player when the connecting cable for using **AppRadio Mode** is connected.

Using the touch panel keys

Playback screen (page 1)



Playback screen (page 2)



- ① **Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the Time and date setting screen.**
 - ➔ For details, refer to *Setting the time and date* on page 201.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
 - ➔ For details, refer to *Using the equaliser* on page 181.
- ⑤ **Selects a file from the list.**
 - ➔ For details, refer to *Selecting files from the file name list* on page 147.
- ⑥ **Displays the Phone menu screen.**
 - ➔ For details, refer to *Displaying the phone menu* on page 76.
- ⑦ **Switches to the next or previous page of touch panel keys.**
- ⑧ **Skips files forward or backward.**
- ⑨ **Uses "Sound Retriever" function.**
 - ➔ For details, refer to *Setting the "Sound Retriever" function* on page 202.

- ⑩ **Plays files in random order.**
 - For details, refer to *Playing files in random order* on page 147.
- ⑪ **Sets a repeat play range.**
 - For details, refer to *Setting a repeat play range* on page 147.
- ⑫ **Switches between playback and pause.**

- Bluetooth audio player compatible with AVRCP1.3 is connected, and the playback is started by the operation on the device.
- Another file is selected while playback is paused.

Reading the screen



- ① **Current time and date**
- ② **File number indicator**
 - Shows the file number currently playing (when available).
- ③ **Play time indicator**
 - Shows the elapsed playing time within the current file (when available).
- ④ **Current file information**
 - If the connected Bluetooth audio player features AVRCP 1.3, the following file information will be displayed.
 - **Track title**
 - Shows the title of the track currently playing (when available).
 - **Artist name**
 - Shows the name of the artist for the track currently playing (when available).
 - **Album title**
 - Shows the title of the album of the current file (when available).
 - **Genre**
 - Shows the genre of the current file (when available).
 - In the following cases, file information will only be displayed after a file starts or resumes playing:

Starting procedure

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

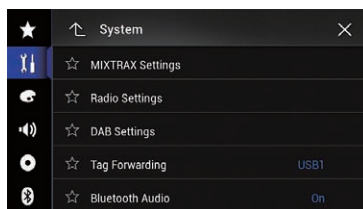
2 Touch the following keys in the following order.



The “System” screen appears.

3 Touch [AV Source Settings].

The following screen appears.



4 Confirm that “Bluetooth Audio” is turned on.

- The default setting is “On”.

5 Display the AV source selection screen.

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

6 Touch [Bluetooth Audio] on the AV source selection screen.

The “Bluetooth” screen appears.

7 Use the touch panel keys on the screen to control the Bluetooth audio player.

- For details, refer to *Using the touch panel keys* on page 145.

Using a Bluetooth audio player

Selecting files from the file name list

The file name list lets you see the list of track titles for the Bluetooth audio player and lets you select one of them to play back.

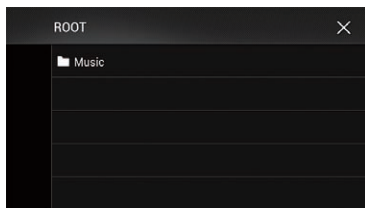
- ❑ This function is only available when the connected Bluetooth audio player supports AVRCP 1.4.

1 Touch the following key.



Displays the file name list.

The following screen appears.



2 Touch a file on the list to play back.

- ❑ Touching a folder on the list shows its contents. You can play a file on the list by touching it. ■

Playing files in random order

All of the files within the repeat play range can be played at random by only touching a single key.

- ❑ This function is only available when the connected Bluetooth audio player supports AVRCP 1.3.

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



Turns random play on or off.

Setting a repeat play range

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

- ❑ This function is only available when the connected Bluetooth audio player supports AVRCP 1.3.

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



Changes the repeat play range between the current file and all audio files in the Bluetooth audio player.

Operating with the hardware buttons

Press the TRK button.

You can skip files forward or backward.

Press and hold the TRK button.

You can perform fast reverse or fast forward. ■

F77DAB

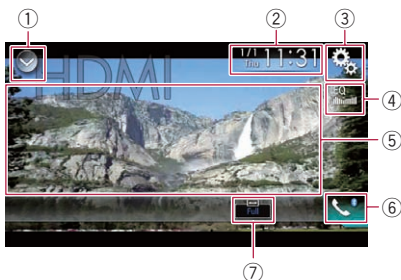
You can display the video image output by the device connected to this product. This section describes operations for an HDMI source.

- ❑ A High Speed HDMI® Cable (sold separately) is required for connection.
 - ➔ For details of the connection method, refer to the Installation Manual.

! CAUTION

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

Using the touch panel keys



- ① **Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the Time and date setting screen.**
 - ➔ For details, refer to *Setting the time and date* on page 201.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
 - ➔ For details, refer to *Using the equaliser* on page 181.
- ⑤ **Hides the touch panel keys.**

Touching this area hides the touch panel keys.

 - ❑ Touch anywhere on the LCD screen to display the touch panel keys again.
- ⑥ **Displays the Phone menu screen.**

- ➔ For details, refer to *Displaying the phone menu* on page 76.

- ⑦ **Changes the wide screen mode.**

- ➔ For details, refer to *Changing the wide screen mode* on page 202. ❑

Reading the screen



- ① **Current time and date** ❑

Starting procedure

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

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

- 2 **Touch [HDMI] on the AV source selection screen.**

The image is displayed on the screen.

- 3 **Use the touch panel keys on the screen to control the external unit.**

- ➔ For details, refer to *Using the touch panel keys* on page 148. ❑

Using an AUX source

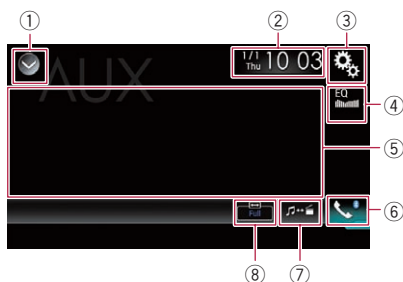
You can display the video image output by the device connected to this product. This section describes operations for an AUX source.

- ❑ A Mini-jack AV cable (CD-RM10) (sold separately) is required for connection.
 - ➔ For details of the connection method, refer to the Installation Manual.

⚠ CAUTION

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

Using the touch panel keys



- ① **Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the Time and date setting screen.**
 - ➔ For details, refer to *Setting the time and date* on page 201.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
 - ➔ For details, refer to *Using the equaliser* on page 181.
- ⑤ **Hides the touch panel keys.**

Touching this area hides the touch panel keys.

 - ❑ Touch anywhere on the LCD screen to display the touch panel keys again.
- ⑥ **Displays the Phone menu screen.**
 - ➔ For details, refer to *Displaying the phone menu* on page 76.
- ⑦ **Switches the operation screen.**

➔ For details, refer to *Switching the operation screen* on page 150.

⑧ **Changes the wide screen mode.**

➔ For details, refer to *Changing the wide screen mode* on page 202. ❑

Reading the screen



- ① **Current time and date** ❑

Starting procedure

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

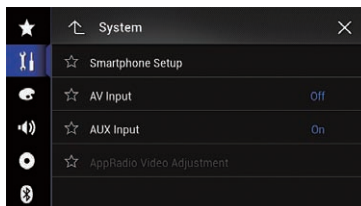
- 1 **Press the HOME button to display the Top menu screen.**
- 2 **Touch the following keys in the following order.**



The “System” screen appears.

3 **Touch [Input/Output Settings].**

The following screen appears.



Using an AUX source

4 Confirm that "AUX Input" is turned on.

- ❑ The default setting is "On".

5 Display the AV source selection screen.

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

6 Touch [AUX] on the AV source selection screen.

The image is displayed on the screen.

7 Use the touch panel keys on the screen to control the external unit.

- ➔ For details, refer to *Using the touch panel keys* on page 149. ❑

5 Touch the item you want to set.

- **Auto** (default):
Adjusts the video signal setting automatically.
- **PAL**:
Sets the video signal to PAL.
- **NTSC**:
Sets the video signal to NTSC.
- **PAL-M**:
Sets the video signal to PAL-M.
- **PAL-N**:
Sets the video signal to PAL-N.
- **SECAM**:
Sets the video signal to SECAM. ❑

Setting the video signal

When you connect this product to an AUX equipment, select the suitable video signal setting.

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

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

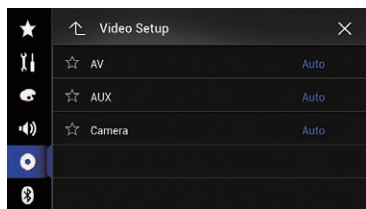
2 Touch the following keys in the following order.



The "Video Setup" screen appears.

3 Touch [Video Signal Setting].

The following screen appears.



4 Touch [AUX].

The pop-up menu appears.

Switching the operation screen

You can switch between the screen to operate music files and that to operate video files.

● Touch the following key.



Switches between the screen to operate video files and that to operate music files.



Using AV input

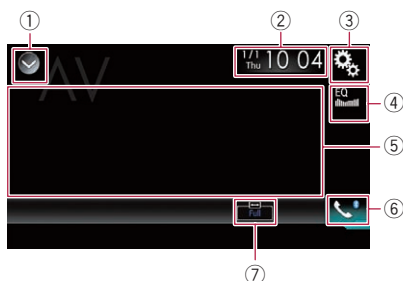
You can display the video image output by the device connected to this product.

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

CAUTION

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

Using the touch panel keys



- ① **Displays the source list.**
 - ➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ② **Displays the Time and date setting screen.**
 - ➔ For details, refer to *Setting the time and date* on page 201.
- ③ **Displays the Setting menu screen.**
- ④ **Recalls equaliser curves.**
 - ➔ For details, refer to *Using the equaliser* on page 181.
- ⑤ **Hides the touch panel keys.**
 - Touching this area hides the touch panel keys.
 - ☐ Touch anywhere on the LCD screen to display the touch panel keys again.
- ⑥ **Displays the Phone menu screen.**
 - ➔ For details, refer to *Displaying the phone menu* on page 76.
- ⑦ **Changes the wide screen mode.**
 - ➔ For details, refer to *Changing the wide screen mode* on page 202. ☐

Reading the screen



- ① **Current time and date** ☐

Starting procedure

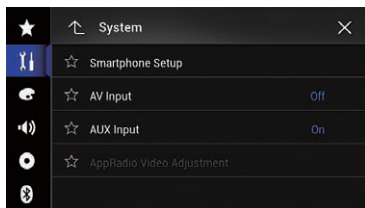
You can display the video image output by the device connected to video input.

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



The "System" screen appears.

- 3 Touch [Input/Output Settings].
The following screen appears.



- 4 Touch [AV Input].
The pop-up menu appears.

5 Touch [Source].
The video image output by the connected external device can be displayed.

- ☐ If "Source" is selected, "2nd Camera Input" is automatically set to "Off".

Using AV input


6 Display the AV source selection screen.

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


7 Touch [AV] on the AV source selection screen.

The image is displayed on the screen.

8 Use the touch panel keys on the screen to control the external unit.


- ➔ For details, refer to *Using the touch panel keys* on page 151. 

Adjusts the video signal setting automatically.

- **PAL:**
Sets the video signal to PAL.
- **NTSC:**
Sets the video signal to NTSC.
- **PAL-M:**
Sets the video signal to PAL-M.
- **PAL-N:**
Sets the video signal to PAL-N.
- **SECAM:**
Sets the video signal to SECAM. 

Setting the video signal

When you connect this product to an AV equipment, select the suitable video signal setting.

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

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

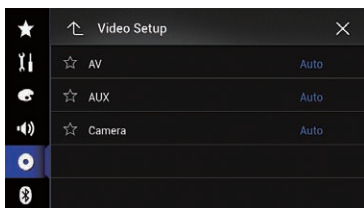
2 Touch the following keys in the following order.



The “Video Setup” screen appears.

3 Touch [Video Signal Setting].

The following screen appears.



4 Touch [AV].

The pop-up menu appears.

5 Touch the item you want to set.

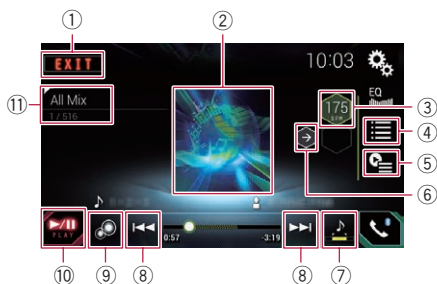
- **Auto** (default):

Using MIXTRAX

MIXTRAX is original technology for creating non-stop mixes of selections from your audio library, complete with DJ effects that make them sound as if a DJ is right there with you playing the music.

- ❑ You can turn MIXTRAX on by touching [MIXTRAX] on the playback screen of compressed audio files.
 - ➔ For details, refer to *Using the touch panel keys* on page 112.

Touch panel keys



- ① Exits the MIXTRAX screen.
- ② Displays the LinkGate screen.
Touch the desired item. Songs related to the selected item are played.
- ③ Specifies the BPM.
The original BPM is not displayed during playback.
- ④ Displays the item selection screen.
➔ For details of the operations, refer to *Selecting an item to play songs* on page 153.
- ⑤ Displays the playback list screen.
➔ For details of the operations, refer to *Selecting songs not to be played* on page 153.
- ⑥ Sets to the original BPM (Beats Per Minute).
- ⑦ Specifies the playback portion.
➔ For details of the operations, refer to *Specifying the playback portion* on page 154.
- ⑧ Touch to select a track.
Touch and hold to fast forward or rewind.

- ⑨ Turns on or off the MIXTRAX original visual display.
- ⑩ Pauses and starts playback.
- ⑪ Displays the item selected on the LinkGate screen or item selection screen.

Selecting an item to play songs

You can specify an item to play songs related to it.

1 Touch the following key.



Displays the item selection screen.

2 Touch the following keys to select the item.



Displays the MIX pattern list.



Displays the tag list.



Displays the file list.

3 Select an item in the list.

Songs related to the selected item are played.

Selecting songs not to be played

You can select items or songs not to be played.

1 Touch the following key.



Displays the playback list screen.

2 Touch the following key.



Displays the **"Playback not allowed"** screen.

3 Touch [Songs], [Artists] or [Albums].

4 Touch the box on the left of the item or song that you do not want to play.

An icon is displayed. Items displayed with the icon will not be played.

- If you touch **[Unselect All]**, all the selections are cancelled.
- If you touch **[Select All]**, all the items are selected.




Specifying the playback portion

You can specify the playback portion.

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



Changes the playback portion.

-  (default):
Plays back a middle portion.
 - :
Plays back a long portion.
 - :
Plays back a short portion.
- The most suitable sound effect is automatically applied when switching to the next song.

Setting the flash pattern

The flashing colour changes with the changes in the sound and bass levels.

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

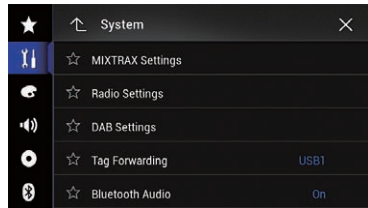
2 Touch the following keys in the following order.



The **"System"** screen appears.

3 Touch [AV Source Settings].

The following screen appears.



4 Touch [MIXTRAX Settings].

5 Touch [Flash Pattern].

The pop-up menu appears.

6 Touch the item you want to set.

- **Sound1** (default) to **Sound6**:
The flash pattern changes according to the sound level. Select a desired mode.
- **L-Pass1** to **L-Pass6**:
The flash pattern changes according to the bass level. Select a desired mode.
- **Random1**:
The flash pattern changes randomly according to the sound level mode and low pass mode.
- **Random2**:
The flash pattern changes randomly according to the sound level mode.
- **Random3**:
The flash pattern changes randomly according to the low pass mode.
- **Off**:
The flash pattern does not flash.

System settings

Navigation info window

You can set whether to display the guidance information of the navigation on the AV operation screen.

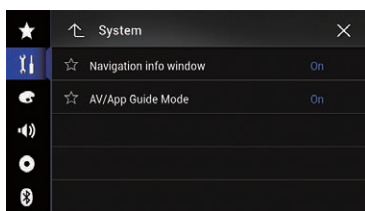
1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The “System” screen appears.

3 Touch [Navigation Related Settings].
The following screen appears.



4 Touch [Navigation info window] repeatedly until the desired setting appears.

- **On** (default):
Displays the navigation information bar.
- **Off**:
Does not display the navigation information bar.

Setting automatic switching to the navigation screen

You can set whether to automatically switch to the navigation screen from the AV screen or the Application screen when your vehicle approaches a guidance point such as an intersection.

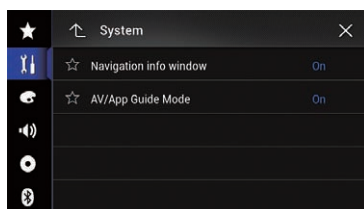
1 Press the HOME button to display the Top menu screen.

2 Touch the following keys in the following order.



The “System” screen appears.

3 Touch [Navigation Related Settings].
The following screen appears.



4 Touch [AV/App Guide Mode] repeatedly until the desired setting appears.

- **On** (default):
Switches from the AV operation screen or the Application screen to the map screen.
- **Off**:
Does not switch the screen.

Setting the FM tuning step

Depending on the region, the tuning step can be changed. The FM tuning step can be switched between 100 kHz and 50 kHz.

- This setting is available when the source is turned off.

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

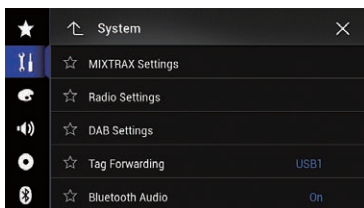
2 Touch the following keys in the following order.



The “System” screen appears.

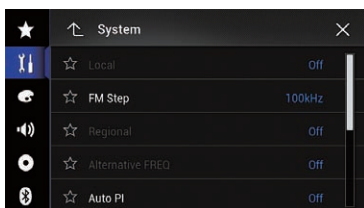
3 Touch [AV Source Settings].

The following screen appears.



4 Touch [Radio Settings].

The following screen appears.



5 Touch [FM Step] repeatedly until the desired setting appears.

- **100kHz** (default):
Switches to 100 kHz.
- **50kHz**:
Switches to 50 kHz.
- If **[TA Interrupt]** and **[Alternative FREQ]** are set to **"Off"**, the seek step is set to **"50kHz"** even if **"100kHz"** is selected.

Setting the Digital Radio aerial power supply

F77DAB **F70DAB** **F970DAB** **F9770DAB**

This function allows you to select whether to output power to a connected Digital Radio aerial.

- ➔ For details on how to connect a Digital Radio aerial, refer to the installation manual.
- This setting is available when the source is turned off.

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

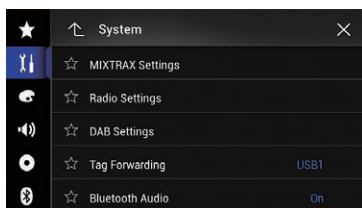
2 Touch the following keys in the following order.



The **"System"** screen appears.

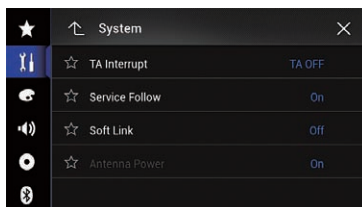
3 Touch [AV Source Settings].

The following screen appears.



4 Touch [DAB Settings].

The following screen appears.



5 Touch [Antenna Power] repeatedly until the desired setting appears.

- **On** (default):
Supplies power to a Digital Radio aerial. Select when using the optional Digital Radio aerial (AN-DAB1 or CA-AN-DAB.001) (sold separately) with this product.
- **Off**:
Does not supply power. Select when using a passive aerial with no booster.

System settings

Activating the Bluetooth audio source

You need to activate the Bluetooth audio source in order to use a Bluetooth audio player.

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

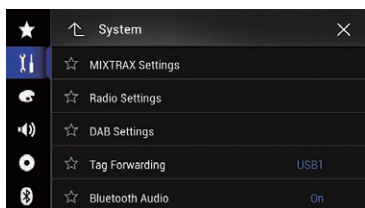
2 Touch the following keys in the following order.



The “System” screen appears.

3 Touch [AV Source Settings].

The following screen appears.



4 Touch [Bluetooth Audio] repeatedly until the desired setting appears.

- **On** (default):
Activates the Bluetooth audio source.
- **Off**:
Deactivates the Bluetooth audio source.

Setting the ever scroll

When “Ever Scroll” is set to “On”, recorded text information scrolls continuously in the display. Set to “Off” if you prefer the information to scroll just once.

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

2 Touch the following keys in the following order.



The “System” screen appears.

3 Touch [Ever Scroll] repeatedly until the desired setting appears.

- **Off** (default):
Turns the ever scroll setting off.
- **On**:
Turns the ever scroll setting on.

Setting AV input

You can use external video equipment such as portable players connected to this product with this setting.

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

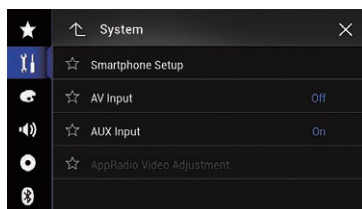
2 Touch the following keys in the following order.



The “System” screen appears.

3 Touch [Input/Output Settings].

The following screen appears.



4 Touch [AV Input].

The pop-up menu appears.

5 Touch the item you want to set.

- **Off** (default):
Deactivates the AV source.

- **Source:**
Displays the video image output by the connected external device.
- **Camera:**
Displays the image output by the connected external camera.
- If "Camera" is selected, "2nd Camera Input" is automatically set to "On".
- If "Off" or "Source" is selected, "2nd Camera Input" is automatically set to "Off".

Setting the rear view camera

The following two functions are available. A separately sold rear view camera (e.g. ND-BC6) is required for utilising the rear view camera function. (For details, consult your dealer.)

Rear view camera

This product features a function that automatically switches to the full-screen image of the rear view camera installed on your vehicle. When the gearstick is in the REVERSE (R) position, the screen automatically switches to full-screen rear view camera image.

- If the gearstick is aligned to the REVERSE (R) position immediately after the system of this product is started up, only the camera image will be displayed and the parking assist guidelines will not be displayed. The parking assist guidelines will be displayed on the camera image after a little while. Be sure to check the conditions around the vehicle even before the guidelines and the message are displayed.

Camera for Camera View mode

Camera View can be displayed at all times (e.g. when monitoring an attached trailer, etc.). Please note that with this setting, the camera image is not resized to fit, and that a portion of what is seen by the camera is not viewable.

CAUTION

Check to make sure settings for rear view camera displays a mirror reversed image.

- Immediately verify whether the display changes to a rear view camera image when the gearstick is aligned to REVERSE (R) from another position.
- When the screen changes to full-screen rear view camera image during normal driving, switch to the opposite setting in "Camera Polarity".

Setting rear view camera activation

- To view images of the rear view camera on the screen of this product, "Back Camera Input" needs to be set to "On".

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

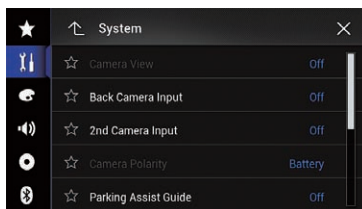
2 Touch the following keys in the following order.



The "System" screen appears.

3 Touch [Camera settings].

The following screen appears.



4 Touch [Back Camera Input] repeatedly until the desired setting appears.

- **Off** (default):
Turns the back camera input setting off.
- **On:**
Turns the back camera input setting on.

System settings

Setting the polarity of the rear view camera

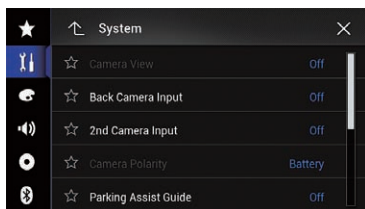
- 1 Press the HOME button to display the Top menu screen.
- 2 Touch the following keys in the following order.



The “System” screen appears.

- 3 Touch [Camera settings].

The following screen appears.



- 4 Touch [Camera Polarity] repeatedly until the desired setting appears.

- **Battery** (default):
When the polarity of the connected lead is positive while the gearstick is in the REVERSE (R) position.
- **Ground**:
When the polarity of the connected lead is negative while the gearstick is in the REVERSE (R) position.

When the gearstick is aligned to the REVERSE (R) position after setting the rear view camera, the rear view image appears.

Setting the reversed image display for the rear view image

Rear view camera images are displayed reversed (as mirror images) on the front screen except when a rear view camera that can output images in the correct direction is used. You can set whether to reverse the rear view

camera images to be displayed on the front screen.

- This setting is available only when you stop your vehicle in a safe place and apply the handbrake.
- This function is available only when “Back Camera Input” is “On”.
 - ➔ For details, refer to *Setting rear view camera activation* on page 158.

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

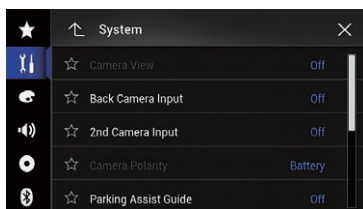
- 2 Touch the following keys in the following order.



The “System” screen appears.

- 3 Touch [Camera settings].

The following screen appears.



- 4 Touch [Back Camera: Reverse Video] repeatedly until the desired setting appears.

- **Off** (default):
Does not reverse the rear view camera images.
- **On**:
Reverses the rear view camera images. □

Setting the camera for Camera View mode

To display **Camera View** at all times, “**Camera View**” needs to be set to “**On**”.

- ❑ To set the rear view camera for **Camera View** mode, “**Back Camera Input**” needs to be set to “**On**”.
 - ➔ For details, refer to *Setting rear view camera activation* on page 158.
- ❑ To set the second camera for **Camera View** mode, set “**AV Input**” to “**Camera**” or set “**2nd Camera Input**” to “**On**”.
 - ➔ For details, refer to *Setting AV input* on page 157.
 - ➔ For details, refer to *Setting the second camera input* on page 162.
- ❑ You can also turn this function on by touching [**Camera View**] on the AV source selection screen or in the source list.

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

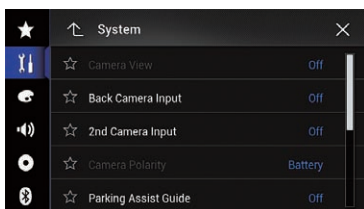
2 Touch the following keys in the following order.



The “**System**” screen appears.

3 Touch [Camera settings].

The following screen appears.



4 Touch [Camera View] repeatedly until the desired setting appears.

- **Off** (default):
Turns the camera view setting off.

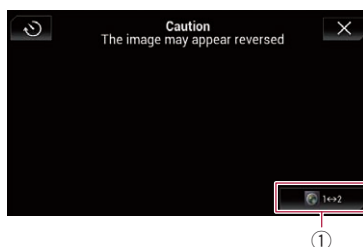
- **On:**

Turns the camera view setting on.

If no operations are performed for seven seconds after the AV operation screen is displayed, the camera view will appear automatically.

- ❑ If you touch the screen while the camera view is displayed, the displayed image will turn off temporarily.

When the camera view of both rear view camera and second camera are available, the key to switch the display appears.



- ① Switches the display between rear view image and second camera image.

Displaying the parking assist guidelines

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

2 Touch the following keys in the following order.

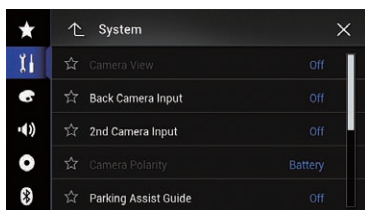


The “**System**” screen appears.

3 Touch [Camera settings].

The following screen appears.

System settings

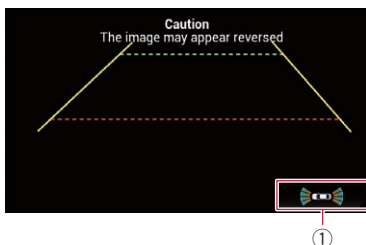


4 Touch [Parking Assist Guide] repeatedly until the desired setting appears.

- **Off** (default):
Hides the guidelines.
- **On**:
Displays the guidelines.

When the gearstick is aligned to the REVERSE (R) position after setting the rear view camera, the rear view image appears.

F77DAB F70DAB F970DAB F9770DAB



- ① Switches the display to the "Parking Assist" screen.
- If you press and hold the **MAP** button, the rear view image disappears.

Setting guidelines on the rear view image

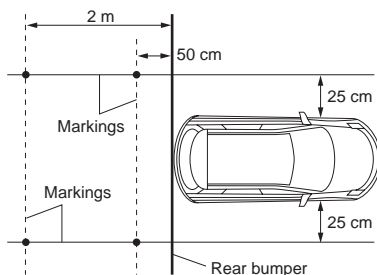
⚠ CAUTION

- When adjusting the guidelines, be sure to park the vehicle in a safe place and apply the handbrake.
- Before getting out of the car to place the markings, be sure to turn the ignition switch off (ACC OFF).

- The range projected by the rear view camera is limited. Also, the vehicle width and distance guidelines displayed on the rear view camera image may differ from the actual vehicle width and distance. (The guidelines are straight lines.)
- The image quality may deteriorate depending on the usage environment, such as at night or in dark surroundings.

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

2 Using packing tape or similar, place markings approximately 25 cm from each side of the vehicle, and approximately 50 cm and 2 m from the rear bumper.



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

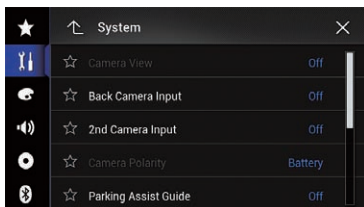
4 Touch the following keys in the following order.



The "System" screen appears.

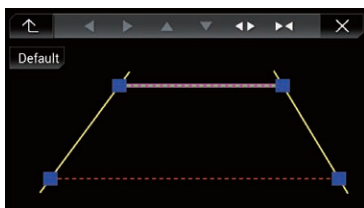
5 Touch [Camera settings].

The following screen appears.



6 Touch [Parking Assist Guide Adjust].

The following screen appears.



7 Set the guidelines by dragging the four points.

8 Touch the following keys to adjust the position of the point if necessary.



Moves the point to the left.



Moves the point to the right.



Moves the point upward.



Moves the point downward.



Extends the line to the left and right from the current centre point of the distance guideline. The adjustment points on the lateral coordinates at both ends will also move.



Shortens the line from the left and right to the current centre point of the distance guideline. The adjustment points on the lateral coordinates at both ends will also move.

Default

Resets the settings of the distance and vehicle width guidelines and adjustment points to the default.

- When a point is moved, the distance from the initial value is displayed at the bottom of the screen.

Setting the second camera input

You can view images of the second camera (a front camera etc.) on the screen of this product.

Setting the second camera activation

- To view images of the second camera on the screen of this product, "2nd Camera Input" needs to be set to "On".

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

2 Touch the following keys in the following order.

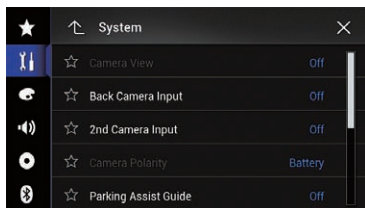


The "System" screen appears.

3 Touch [Camera settings].

The following screen appears.

System settings



4 Touch [2nd Camera Input] repeatedly until the desired setting appears.

- **Off** (default):
Turns the second camera input setting off.
- **On**:
Turns the second camera input setting on.
- The confirmation message appears if setting **"2nd Camera Input"** to **"On"** while the AV source is on. The AV source will turn off if **"Yes"** is selected, and **"2nd Camera Input"** will be set to **"On"**. Select **"No"** to cancel setting **"2nd Camera Input"** to **"On"**.
- If **"On"** is selected, **"AV Input"** is automatically set to **"Camera"**.
- If **"Off"** is selected, **"AV Input"** is automatically set to **"Off"**.

Setting the reversed image setting for the second camera input image

Second camera images are displayed reversed (as mirror images) on the front screen except when a second view camera that can output images in the correct direction is used. You can set whether to reverse the second camera images to be displayed on the front screen.

- This setting is available only when you stop your vehicle in a safe place and apply the handbrake.
- This function is available when **"2nd Camera Input"** is **"On"** or **"AV Input"** is set to **"Camera"**.

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

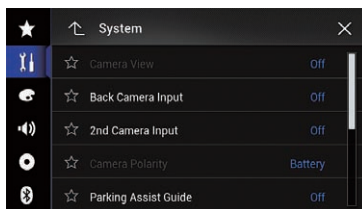
2 Touch the following keys in the following order.



The **"System"** screen appears.

3 Touch [Camera settings].

The following screen appears.



4 Touch [2nd Camera: Reverse video] repeatedly until the desired setting appears.

- **Off** (default):
Does not reverse the second camera images.
- **On**:
Reverses the second camera images.

Setting the safe mode

For safety reasons, you can limit the functions that are available while your vehicle is in motion.

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

2 Touch the following keys in the following order.



The **"System"** screen appears.

3 Touch [Safe Mode] repeatedly until the desired setting appears.

- **On** (default):

Activates the safe mode function.

- **Off:**
Deactivates the safe mode function.

Turning off the demo screen

If the demo screen appears, perform the following procedure to turn off the demo screen.

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



The “System” screen appears.

- 3 Touch [Demo Mode] repeatedly until the desired setting appears.

- **On** (default):
Displays the demo screen.
- **Off:**
Hides the demo screen.

Selecting the system language

The system language can be selected.

- The languages used in the programme and voice guidance can be set on the “Regional” screen.
 - ➔ For details, refer to *Customising the navigation settings* on page 58.
- The language can be changed for the following:
 - The “Audio” screen
 - The “System” screen
 - The “Video Setup” screen
 - The “Bluetooth” screen
 - Language for messages

Some operations on this product are prohibited from use while driving or require careful attention when operated. In such cases, a caution message will

appear on the display. You can change the language for caution messages with this setting.

- If the embedded language and the selected language setting are not the same, text information may not display properly.
- Some characters may not be displayed properly.

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



The “System” screen appears.

- 3 Touch [System Language].
The pop-up menu appears.

- 4 Touch the desired language.
After the language is selected, the previous screen returns.

Reversing the climate control status display

F77DAB F70DAB F970DAB F9770DAB

If the left/right display of the climate control status screen does not match that of the vehicle, the display can be reversed.

- To configure this setting, the optional Vehicle Bus adapter must be connected.
- ➔ For details of the operations, refer to *Displaying the operating status of the climate control panel* on page 199.

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

System settings

- 2 Touch the following keys in the following order.



The “System” screen appears.

- 3 Touch [Climate Reverse] repeatedly until the desired setting appears.

- **Off** (default):
Does not reverse the climate control status display.
- **On**:
Reverses the climate control status display.

Setting the keyboard language with the application for iPhone

F77DAB **F70DAB** **F970DAB** **F9770DAB**

You can use the keyboard in **AppRadio Mode** by setting the language of the keyboard for iPhone.

- This function is only available in **AppRadio Mode** on the iPhone.

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

- 2 Touch the following keys in the following order.



The “System” screen appears.

- 3 Touch [Keyboard].

The pop-up menu appears.

- 4 Touch the desired language.

After the language is selected, the previous screen returns.

Setting the beep sound

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

- 2 Touch the following keys in the following order.



The “System” screen appears.

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

- **On** (default):
Sounds a beep.
- **Off**:
Does not sound a beep.

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

F970DAB **F970BT** **F9770DAB** **F9770BT**

If you feel that the touch panel keys on the screen deviate from the actual positions that respond to your touch, adjust the response positions of the touch panel screen.

- This setting is available only when you stop your vehicle in a safe place and apply the handbrake.
- Do not use sharp pointed tools such as a ballpoint or mechanical pen, which could damage the screen.
- Do not turn off the engine while saving the adjusted position data.

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

2 Touch the following keys in the following order.



The “**System**” screen appears.

3 Touch [Touch Panel Calibration].

The touch panel adjustment screen appears.

4 Touch two corners of the screen along the arrows, and then touch the centres of two + marks at the same time twice.

5 Press the HOME button.

The adjustment results are saved.

6 Press the HOME button once again.

Proceed to 16-point adjustment.

- If you press and hold the HOME button, the adjustment is cancelled.

7 Gently touch the centre of the + mark displayed on the screen.

The target indicates the order.

After you touch all marks, the adjusted position data is saved.

- If you press the HOME button, the previous adjustment position returns.
- If you press and hold the HOME button, the adjustment is cancelled.

8 Press and hold the HOME button.

The adjustment results are saved. 

Setting the dimmer function

You can specify the timing that the dimmer function is to be turned on.

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

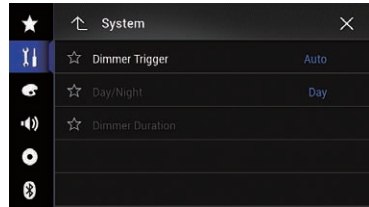
2 Touch the following keys in the following order.



The “**System**” screen appears.

3 Touch [Dimmer Settings].


The following screen appears.



4 Touch [Dimmer Trigger].

The pop-up menu appears.

5 Touch the item you want to set.

- **Auto** (default):
Activates the dimmer function when the vehicle's headlights are on (nighttime).
 - **Manual**:
Enables to set whether to activate the dimmer function.
 - **Time**:
Enables to set the duration of time for the dimmer function to be active.
- If “**Manual**” is selected, set whether to activate the dimmer function.
 - ➡ For details, refer to *Setting whether to activate the dimmer function* on page 167.
 - If “**Time**” is selected, specify the duration for the dimmer function to be active.
 - ➡ For details, refer to *Setting the duration of time for the dimmer function to be active* on page 167. 

System settings

Setting whether to activate the dimmer function

You can set whether to activate the dimmer function at nighttime.

- ❑ This function is available only when “**Dimmer Trigger**” is set to “**Manual**”.
 - ➔ For details, refer to *Setting the dimmer function* on page 166.

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

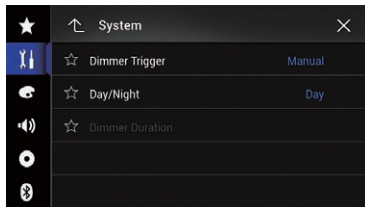
2 Touch the following keys in the following order.



The “**System**” screen appears.

3 Touch [Dimmer Settings].

The following screen appears.



4 Touch [Day/Night].

The pop-up menu appears.

5 Touch the item you want to set.

- **Day** (default):
Deactivates the dimmer function.
- **Night:**
Activates the dimmer function.

Setting the duration of time for the dimmer function to be active

You can set the duration of time for the dimmer function to be active.

- ❑ This function is available only when “**Dimmer Trigger**” is set to “**Time**”.
 - ➔ For details, refer to *Setting the dimmer function* on page 166.

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

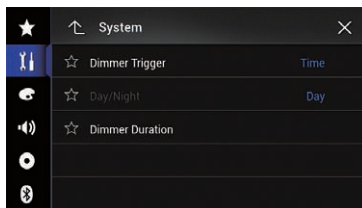
2 Touch the following keys in the following order.



The “**System**” screen appears.

3 Touch [Dimmer Settings].

The following screen appears.



4 Touch [Dimmer Duration].

The duration setting bar appears.

5 Touch the desired points on the duration setting bar, or slide the cursors to specify the start time and the end time, respectively.

- ❑ The time display format depends on the “**Time Format**” setting.
- ❑ The value displayed at the centre of the duration setting bar (“12” for 12-hour format and “00” for 24-hour format) indicates midnight. The values to the left of the value at the centre are for the afternoon, and the values to the right of value at the centre are for the morning.
- ❑ The default values are “18:00” (start time) and “6:00” (end time).
- ❑ The value can be changed in 15-minute steps.

Adjusting the picture

You can adjust the picture for each source, the Application screen, and rear view camera.

CAUTION

For safety reasons, you cannot use some of these functions while your vehicle is in motion. To enable these functions, you must stop in a safe place and apply the handbrake. Refer to Important Information for the User (a separate manual).

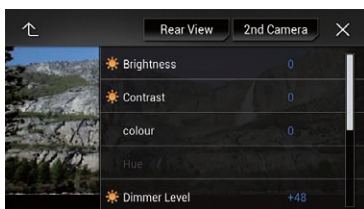
- 1 Display the screen you wish to adjust.
- 2 Press the HOME button to display the Top menu screen.
- 3 Touch the following keys in the following order.



The “System” screen appears.

4 Touch [Picture Adjustment].

The following screen appears.



5 Touch any of the following keys to select the function to be adjusted.

Picture adjustment items are displayed.

- **Brightness:**
Adjusts the black intensity.
- **Contrast:**
Adjusts the contrast.
- **colour:**
Adjusts the colour saturation.
- **Hue:**
Adjusts the tone of colour (which colour is emphasised, red or green).
- **Dimmer Level:**
Adjusts the brightness of the display.
- **Temperature:**
Adjusts the colour temperature, resulting in a better white balance.
 - You can adjust **Hue** only when the colour system is set to NTSC.
 - If you touch [**Rear View**] or [**2nd Camera**], the mode changes to the selected camera mode. By touching [**Source**], [**Navi**] or [**Apps**], you can return to the selected mode.

6 Touch the following keys to adjust the selected item.



Decreases the level of the selected item.



Increases the level of the selected item.



Selects the adjustable previous item.




Selects the adjustable next item.

Each time you touch the key, the level of the selected item increases or decreases.

- “**Brightness**”, “**Contrast**”, “**colour**” and “**Hue**” can be adjusted from “-24” to “+24”.
- “**Dimmer Level**” can be adjusted from “+1” to “+48”.
- “**Temperature**” can be adjusted from “-3” to “+3”.
- The adjustments of “**Brightness**”, “**Contrast**”, and “**Dimmer Level**” are stored separately for the On/Off status of the dimmer function. These are switched automatically depending on whether the dimmer function is on or off.
 - ➔ For details on setting the dimmer function, refer to *Setting the dimmer function* on page 166.
- The picture adjustment may not be available with some rear view cameras.

System settings

- ❑ The setting contents can be memorised separately for the following screens and video images.
 - **DVD**, **Video-CD** and **Disc**
 - **AV** and external camera
 - **USB** (Video) and **USB** (JPEG)
 - **SD** (Video) and **SD** (JPEG)
 - **iPod** (iPod with a 30-pin connector)
 - **iPod** (Video) and **AppRadio Mode** (iPod with a 30-pin connector)
 - **HDMI** and **AppRadio Mode** (HDMI) (for AVIC-F77DAB)
 - **Android Auto** (for AVIC-F77DAB and AVIC-F70DAB)
 - **MirrorLink**
 - **AUX**
 - Internal navigation system, MIXTRAX, images output from the external device
 - Rear view camera 

Displaying the firmware version

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

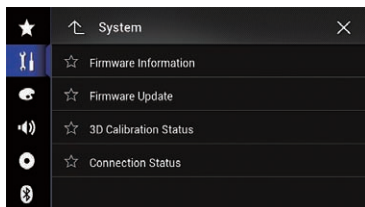
2 Touch the following keys in the following order.



The “**System**” screen appears.


3 Touch [System Information].

The following screen appears.



4 Touch [Firmware Information].

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

- ❑ You can check the open source licences of the functions that this product is equipped with under “**Licence**” on the “**Firmware Information**” screen.
- ❑ For AVIC-F970DAB, AVIC-F970BT, AVIC-F9770DAB, and AVIC-F9770BT users You can check the device name of this product on the “**Firmware Information**” screen. 

Updating firmware

CAUTION

- Never turn this product off, eject the SD memory card or disconnect the USB storage device while the firmware is being updated.
 - You can only update the firmware when the vehicle is stopped and the handbrake is engaged.
- ❑ Use the USB port1 to update the firmware using a USB storage device.
 - ❑ SD memory card is available for AVIC-F77DAB and AVIC-F70DAB.

1 Download the firmware update files.

2 Connect a blank (formatted) SD memory card or USB storage device to your computer, and then locate the correct update file and copy it onto the SD memory card or USB storage device.

3 Turn the source off.

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

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

System settings

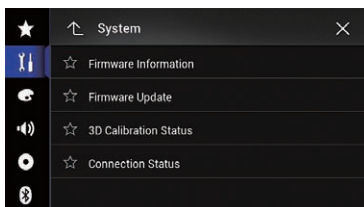
5 Touch the following keys in the following order.



The “**System**” screen appears.

6 Touch [System Information].

The following screen appears.



7 Touch [Firmware Update].

The “**Firmware Update**” screen appears.

8 Touch [Continue] to display the data transfer mode.

- ❑ Follow the on-screen instructions to finish updating the firmware.
- ❑ This product will reset automatically after the firmware update is completed if the update is successful.
- ❑ When the firmware update starts, the source is turned off and the Bluetooth connection is disconnected.
- ❑ If an error message appears on the screen, touch [Continue] to proceed and start the recovery sequence.

Checking sensor learning status and driving status

- ❑ This product can automatically use its sensor memory based on the outer dimensions of the tyres.

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

2 Touch the following keys in the following order.



The “**System**” screen appears.

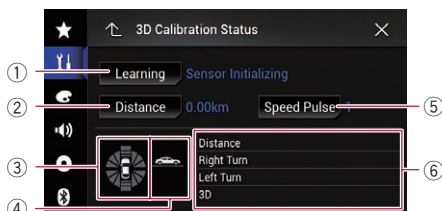
3 Touch [System Information].

The following screen appears.



4 Touch [3D Calibration Status].


The “**3D Calibration Status**” screen appears.



- ① **Learning**
Indicates the current driving mode.
- ② **Distance**
Indicates driving distance.
- ③ **Acceleration or deceleration/Rotational speed**
Indicates the acceleration or deceleration velocity of your vehicle. The rotational speed when your vehicle turns to the left or right is also shown.
- ④ **Inclination**
Indicates the incline of the street that you are currently on.
- ⑤ **Speed Pulse**
Indicates the total number of speed pulses.
- ⑥ **Degree of learning**

System settings

Sensor learning situations for distance (**Distance**), right turns (**Right Turn**), left turns (**Left Turn**) and 3D detection (**3D**) are indicated by the length of the bars.

- ❑ When the tyres have been changed or chains have been fitted, turning on the Speed Pulse allows the system to detect the fact that the tyre diameter has changed, and automatically replaces the value for calculating distance.
- ❑ If a separately sold speed pulse generator (ND-PG1) is connected, the distance calculation value cannot be replaced automatically. 

Clearing the status

You can delete the learned results stored in "Distance", "Speed Pulse" or "Learning".

1 Touch [Distance] or [Speed Pulse].

A message confirming whether to erase the data appears.

2 Touch [Yes].


The results stored in "Distance" or "Speed Pulse" are cleared.

3 Touch [Learning].

The pop-up menu appears.

4 Touch [Reset All].

All learned results are cleared.

- ❑ Touch **[Reset All]** for the following cases:
 - After changing the installation position of the navigation system
 - After changing the installation angle of the navigation system
 - After moving the navigation system to another vehicle
- If you touch **[Reset Distance]**, all learned results stored in "Distance" are cleared. 

Checking the connections of leads

Check that the leads are properly connected between this product and vehicle. Also check whether they are connected in the correct positions.

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

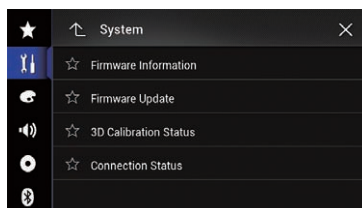
2 Touch the following keys in the following order.



The "System" screen appears.

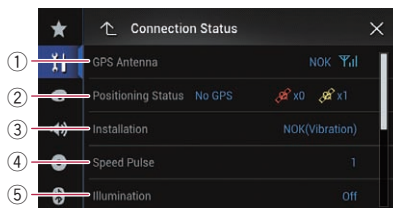
3 Touch [System Information].

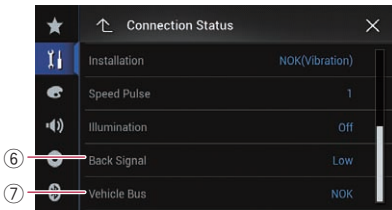
The following screen appears.



4 Touch [Connection Status].

The "Connection Status" screen appears.





① GPS Antenna

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

Colour	Signal communication	Used in positioning
Orange	Yes	Yes
Yellow	Yes	No

- ❑ When the GPS aerial is connected to this product, **"OK"** is displayed. When the GPS aerial is not connected to this product, **"NOK"** is displayed.
- ❑ If reception is poor, please change the installation position of the GPS aerial.

② Positioning Status

Displays the positioning status (3D positioning, 2D positioning, or no positioning), the number of satellites used for positioning (orange), and the number of satellites whose signal has been received (yellow). If signals from more than three satellites are received, the current location can be measured.

- ➔ For details, refer to *Positioning technology* on page 215.

③ Installation

Indicates whether the installation position of this product is correct or not. If installed correctly, **"OK"** appears. When this product is installed at an extreme angle exceeding the limitation of the installing angle, **"NOK (Inst. Angle)"** will be displayed. When the angle of this product has been changed, **"NOK(Vibration)"** will be displayed.

④ Speed Pulse

The Speed Pulse value detected by this product is shown. **"0"** is shown while the vehicle is stationary.

⑤ Illumination

When the headlights or small lamps of the vehicle are on, **"ON"** is displayed. When the small lamps of the vehicle are off, **"OFF"** is displayed. (If the orange/white lead is not connected, **"OFF"** appears.)

⑥ Back Signal

When the gearstick is shifted to **"R"**, the signal switches to **"High"** or **"Low"**. (One of these is displayed depending on the vehicle.)

⑦ Vehicle Bus

F77DAB **F70DAB** **F970DAB** **F9770DAB**

When the optional Vehicle Bus adapter is connected, **"OK"** is displayed. If not connected, **"NOK"** is displayed.

Audio adjustments

Using fader/balance adjustment

You can select a fader/balance setting that provides an ideal listening environment in all occupied seats.

- This function is available only when main audio is available.
- This function is available only when “**Rear Speaker**” is set to “**On**”.
 - ➔ For details, refer to *Adjusting the front and rear speaker output* on page 176.

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

2 Touch the following keys in the following order.



The “**Audio**” screen appears.

3 Touch [Fader/Balance].

The “**Fader/Balance**” screen appears.

4 Touch the following keys to adjust the front/rear speaker balance.



Moves towards the front.



Moves towards the rear.

Each time you touch the keys, the front/rear speaker balance moves towards the front or rear.

- “**Front25**” to “**Rear25**” is displayed as the front/rear speaker balance moves from the front to rear.
- The default setting is “**F/R0 L/R0**”.
- Set “**Front**” and “**Rear**” to “**0**” when using a dual speaker system.

5 Touch the following keys to adjust the left/right speaker balance.



Moves towards the left.



Moves towards the right.

Each time you touch the keys, the left/right speaker balance moves towards the left or right.

- “**Left25**” to “**Right25**” is displayed as the left/right speaker balance moves from the left to right.
- The default setting is “**L/R0**”.
- You can also set the fader/balance by dragging the point on the displayed table.

Using balance adjustment

You can adjust the balance between right/left sound output.

- This function is available only when main audio is available.
- This function is available only when “**Rear Speaker**” is set to “**Off**”.
 - ➔ For details, refer to *Adjusting the front and rear speaker output* on page 176.

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

2 Touch the following keys in the following order.



The “**Audio**” screen appears.

3 Touch [Balance].

The “**Fader/Balance**” screen appears.

Audio adjustments

4 Touch the following keys to adjust the left/right speaker balance.



Moves towards the left.



Moves towards the right.

Each time you touch the keys, the left/right speaker balance moves towards the left or right.

- "Left25" to "Right25" is displayed as the left/right speaker balance moves from the left to right.
- The default setting is "L/R0".
- You can also set the fader/balance by dragging the point on the displayed table.

Switching sound muting/attenuation

You can automatically mute or attenuate the AV source volume and the application volume when the navigation outputs the guidance voice.

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



The "Audio" screen appears.

- 3 Touch [Mute Level].
The pop-up menu appears.

4 Touch the item you want to set.

- **ATT** (default):
The volume becomes 1/10.
- **Mute**:
The volume becomes 0.
- **Off**:
The volume does not change.

Adjusting source levels

The **SLA** (source level adjustment) function adjusts the volume level of each source to prevent radical changes in volume when switching between sources.

- This function is available only when main audio is available.
- Settings are based on the FM tuner volume level, which remains unchanged.
- This function is not available when the FM tuner is selected as the AV source.

1 Compare the FM tuner volume level with the level of the source you want to adjust.

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

3 Touch the following keys in the following order.



The "Audio" screen appears.

4 Touch [Source Level Adjuster].

The "Source Level Adjuster" screen appears.

5 Touch the following keys to adjust the source volume.



Increases the source volume.



Decreases the source volume.

- If you directly touch the area where the cursor can be moved, the **SLA** setting will be changed to the value of the touched point.
- "+4" to "-4" is displayed as the source volume is increased or decreased.
- The default setting is "0".

Audio adjustments

The following AV sources are set to the same source level adjustment volume automatically.

F77DAB

	Required cable (sold separately)	Smartphone Setup		AV sources
		Device	Connection	
iPod / iPhone with a 30-pin connector	CD-IU201V	iPhone/iPod	USB	USB1 iPod1 aha
	CD-IU201S	iPhone/iPod	USB	USB1 aha iPod1 AppRadio Mode
iPod / iPhone with a Lightning connector	<ul style="list-style-type: none"> • CD-IH202 • CD-IU52 • Lightning Digital AV Adapter 	iPhone/iPod	Digital AV adapter	aha AppRadio Mode HDMI
	CD-IU52	iPhone/iPod	USB	iPod1 aha
Android device	CD-MU200	Others	USB	Android Auto MirrorLink
	CD-AH200	Others	HDMI	aha AppRadio Mode HDMI

F70DAB F970DAB F970BT F9770DAB F9770BT

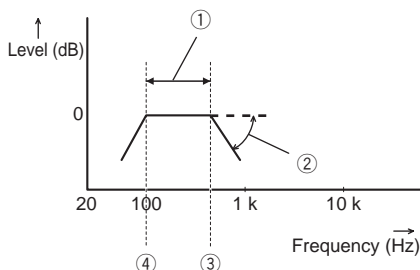
	Required cable (sold separately)	Smartphone Setup		AV sources
		Device	Connection	
iPod / iPhone with a 30-pin connector	CD-IU201V	iPhone/iPod	USB	USB1 iPod1 aha
	CD-IU201S	iPhone/iPod	USB	USB1 aha iPod1 AppRadio Mode
iPod / iPhone with a Lightning connector	<ul style="list-style-type: none"> • CD-IV202AV • CD-IU52 • Lightning to VGA Adapter 	iPhone/iPod	VGA adapter	aha AppRadio Mode Bluetooth Audio
	CD-IU52	iPhone/iPod	USB	iPod1 aha
Android device	CD-MU200	Others	USB	Android Auto (*1) MirrorLink

(*1) For AVIC-F70DAB

- ❑ When a USB storage device is connected to USB port 1 or USB port 2, the source level adjustment volume is automatically set to the same level as the USB port to which the device is connected. The source level adjustment volume that is automatically set varies depending on whether the device is connected to USB port 1 or USB port 2.
- ❑ When an iPod / iPhone with a Lightning connector is connected to USB port 1 or USB port 2 using a USB interface cable for iPod / iPhone (CD-IU52) (sold separately), the source level adjustment volume is automatically set to the same level as the USB port to which the iPod / iPhone with a Lightning connector is connected. The source level adjustment volume that is automatically set varies depending on whether the iPod / iPhone with a Lightning connector is connected to USB port 1 or USB port 2.
- ❑ When an **Android Auto**-compatible device (for AVIC-F77DAB and AVIC-F70DAB) or a MirrorLink device is connected to USB port 2, the source level adjustment volume is automatically set to the same level as USB port 2. ❑

Adjusting the filter

The following adjustments can be made during filter adjustments. Make the appropriate adjustments for the reproduced frequency band and characteristics of the connected speaker unit.



- ① Reproduced frequency band
- ② Slope adjustment
- ③ Cut-off frequency of the LPF
- ④ Cut-off frequency of the HPF

Adjusting the front and rear speaker output

You can set the frequency range for the sound output from the front and rear speakers.

- ❑ This function is available only when main audio is available.

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

2 Touch the following keys in the following order.



The “**Audio**” screen appears.

3 Confirm that “Rear Speaker” is set to “On”.

- ❑ The default setting is “On”.

4 Touch [Crossover].

The “**Cutoff**” screen appears.

Audio adjustments

5 Touch the following keys to select "Front" or "Rear".



Selects the adjustable previous speaker.



Selects the adjustable next speaker.

6 Touch [HPF] to turn on.

7 Drag the line graph horizontally to adjust the range of cut-off frequency from "50" Hz to "200" Hz.

The default setting is "100" Hz.

8 Drag the tip of the slope to adjust the range of level between "-6" dB/oct and "-18" dB/oct.

The default setting is "-12" dB/oct.

Using the subwoofer output

This product is equipped with a subwoofer output mechanism, which can be turned on or off.

This function is available only when main audio is available.

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

2 Touch the following keys in the following order.



The "Audio" screen appears.

3 Touch [Subwoofer] to set the subwoofer output "On".

The default setting is "Off".

4 Touch [Subwoofer Settings].

The "Cutoff" screen appears.

5 Touch the following keys to select "Subwoofer".



Selects the adjustable previous speaker.



Selects the adjustable next speaker.

6 Touch [LPF] to turn on.

7 Touch the following keys to select the phase of subwoofer output.



Sets the phase of subwoofer output to normal.



Sets the phase of subwoofer output to reverse.

8 Drag the line graph horizontally to adjust the range of cut-off frequency from "50" Hz to "200" Hz.

The default setting is "100" Hz.

9 Drag the tip of the slope to adjust the range of level between "-6" dB/oct and "-18" dB/oct.

The default setting is "-18" dB/oct.

Selecting the listening position

You can select a listening position that you want to make as the centre of sound effects.

This function is available only when main audio is available.

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

2 Touch the following keys in the following order.




The “**Audio**” screen appears.

3 Touch [Listening Position].

The “**Listening Position**” screen appears.

4 Touch the desired position.

- **Off** (default):
Changes the listening position setting to off.
- **Front**:
Changes the listening position setting to front.
- **Front-L**:
Changes the listening position setting to front left.
- **Front-R**:
Changes the listening position setting to front right.
- **All**:
Changes the listening position setting to all. 

Adjusting the speaker output levels finely

Fine adjustments of the speaker output level can be made by listening to audio output.

- This function is available only when main audio is available.
- This function is available only when “**Rear Speaker**” is set to “**On**”.
➔ For details, refer to *Adjusting the front and rear speaker output* on page 176.
- This function is available only when “**Subwoofer**” is set to “**On**”.
➔ For details, refer to *Using the subwoofer output* on page 177.

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

2 Touch the following keys in the following order.



The “**Audio**” screen appears.

3 Touch [Speaker Level].

The “**Speaker Level**” screen appears.

4 Touch the following keys to select the listening position if necessary.



Selects the listening position.



- **Off**:
Changes the listening position setting to off.
 - **Front Left**:
Changes the listening position setting to front left.
 - **Front Right**:
Changes the listening position setting to front right.
 - **Front**:
Changes the listening position setting to front.
 - **All**:
Changes the listening position setting to all.
- If you change the listening position setting, the output levels of all the speakers will change in conjunction with the setting.

5 Touch the following keys to adjust the speaker output level.



Decreases the speaker level.



Increases the speaker level.

- “**-24**” dB to “**10**” dB is displayed as the distance to be corrected is increased or decreased.
- **Front Left**:
Changes the speaker level of the front left speaker.
- **Front Right**:

Audio adjustments

Changes the speaker level of the front right speaker.

- **Rear Left:**
Changes the speaker level of the rear left speaker.
- **Rear Right:**
Changes the speaker level of the rear right speaker.
- **Subwoofer:**
Changes the speaker level of the subwoofer speaker.
 - If you touch [Apply Auto EQ], the result of "A-EQ&TA Measurement" will be applied to the speaker level setting.
 - ☐ To use this function, the vehicle's acoustics must be measured in advance. ▣

Adjusting the time alignment

By adjusting the distance from each speaker to the listening position, time alignment is able to correct the time required for sound to reach the listening position.

- ☐ This function is available only when main audio is available.
- ☐ This function is available only when "Rear Speaker" is set to "On".
 - For details, refer to *Adjusting the front and rear speaker output* on page 176.
- ☐ This function is available only when "Subwoofer" is set to "On".
 - For details, refer to *Using the subwoofer output* on page 177.
- ☐ This function is available only when the listening position setting is set to "Front Left" or "Front Right".
 - For details, refer to *Selecting the listening position* on page 177.

1 Measure the distance between the head of the listener and each speaker unit.

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

3 Touch the following keys in the following order.



The "Audio" screen appears.

4 Touch [Time Alignment].

The "Time Alignment" screen appears.

5 Touch the following keys to select the listening position if necessary.



Selects the listening position.



- **Off:**
Changes the listening position setting to off.
- **Front Left:**
Changes the listening position setting to front left.
- **Front Right:**
Changes the listening position setting to front right.
- **Front:**
Changes the listening position setting to front.
- **All:**
Changes the listening position setting to all.
 - ☐ If you change the listening position setting, the output levels of all the speakers will change in conjunction with the setting.

6 Touch the following keys to input the distance between the selected speaker and the listening position.



Decreases the distance between the selected speaker and the selected listening position.



Increases the distance between the selected speaker and the selected listening position.

- ❑ "0.0" cm to "500.0" cm is displayed as the distance to be corrected is increased or decreased.
- **Front Left:**
Changes the distance between the front left speaker and the selected listening position.
- **Front Right:**
Changes the distance between the front right speaker and the selected listening position.
- **Rear Left:**
Changes the distance between the rear left speaker and the selected listening position.
- **Rear Right:**
Changes the distance between the rear right speaker and the selected listening position.
- **Subwoofer:**
Changes the distance between the subwoofer speaker and the selected listening position.
 - If you touch **[TA On]**, the time alignment is turned off.
 - If you touch **[Apply Auto EQ]**, the result of "A-EQ&TA Measurement" will be applied to the time alignment setting.
 - ❑ To use this function, the vehicle's acoustics must be measured in advance.

Using the automatic sound leveliser

During driving, noise in the car changes according to the driving speed and road conditions. ASL (automatic sound leveliser) monitors such varying noise and automati-

cally increases the volume level, if this noise becomes greater. The sensitivity (variation of volume level to noise level) of ASL can be set to one of five levels.

- ❑ This function is available only when main audio is available.

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

2 Touch the following keys in the following order.



The "Audio" screen appears.

3 Touch [ASL].

The "ASL" screen appears.

4 Touch the item you want to set.

- **Off** (default):
Turns the ASL setting off.
- **LOW:**
Changes the ASL level to low.
- **MID-LOW:**
Changes the ASL level to mid-low.
- **MID:**
Changes the ASL level to mid.
- **MID-HIGH:**
Changes the ASL level to mid-high.
- **HIGH:**
Changes the ASL level to high.

Audio adjustments

Using the equaliser

The equaliser lets you adjust equalisation to match the vehicle interior acoustic characteristics as desired.

Recalling equaliser curves

There are seven stored equaliser curves that you can easily recall at any time. Here is a list of the equaliser curves:

Equaliser curve

S.Bass is a curve in which only low-pitched sound is boosted.

Powerful is a curve in which low- and high-pitched sounds are boosted.

Natural is a curve in which low- and high-pitched sounds are slightly boosted.

Vocal is a curve in which the midrange, which is the human vocal range, is boosted.

Flat is a flat curve in which nothing is boosted.

Custom1 is an adjusted equaliser curve that you create. If you select this curve, the effect is applied to all AV sources.

Custom2 is an adjusted equaliser curve that you create. If you select this curve, the effect is applied to all AV sources.

- This function is available only when main audio is available.
- The default setting is “**Powerful**”.
- When “**Flat**” is selected, no supplement or correction is made to the sound. This is useful to check the effect of the equaliser curves by switching alternatively between “**Flat**” and a set equaliser curve.

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

2 Touch the following keys in the following order.



The “**Audio**” screen appears.

3 Touch [Graphic EQ].

The “**Graphic EQ**” screen appears.

4 Touch the equaliser you want.

Customising the equaliser curves

You can adjust the currently selected equaliser curve setting as desired. Adjustments can be made with a 13-band graphic equaliser.

- This function is available only when main audio is available.
- If you make adjustments when a curve “**S.Bass**”, “**Powerful**”, “**Natural**”, “**Vocal**”, or “**Flat**” is selected, the equalizer curve settings will be changed to “**Custom1**” automatically.
- If you make adjustments when the “**Custom2**” curve is selected for example, the “**Custom2**” curve will be updated.
- “**Custom1**” and “**Custom2**” curves can be created common to all sources.

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

2 Touch the following keys in the following order.



The “**Audio**” screen appears.

3 Touch [Graphic EQ].

The “**Graphic EQ**” screen appears.

4 Touch one of the keys to select a curve that you want to use as the basis of customising.

5 Touch the frequency for which you want to adjust the level.

- If you trail a finger across the bars of multiple equaliser bands, the equaliser curve settings will be set to the value of the touched point on each bar.

Using the auto-adjusted equaliser

You can set the auto-adjusted equaliser to suit the vehicle's acoustics. To use this function, the vehicle's acoustics must be measured in advance.

- ➔ For details of the operations, refer to *Adjusting the equaliser curve automatically (Auto EQ)* on page 182.
- ☐ To manually adjust the equaliser curve, set "Auto EQ&TA" to "Off".

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

2 Touch the following keys in the following order.



The "Audio" screen appears.

3 Touch [Auto EQ&TA] repeatedly until the desired setting appears.

- **Off** (default):
Turns the Auto EQ&TA setting off.
- **On**:
Turns the Auto EQ&TA setting on. ☐

Adjusting the equaliser curve automatically (Auto EQ)

By measuring the vehicle's acoustics, the equaliser curve can be adjusted automatically to suit the vehicle interior.

WARNING

A loud tone (noise) may be emitted from the speakers when measuring the vehicle's acoustics. Never perform Auto EQ measurement while driving.

CAUTION

- Thoroughly check the conditions before performing Auto EQ, as the speakers may be da-

amaged if this is performed under the following conditions:

- When the speakers are incorrectly connected. (For example, when a rear speaker is connected as a subwoofer output.)
- When a speaker is connected to a power amp delivering output higher than the speaker's maximum input power capability.
- If a microphone for acoustical measurement (sold separately) is not placed in an appropriate location, the measurement tone may become loud and measurement may take a long time, resulting in battery drainage. Be sure to place the microphone in the specified location.

Before operating the Auto EQ function

- Perform Auto EQ in as quiet a place as possible, with the vehicle engine and air conditioning switched off. Also, cut power to car phones or mobile phones in the vehicle, or remove them from the vehicle before performing Auto EQ. Sounds other than the measurement tone (surrounding sounds, engine sound, telephones ringing, etc.) may prevent correct measurement of the vehicle's acoustics.
- Be sure to perform Auto EQ using the microphone for acoustical measurement (sold separately). Using another microphone may prevent measurement, or result in incorrect measurement of the vehicle's acoustics.
- To perform Auto EQ, the front speakers must be connected.
- When this product is connected to a power amp with input level control, Auto EQ may be impossible if the power amp's input level is set below the standard level.

Audio adjustments

- When this product is connected to a power amp with an LPF (low pass filter), turn the LPF off before performing Auto EQ. Also, set the cut-off frequency for the built-in LPF of an active subwoofer to the highest frequency.
- The distance has been calculated by a computer to provide optimum delay to ensure accurate results. Do not change this value.
 - The reflected sound within the vehicle is strong and delays occur.
 - The LPF on active subwoofers or external amps delay the lower sounds.
- If an error occurs during measurement, a message appears and measurement is cancelled. Check the following before measuring the vehicle's acoustics.
 - Front speakers (left/right)
 - Rear speakers (left/right)
 - Noise
 - Microphone for acoustical measurement (sold separately)
 - Low battery

Performing Auto EQ

- ❑ Auto EQ changes the audio settings as follows:
 - “Auto EQ&TA” is set to “On”.
 - For details, refer to *Using the auto-adjusted equaliser* on page 182.
 - The fader/balance settings return to the centre position.
 - For details, refer to *Using balance adjustment* on page 173.
 - The equaliser curve switches to “Flat”.
 - For details, refer to *Using the equaliser* on page 181.
 - The front and rear speakers will automatically be adjusted to a high pass filter setting.
- ❑ Previous settings for Auto EQ will be overwritten.
- ❑ For AVIC-F77DAB and AVIC-F70DAB users

Do not press the ▲ button to open or close the panel when you are using the microphone.

⚠ CAUTION

Do not turn off the engine while the measurement is in progress.

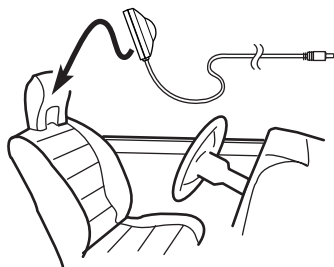
1 Stop the vehicle in a quiet place, close all the doors, windows and sun roof, and then turn the engine off.

If the engine is left running, engine noise may prevent correct Auto EQ.

- ❑ If driving restrictions are detected during measurement, measurement is cancelled.

2 Fix the microphone for acoustical measurement (sold separately) in the centre of the headrest of the driver's seat, facing forward.

The Auto EQ may differ depending on where you place the microphone. If desired, place the microphone on the front passenger seat and perform Auto EQ.



3 Disconnect the iPhone or smartphone device.

4 Turn on the ignition switch (ACC ON).

If the vehicle's air conditioner or heater is turned on, turn it off. Noise from the fan in the air conditioner or heater may prevent correct Auto EQ.

5 Switch the AV source to “OFF”.

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

Audio adjustments

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

7 Touch the following keys in the following order.



The “Audio” screen appears.

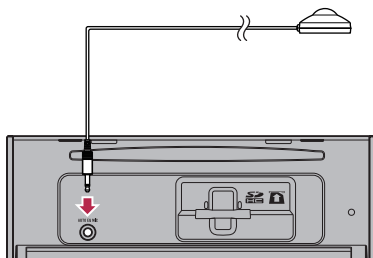
8 Touch [A-EQ&TA Measurement].

The “A-EQ&TA Measurement” screen appears.

9 Connect the microphone for acoustical measurement (sold separately) with this product.

F77DAB F70DAB

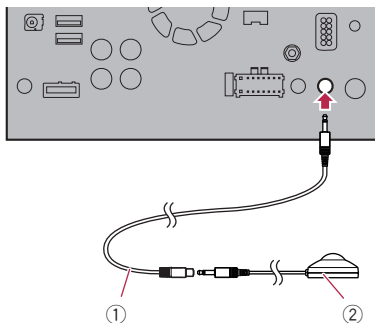
Plug the microphone into the microphone input jack on this product.



F970DAB F970BT F9770DAB F9770BT

Connect the microphone with the mini-jack extension cable, and then plug it into the auxiliary input jack on this product.

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



- ① Mini-jack extension cable (sold separately)
- ② Microphone for acoustical measurement (sold separately)

10 Touch [Front Left] or [Front Right] to select the current listening position.

11 Touch [Start].

A 10-second countdown starts.

- The Bluetooth connection is disconnected before the process starts.

12 Exit the vehicle and keep the doors closed until the countdown finishes.

When the countdown finishes, a measurement tone (noise) is emitted from the speakers and the Auto EQ measurement begins.

13 Wait until the measurement is completed.

When Auto EQ is completed, a message is displayed indicating that the measurement is completed.

- If the vehicle's acoustics cannot be measured correctly, an error message will be displayed.
- The measurement time varies depending on the type of vehicle.
- To stop the measurement, touch [Stop].

14 Store the microphone carefully in the glove compartment or another safe place.

If the microphone is subjected to direct sunlight for an extended period, high temperatures may cause distortion, colour change or malfunction. ■

Theme menu

Selecting the background display

The background display can be selected from 8 different preset displays for the AV operation screen and 5 different preset displays for the Top menu screen. Furthermore, you can change the background display to other images imported from an external storage device (USB, SD).

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

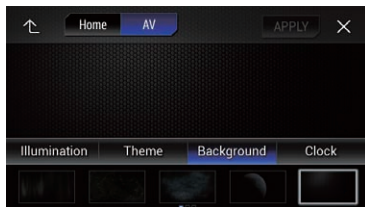
2 Touch the following keys in the following order.



The “**Theme**” screen appears.

3 Touch [Background].

The following screen appears.




- You can also change the screen for settings by touching [**Illumination**], [**Theme**] or [**Clock**] on this screen.

4 Touch [Home] or [AV] to switch the screen displays.

- The setting contents can be memorised separately for the AV operation screen and the Top menu screen.

5 Touch the item you want to set.

- **Preset displays:**
Selects the desired preset background display.
-  (custom):

Displays the background display image imported from the external storage device (USB, SD).

➔ For details, refer to *Changing to the background display image stored on the external storage device (USB, SD)* on page 185.

-  (off):
Hides the background display.

Changing to the background display image stored on the external storage device (USB, SD)

You can change the background display image to an image imported from the external storage device (USB, SD).

- Background display image must be used within the following formats.
 - JPEG image files (.jpg or .jpeg)
 - Allowable data size is 10 MB or smaller
 - Allowable image size is 4 000 pixels × 4 000 pixels or smaller

CAUTION

Do not turn off the engine while importing an image from the external storage device (USB, SD).

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

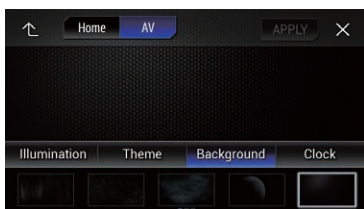
2 Touch the following keys in the following order.



The “**Theme**” screen appears.

3 Touch [Background].

The following screen appears.



- ❑ You can also change the screen for settings by touching [**Illumination**], [**Theme**] or [**Clock**] on this screen.

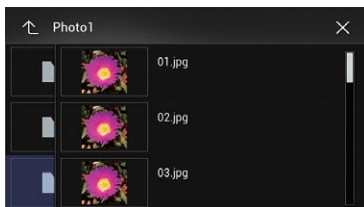
4 Touch the following key.



Displays the list of the background display images stored on the external storage device (USB, SD).


5 Touch the desired external storage device (USB, SD).

The following screen appears.



6 Touch the image to use as the background display from the list.

The image is set as the background display.

- ❑ You can delete the imported image and restore the setting for the background display to the default by touching and holding the custom key. 

Setting the illumination colour

The illumination colour can be selected from 5 different colours. Furthermore, the illumination can be switched between these 5 colours in order.

Selecting the colour from the preset colours

You can select an illumination colour from the colour list.

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

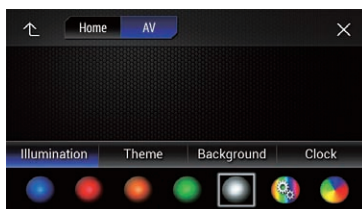
2 Touch the following keys in the following order.



The "**Theme**" screen appears.



3 Touch [**Illumination**].

The following screen appears.



- ❑ You can also change the screen for settings by touching [**Theme**], [**Background**] or [**Clock**] on this screen.

4 Touch the colour you want.

- **Coloured keys:**
Selects the desired preset colour.
-  (custom):
Displays the screen to customise the illumination colour.
➔ For details, refer to *Creating a user-defined colour* on page 187.
-  (rainbow):
Shifts through the rainbow of colours gradually.
- ❑ You can preview the Top menu screen or the AV operation screen by touching [**Home**] or [**AV**] respectively.

Theme menu

Creating a user-defined colour

You can create a user-defined colour. The created colour is stored, and you can select the colour when setting the illumination colour the next time.

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

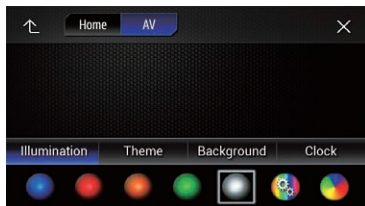
2 Touch the following keys in the following order.



The “**Theme**” screen appears.

3 Touch [Illumination].

The following screen appears.



- You can also change the screen for settings by touching [**Theme**], [**Background**] or [**Clock**] on this screen.

4 Touch the following key.



Displays the screen to create a user-defined colour and store it to memory.

5 Touch the following keys.



Adjusts the brightness and the level of red, green and blue to create a favourite colour.



- You can also adjust the colour tone by dragging the colour bar.

6 Touch and hold [Memo] to store the customised colour in the memory.

The customised colour is stored in the memory.

The set colour will be recalled from the memory the next time you touch the same key.

Selecting the theme colour

A theme colour can be selected from 5 different colours.

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

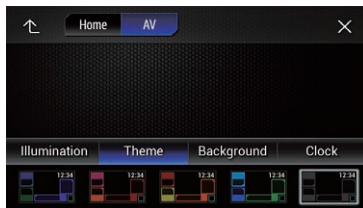
2 Touch the following keys in the following order.



The “**Theme**” screen appears.

3 Touch [Theme].

The following screen appears.



- You can also change the screen for settings by touching [**Illumination**], [**Background**] or [**Clock**] on this screen.

4 Touch the colour you want.

- You can preview the Top menu screen or the AV operation screen by touching [**Home**] or [**AV**] respectively.

Selecting the clock image

The clock on the AV operation screen and the Top menu screen can be selected from 3 different images.

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

2 Touch the following keys in the following order.



The “Theme” screen appears.

3 Touch [Clock].

The following screen appears.



- You can also change the screen for settings by touching [Illumination], [Theme] or [Background] on this screen.

4 Touch the item you want to set.

- **Preset images:**
Selects the desired preset clock image.
- **OFF (off):**
Hides the clock display.
- You can preview the Top menu screen or the AV operation screen by touching [Home] or [AV] respectively.

Changing the preinstalled splash screen

You can change the splash screen to other images preinstalled in this product.

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

2 Touch the following keys in the following order.



The “Theme” screen appears.

3 Touch [Splash Screen].

The following screen appears.



4 Touch the item you want to set.

- **Preset images:**
Selects the desired preset splash screen image.
- **(custom):**
Displays the splash screen image imported from the external storage device (USB, SD).
➤ For details, refer to *Changing to the splash screen stored on the external storage device (USB, SD)* on page 188.

Changing to the splash screen stored on the external storage device (USB, SD)

You can change the splash screen to other images imported from the external storage device (USB, SD).



CAUTION

Do not turn off the engine while importing an image from the external storage device (USB, SD).

Theme menu

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

2 Touch the following keys in the following order.



The “Theme” screen appears.

3 Touch [Splash Screen].

The following screen appears.



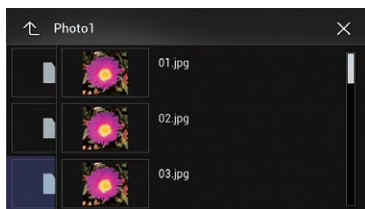
4 Touch the following key.



Displays the list of the splash screens stored on the external storage device (USB, SD).

5 Touch the desired external storage device (USB, SD).

The following screen appears.



6 Touch the image to use as the splash screen from the list.

The image is set as the splash screen.

- You can delete the imported image and restore the setting on the splash screen to the default by touching and holding the custom key. □

Replicating the settings

Exporting “Theme” settings

You can export settings you have made on the “Theme” screen to an external storage device (USB, SD). These settings can be exported separately.

- This setting is available only when you stop your vehicle in a safe place and apply the handbrake.
- If multiple external storage devices are connected to this product, the order of priority for the targets that the “Theme” settings are exported to is as follows:
 - ① SD memory card (for AVIC-F77DAB and AVIC-F70DAB)
 - ② USB storage device that is connected to USB port 1
 - ③ USB storage device that is connected to USB port 2



CAUTION

Do not turn off the engine while exporting the settings.

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

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

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

3 Touch the following keys in the following order.



The “Theme” screen appears.

4 Touch [Export].

The “Settings Export” screen appears.

5 Touch the desired item.

- **Illumination:**
Selects the illumination colour setting.
- **Splash Screen:**
Selects the splash screen setting.
- **Select All:**
Selects all settings.

6 Touch [Export].

Data export starts.

After the data is exported, a completion message appears.

- The source is turned off and the Bluetooth connection is disconnected before the process starts.

Importing “Theme” settings

The settings made on the “**Theme**” screen that were exported to an external storage device (USB, SD) can be imported.

- This setting is available only when you stop your vehicle in a safe place and apply the handbrake.
- 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 imported from is as follows:
 - ① SD memory card (for AVIC-F77DAB and AVIC-F70DAB)
 - ② USB storage device that is connected to USB port 1
 - ③ USB storage device that is connected to USB port 2



CAUTION

- Do not turn off the engine while importing the settings.
- To prevent data loss and damage to the SD memory card, never edit the data exported to the SD memory card.

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

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

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

2 Touch [Import].

Data import starts.

When the data is successfully imported, an import complete message is displayed.

- The source is turned off and the Bluetooth connection is disconnected before the process starts.

Setting up the video player

Setting the top-priority languages

You can assign the top-priority language to the top-priority subtitle, audio and menu in initial playback. If the selected language is recorded on the disc, subtitles, audio and menu are displayed or output in that language.

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

Setting the subtitle language

You can set a desired subtitle language. When available, the subtitles will be displayed in the selected language.

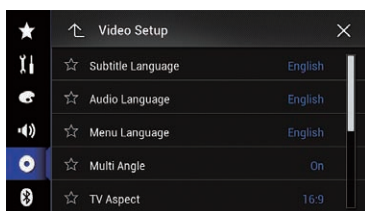
- 1 Press the HOME button to display the Top menu screen.
- 2 Touch the following keys in the following order.



The "Video Setup" screen appears.

- 3 Touch [DVD/DivX Setup].


The following screen appears.



- 4 Touch [Subtitle Language].

The pop-up menu appears.

- 5 Touch the desired language.

When you select "Others", a language code input screen is shown. Input the four-digit code of the desired language then touch .

- ➔ For details, refer to *Language code chart for DVDs* on page 197.

The subtitle language is set.

- ❑ If the selected language is not available, the language specified on the disc is displayed.
- ❑ You can switch the subtitle language by touching the subtitle language switching key during playback.
- ❑ The setting made here will not be affected even if the subtitle language is switched during playback using the subtitle language switching key.

Setting the audio language

You can set the preferred audio language.

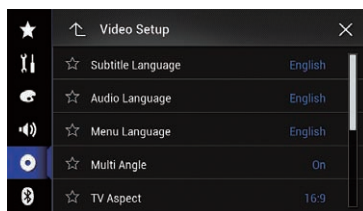
- 1 Press the HOME button to display the Top menu screen.
- 2 Touch the following keys in the following order.



The "Video Setup" screen appears.

- 3 Touch [DVD/DivX Setup].


The following screen appears.



- 4 Touch [Audio Language].

The pop-up menu appears.

- 5 Touch the desired language.

When you select "Others", a language code input screen is shown. Input the four-digit code of the desired language then touch .

- ➔ For details, refer to *Language code chart for DVDs* on page 197.

The audio language is set.

- ❑ If the selected language is not available, the language specified on the disc is applied.
- ❑ You can switch the audio language by touching the audio language switching key during playback.
- ❑ The setting made here will not be affected even if the audio language is switched during playback using the audio language switching key.

Setting the menu language

You can set the preferred language in which the menus recorded on a disc are displayed.

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

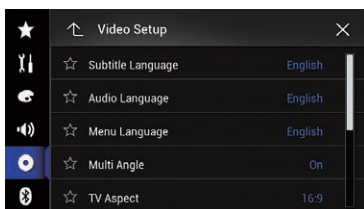
2 Touch the following keys in the following order.



The “**Video Setup**” screen appears.

3 Touch [DVD/DivX Setup].


The following screen appears.



4 Touch [Menu Language].


The pop-up menu appears.

5 Touch the desired language.

When you select “**Others**”, a language code input screen is shown. Input the four-digit code of the desired language then touch .

- ➡ For details, refer to *Language code chart for DVDs* on page 197.

The menu language is set.

- ❑ If the selected language is not available, the language specified on the disc is displayed. .

Setting the angle icon display

You can set whether to display the angle icon on the scenes where the angle can be switched.

- ❑ This setting is available only when “**Disc**” is selected as the source.

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

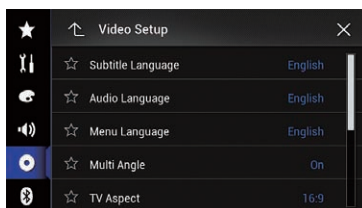
2 Touch the following keys in the following order.




The “**Video Setup**” screen appears.

3 Touch [DVD/DivX Setup].

The following screen appears.



4 Touch [Multi Angle] repeatedly until the desired setting appears.

- **On** (default): Turns the multi-angle setting on.
- **Off**: Turns the multi-angle setting off. .

Setting up the video player

Setting the aspect ratio

There are two kinds of displays. A wide screen display has a width-to-height ratio (TV aspect) of 16:9, while a regular display has a TV aspect of 4:3. If you use a regular rear display with a TV aspect of 4:3, you can set the aspect ratio suitable for your rear display. (We recommend use of this function only when you want to fit the aspect ratio to the rear display.)

- When using a regular display, select either “**Letter Box**” or “**Pan Scan**”. Selecting “**16:9**” may result in an unnatural image.
- If you select the TV aspect ratio, this product’s display will change to the same setting.
- This setting is available only when “**Disc**” is selected as the source.

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

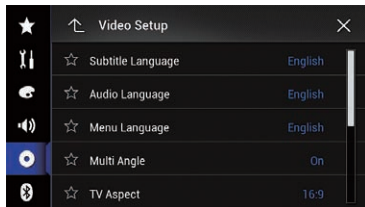
2 Touch the following keys in the following order.



The “**Video Setup**” screen appears.

3 Touch [DVD/DivX Setup].

The following screen appears.



4 Touch [TV Aspect].

The pop-up menu appears.

5 Touch the item you want to set.

- **16:9** (default):
Displays the wide screen image (16:9) as it is (initial setting).
- **Letter Box:**

Makes the image in the shape of a letterbox with black bands on the top and bottom of the screen.

- **Pan Scan:**
Cuts the image short on the right and left sides of the screen.
- When playing discs that do not have a pan-scan system, the disc is played back with “**Letter Box**” even if you select the “**Pan Scan**” setting. Confirm whether the disc package bears the **16:9 LB** mark.
- The TV aspect ratio cannot be changed for some discs. For details, refer to the disc’s instructions.

Setting parental lock

Some DVD-Video discs let you use parental lock to set restrictions so that children cannot watch violent or adult-oriented scenes. You can set the parental lock level in steps as desired.

- This setting is available only when “**Disc**” is selected as the source.
- When you set a parental lock level and then play a disc featuring parental lock, code number input indications may be displayed. In this case, playback will start when the correct code number is input.

Setting the code number and level

When you first use this function, register your code number. If you do not register a code number, the parental lock will not operate.

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

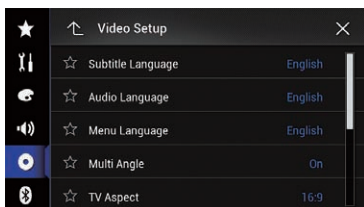
2 Touch the following keys in the following order.



The “**Video Setup**” screen appears.

3 Touch [DVD/DivX Setup].

The following screen appears.

**4 Touch [Parental].**

The "Parental" screen appears.

5 Touch [0] to [9] to input a four-digit code number.**6 While the input number is displayed, touch the following key.**

Registers the code number.

7 Touch any number between [1] to [8] to select the desired level.

- **8:**
Enables playback of the entire disc (initial setting).
- **7 to 2:**
Enables playback of discs for children and non-adult oriented discs.
- **1:**
Enables only playback of discs for children.

8 While the input number is displayed, touch the following key.

Sets the parental lock level.

- We recommend that you keep a record of your code number in case you forget it.
- The parental lock level is recorded on the disc. You can confirm it by looking at the disc package, the included literature or the disc itself. You cannot use parental lock

with discs that do not feature a recorded parental lock level.

- With some discs, parental lock operates to skip certain scenes only, after which normal playback resumes. For details, refer to the disc's instructions.

Displaying your DivX VOD registration code

If you want to play DivX VOD (video on demand) content on this product, you must first register this product with your DivX VOD content provider. You do this by generating a DivX VOD registration code, which you submit to your provider.

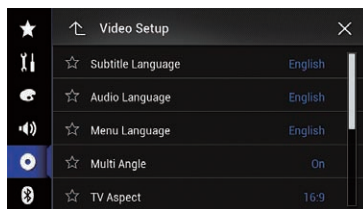
- Keep a record of the code as you will need it when you register this product to the DivX VOD provider.
- This setting is available only when "Disc" is selected as the source.

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

The "Video Setup" screen appears.

3 Touch [DVD/DivX Setup].

The following screen appears.

**4 Touch [DivX® VOD].**


The "DivX® VOD" screen appears.

- If a registration code has already been activated, it cannot be displayed.

Setting up the video player

5 Touch [Registration Code].

Your 10-digit registration code is displayed.

- ❑ Make a note of the code as you will need it when you register with a DivX VOD provider. 

Displaying your DivX VOD deregistration code

A registration code registered with a deregistration code can be deleted.

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

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

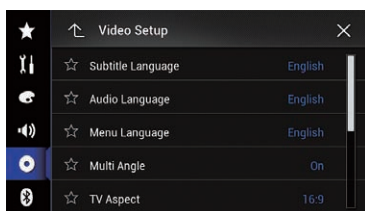
2 Touch the following keys in the following order.



The “Video Setup” screen appears.

3 Touch [DVD/DivX Setup].

The following screen appears.




4 Touch [DivX® VOD].

The “DivX® VOD” screen appears.

5 Touch [Deregistration Code].

Your eight-digit deregistration code is displayed.

- ❑ Make a note of the code as you will need it when you deregister from a DivX VOD provider. 

Automatic playback of DVDs

When a DVD disc with a DVD menu is inserted, this product will cancel the menu automatically and start playback from the first chapter of the first title.

- ❑ Some DVDs may not operate properly. If this function is not fully operable, turn this function off and start playback.
- ❑ This setting is available only when “Disc” is selected as the source.

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

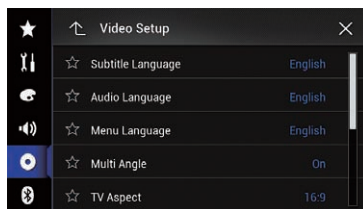
2 Touch the following keys in the following order.




The “Video Setup” screen appears.

3 Touch [DVD/DivX Setup].

The following screen appears.



4 Touch [DVD Auto Play] repeatedly until the desired setting appears.

- **Off** (default):
Turns the DVD Auto Play setting off.
- **On**:
Turns the DVD Auto Play setting on. 

Setting the video signal for the rear view camera

When you connect a rear view camera to this product, select the suitable video signal setting.

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

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

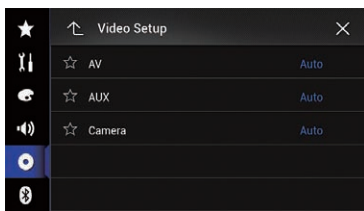
2 Touch the following keys in the following order.



The “Video Setup” screen appears.

3 Touch [Video Signal Setting].


The following screen appears.



4 Touch [Camera].

The pop-up menu appears.

5 Touch the item you want to set.

- **Auto** (default):
Adjusts the video signal setting automatically.
- **PAL**:
Sets the video signal to PAL.
- **NTSC**:
Sets the video signal to NTSC.
- **PAL-M**:
Sets the video signal to PAL-M.
- **PAL-N**:
Sets the video signal to PAL-N.
- **SECAM**:
Sets the video signal to SECAM. 

- ❑ The video output format setting has no effect on AUX, AV, and iPod sources (when the control mode is set to iPod).
- ❑ This function is available when nothing is output to the front screen, and a source other than Disc, USB1, USB2, and SD is output to the rear display.


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

2 Touch the following keys in the following order.



The “Video Setup” screen appears.

3 Touch [Video Output Format] repeatedly until the desired setting appears.

- **PAL** (default):
Sets the video output format to PAL.
- **NTSC**:
Sets the video output format to NTSC. 

Setting the video output format

You can switch the video output format of the rear display between NTSC and PAL.

Setting up the video player

Language code chart for DVDs

Two-letter code, input code	Language	Two-letter code, input code	Language	Two-letter code, input code	Language
aa, 0101	Afar	ie, 0905	Interlingue	rn, 1814	Rundi
ab, 0102	Abkhazian	ik, 0911	Inupiaq	ro, 1815	Romanian
af, 0106	Afrikaans	in, 0914	Indonesian	ru, 1821	Russian
am, 0113	Amharic	is, 0919	Icelandic	rw, 1823	Kinyarwanda
ar, 0118	Arabic	it, 0920	Italian	sa, 1901	Sanskrit
as, 0119	Assamese	iw, 0923	Hebrew	sd, 1904	Sindhi
ay, 0125	Aymara	ja, 1001	Japanese	sg, 1907	Sango
az, 0126	Azerbaijani	ji, 1009	Yiddish	sh, 1908	Serbo-Croat
ba, 0201	Bashkir	jw, 1023	Javanese	si, 1909	Sinhala
be, 0205	Belarusian	ka, 1101	Georgian	sk, 1911	Slovak
bg, 0207	Bulgarian	kk, 1111	Kazakh	sl, 1912	Slovenian
bh, 0208	Bihari	kl, 1112	Greenlandic	sm, 1913	Samoan
bi, 0209	Bislama	km, 1113	Central Khmer	sn, 1914	Shona
bn, 0214	Bengali	kn, 1114	Kannada	so, 1915	Somali
bo, 0215	Tibetan	ko, 1115	Korean	sq, 1917	Albanian
br, 0218	Breton	ks, 1119	Kashmiri	sr, 1918	Serbian
ca, 0301	Catalan	ku, 1121	Kurdish	ss, 1919	Swati
co, 0315	Corsican	ky, 1125	Kirghiz	st, 1920	Sotho
cs, 0319	Czech	la, 1201	Latin	su, 1921	Sundanese
cy, 0325	Welsh	ln, 1214	Lingala	sv, 1922	Swedish
da, 0401	Danish	lo, 1215	Lao	sw, 1923	Swahili
de, 0405	German	lt, 1220	Lithuanian	ta, 2001	Tamil
dz, 0426	Dzongkha	lv, 1222	Latvian	te, 2005	Telugu
el, 0512	Greek	mg, 1307	Malagasy	tj, 2007	Tajik
en, 0514	English	mi, 1309	Maori	th, 2008	Thai
eo, 0515	Esperanto	mk, 1311	Macedonian	ti, 2009	Tigrinya
es, 0519	Spanish	ml, 1312	Malayalam	tk, 2011	Turkmen
et, 0520	Estonian	mn, 1314	Mongolian	tl, 2012	Tagalog
eu, 0521	Basque	mo, 1315	Moldavian	tn, 2014	Tswana
fa, 0601	Persian	mr, 1318	Marathi	to, 2015	Tonga
fi, 0609	Finnish	ms, 1319	Malay	tr, 2018	Turkish
fj, 0610	Fijian	mt, 1320	Maltese	ts, 2019	Tsonga
fo, 0615	Faroese	my, 1325	Burmese	tt, 2020	Tatar
fr, 0618	French	na, 1401	Nauru	tw, 2023	Twi
fy, 0625	Western Frisian	ne, 1405	Nepali	uk, 2111	Ukrainian
ga, 0701	Irish	nl, 1412	Dutch	ur, 2118	Urdu
gd, 0704	Scot.Gaelic	no, 1415	Norwegian	uz, 2126	Uzbek
gl, 0712	Galician	oc, 1503	Occitan	vi, 2209	Vietnamese
gn, 0714	Guarani	om, 1513	Oromo	vo, 2215	Volapük
gu, 0721	Gujarati	or, 1518	Oriya	wo, 2315	Wolof
ha, 0801	Hausa	pa, 1601	Panjabi	xh, 2408	Xhosa
hi, 0809	Hindi	pl, 1612	Polish	yo, 2515	Yoruba
hr, 0818	Croatian	ps, 1619	Pashto	zh, 2608	Chinese
hu, 0821	Hungarian	pt, 1620	Portuguese	zu, 2621	Zulu
hy, 0825	Armenian	qu, 1721	Quechua		
ia, 0901	Interlingua	rm, 1813	Romansh		



Registering your favourite menu items in shortcuts allows you to quickly jump to the registered menu screen by a simple touch on the "Favorites" screen.

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

Creating a shortcut

- 1 Touch the HOME button to display the Top menu screen.
- 2 Touch the following key.



Displays the Setting menu screen.

- 3 Touch the star icon of the menu item that you want to add to the favourite menu.

The star icon for the selected menu is filled in.

- To cancel the registration, touch the star icon in the menu column again.
 - For AVIC-F77DAB, AVIC-F70DAB, AVIC-F970DAB, and AVIC-F9770DAB users
If "TA Interrupt" under either of "Radio Settings" or "DAB Settings" is registered to the favorite menu, "TA Interrupt" under both of "Radio Settings" or "DAB Settings" is registered. □

Selecting a shortcut

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



The "Favorites" screen appears.

- 3 Touch the desired item. □

Removing a shortcut

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



The "Favorites" screen appears.

- 3 Touch and hold the star icon of the favourite menu you want to remove.

The selected menu is removed from the "Favorites" screen.

- For AVIC-F77DAB, AVIC-F70DAB, AVIC-F970DAB, and AVIC-F9770DAB users
If "TA Interrupt" under either of "Radio Settings" or "DAB Settings" is removed from the favourite menu, "TA Interrupt" under both of "Radio Settings" or "DAB Settings" is removed. □

Displaying the operation status of vehicle equipment

F77DAB F70DAB F970DAB F9770DAB

By connecting the optional Vehicle Bus adapter, you can display the operation status of the vehicle's parking sensor function and climate control panel on the screen.

CAUTION

- For information on installing the Vehicle Bus adapter, see the operating manual of the Vehicle Bus adapter.
- After installing the Vehicle Bus adapter, be sure to check operations.
- For details about vehicle models that are compatible with Vehicle Bus adapters, refer to the information on our website.
- Functions and displays vary depending on the vehicle model. For details of the functions available according to the model, refer to the information on our website.

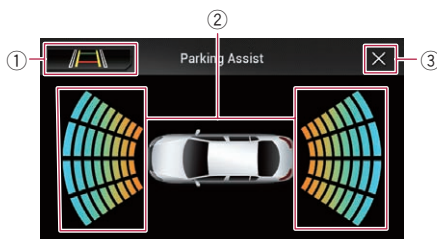
Displaying obstacle detection information

CAUTION

This function is intended solely to assist the driver's vision. It does not detect all dangers and obstacles and is not a substitute for your attentiveness, judgement, and care while parking your vehicle.

Turn on the parking assist sensor on your vehicle, and the screen will switch to the **"Parking Assist"** screen.

- This function is only available for vehicles equipped with a parking sensor system.
- The **"Parking Assist"** screen is not displayed until the navigation screen has started.

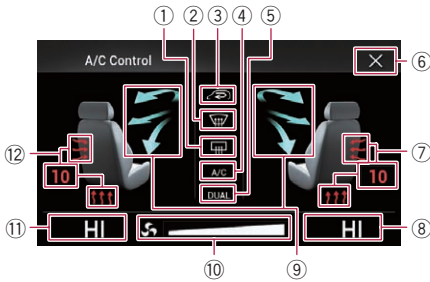


- ① Switches the display to the rear view camera image.
 - The display switches only when the rear view camera setting is set to **"On"** and the gearstick is in the REVERSE (R) position.
- ② Displays the position of detected obstacles.
- ③ The previous screen returns.

Displaying the operating status of the climate control panel

When you operate the climate control panel of the vehicle, the screen switches automatically to the **"A/C Control"** screen.

- The settings of the climate control panel operated before this product is started are not displayed on the screen.
- Any climate control panel settings of the vehicle that are turned off are not displayed on the screen.
- If the information displayed on the screen is reversed for the left and right sides of the vehicle, change the **"Climate Reverse"** setting to **"On"**.
 - ➡ For details of the operations, refer to *Reversing the climate control status display* on page 164.



- ① Displays that the rear window heating setting is on.
- ② Displays that the front window heating setting is on.
- ③ Displays that the internal circulation mode setting is on.
- ④ Displays that the A/C setting is on.
- ⑤ Displays that the dual A/C function is on.
- ⑥ The previous screen returns.
 - ❑ If you do not operate the climate control panel for a few seconds, the previous screen is displayed automatically.
- ⑦ Displays the seat heating setting for the right seat.
- ⑧ Displays the internal temperature setting for the right seat.
- ⑨ Displays the fan direction.
- ⑩ Displays the fan speed.
- ⑪ Displays the internal temperature setting for the left seat.
- ⑫ Displays the seat heating setting for the left seat. ❑

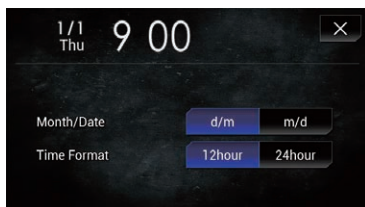
Common operations

Setting the time and date

You can change the date display format and the time format.

1 Touch the current time on the screen to display the Time and date setting screen.

The following screen appears.



2 Touch the item you want to set.

Month/Date

- **d/m** (default):
Changes the date display format to date/month.
- **m/d**:
Changes the date display format to month/date.

Time Format

- **12hour** (default):
Changes the display to 12-hour format with am/pm.
- **24hour**:
Changes the display to 24-hour format.

Storing song information to an iPod (iTunes Tagging)

You can store song information to the iPod when this product receives song information. The songs will appear in a playlist called "Tagged playlist" in iTunes the next time you synchronise your iPod. You can directly buy the songs via this product.

Depending on when the song information is stored, information for the previous song or the song after the current song may also be stored. Be sure to confirm the song before you purchase it.

- The iTunes Tagging function is available when the song information is available.
- This function is available for the following iPod models:
 - iPhone 4s
 - iPhone 4
 - iPhone 3GS
 - iPhone 3G
 - iPhone
 - iPod touch 5th generation
 - iPod touch 4th generation
 - iPod touch 3rd generation
 - iPod touch 2nd generation
 - iPod touch 1st generation
 - iPod classic
 - iPod nano 6th generation
 - iPod nano 5th generation
 - iPod nano 4th generation
 - iPod nano 3rd generation

- The version of iTunes must be 7.4 or higher.

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

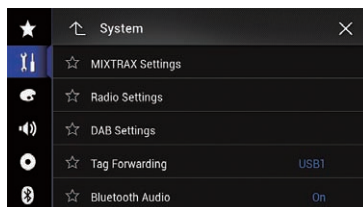
2 Touch the following keys in the following order.



The "System" screen appears.

3 Touch [AV Source Settings].

The following screen appears.




4 Touch [Tag Forwarding] repeatedly until the desired setting appears.

- **USB1** (default):
Transfers the song information to your iPod which is connected to USB port 1.

- **USB2:**

Transfers the song information to your iPod which is connected to USB port 2.


5 Tune into a broadcast station.

When the song information is received,  is displayed while the desired song is being broadcast, and the touch panel key becomes active.

- For details, refer to *iTunes® tagging indicator* on page 90.
- For details, refer to *Using the touch panel keys* on page 89.

6 Touch the touch panel key on which song information is displayed.

The information on the song on air is stored in this product.


While the information is being acquired,  is displayed.

When it is completed,  turns off and  is displayed.

- The song information for up to 50 songs can be stored in this product.
Depending on when the song information is stored, information for the previous song or the song after the current song may also be stored.

7 Connect your iPod.

The song information is transferred to your iPod.

- If the iPod is already connected, the song information will be transferred to your iPod every time you touch the touch panel key on which song information is displayed.
When the song information transfer to your iPod is completed,  disappears.
- When the song information transfer is completed, the information stored in this product will be automatically deleted.
- If you turn off this product or disconnect the iPod while transferring song information, the transfer may not successfully complete.
- While this product is storing song information, transfer to an iPod is not possible.




Setting the “Sound Retriever” function

The “**Sound Retriever**” function automatically enhances compressed audio and restores rich sound.

- **Touch the following key repeatedly until the desired setting appears on the AV operation screen.**



Sets the “**Sound Retriever**” function.

-  (Mode1) (default):
Activates the “**Sound Retriever**” function.
 -  (Mode2):
Activates the “**Sound Retriever**” function.
 -  (Off):
Deactivates the “**Sound Retriever**” function.
- Mode2 has a stronger effect than Mode1.

Changing the wide screen mode

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

- This setting is available only when you stop your vehicle in a safe place and apply the handbrake.
- The default setting is “**Full**” for video, and “**Normal**” for JPEG images.

1 Touch the following key.



Displays the setting screen to select the appropriate screen ratio for the playback video.

- The appearance of this key changes according to the current setting.

2 Touch the desired mode.

- **Full**

Common operations

A 4:3 picture is enlarged in the horizontal direction only, enabling you to enjoy a 4:3 TV picture (normal picture) without any omissions.

This setting is for video only.

- **Zoom**

A 4:3 picture is enlarged in the same proportion both vertically and horizontally; ideal for a wide screen picture.

This setting is for video only.

- **Normal**

A 4:3 picture is displayed normally, giving you no sense of disparity since its proportions are the same as those of the normal picture.

- **Trimming**

An image is displayed across the entire screen with the horizontal-to-vertical ratio left as is. If the horizontal-to-vertical ratio differs between the display and the image, the image may be displayed partly cut off either at the top/bottom or sides.

This setting is for JPEG images only.

Different settings can be stored for each video source.

When a video is viewed in a wide screen mode that does not match its original aspect ratio, it may appear different.

The video image will appear coarser when viewed in "**Zoom**" mode.

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.

- ❑ This function is not available during a call via this product or while using the voice recognition function.

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

2 Touch the following key.



Displays the AV source selection screen.

3 Touch [Rear].

The "Rear" screen appears.

4 Touch the source you want to show on the rear display.

The source you can select is as follows.

- **Mirror**
The video on the front screen of this product is output to the rear display.
— Not all videos or sounds can be output to the rear display.
- **DVD/CD**
The video and sound of DVDs are output to the rear display.
— Compatible file types are DVD-V, Video-CD, DivX, MPEG-1, MPEG-2, and MPEG-4 only.
- **USB/iPod**
The video and sound of the USB storage device or iPod are output to the rear display.
— The port that supports the rear display will only be USB port 1.
— Compatible file types are MPEG-4, H.264, WMV, MKV, and FLV only.
- **SD**
The video and sound of the SD memory cards are output to the rear display.
— Compatible file types are MPEG-4, H.264, WMV, MKV, and FLV only.

- **AV**

The video and sound of the AV input are output to the rear display.

— The video image and sound are output only when "AV" has both video and sound.

— The video image and sound are output only when "AV Input" is set to "Source".

➔ For details, refer to *Setting AV input* on page 157.

- **OFF**

Nothing is output to the rear display.

- Touch the following key.



Closes the "Rear" screen.

- You can also select "Rear" on the source list.
➔ For details, refer to *Selecting a front source on the source list* on page 21.
- ❑ For AVIC-F77DAB and AVIC-F70DAB users
Video files on the external storage device (USB, SD) are not available as a source for the rear display when **Android Auto** is on.
- ❑ "SD" is available for AVIC-F77DAB and AVIC-F70DAB only. ❑

Setting the anti-theft function

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

Setting the password

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

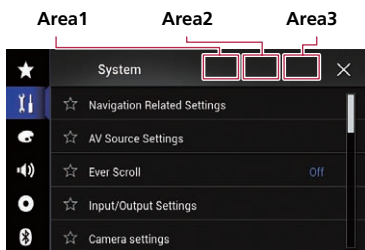
2 Touch the following keys in the following order.



The "System" screen appears.

Other functions

- 3 Touch **Area1**, followed by **Area2**, and then touch and hold **Area3**.



The “**Anti-theft Setting Menu**” screen appears.

- 4 Touch [**Set Password**].

The “**Password Entry**” screen appears.

- 5 Enter the password you want to set.

- 5 to 16 characters can be entered for a password.

- 6 Touch [**Go**].

The “**Hint Entry**” screen appears.

- 7 Enter a password hint.

- Up to 40 characters can be entered for a hint.

- 8 Touch [**Go**].

The “**Password Confirmation**” screen appears.

- If you want to change the password currently set, enter the current password and then enter the new one.

- 9 Check the password, and then touch [**OK**].

The “**Anti-theft Setting Menu**” screen appears.

Entering the password

On the password input screen, you must enter the current password.

- 1 Enter the password.

- 2 Touch [**Go**].

When the correct password is entered, this product will be unlocked.

Deleting the password

The current password and password hint can be deleted.

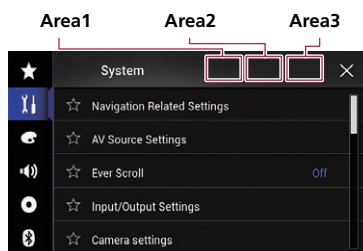
- 1 Press the **HOME** button to display the **Top menu screen**.

- 2 Touch the following keys in the following order.



The “**System**” screen appears.

- 3 Touch **Area1**, followed by **Area2**, and then touch and hold **Area3**.



The “**Anti-theft Setting Menu**” screen appears.

- 4 Touch [**Clear Password**].

A message confirming whether to delete the password appears.

- 5 Touch [**Yes**].

The password setting screen appears. A message confirming a password hint appears.

- 6 Touch [**OK**].

The “**Password Entry**” screen appears.

- 7 Enter the current password.

8 Touch [Go].

A message indicating that the security setting is cancelled appears.

Forgotten password

Contact the nearest authorised Pioneer Service Station.

Restoring this product to the default settings

You can restore settings or recorded content to the default settings. Various methods are used to clear user data.

Method 1: Remove the vehicle battery

Resets various settings registered to this product.

Method 2: Touch the item you want to initialise on the "System" screen

➔ For details, refer to *Restoring the default settings* on page 206.

Method 3: Press the RESET button

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

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

Restoring the default settings

Resets various settings registered to this product to the default settings.

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

CAUTION

Do not turn off the engine while restoring the settings.

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

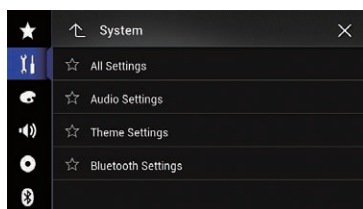
2 Touch the following keys in the following order.



The "System" screen appears.

3 Touch [Restore Settings].

The following screen appears.



4 Touch the item you want to initialise.

- All Settings
- Audio Settings
 - This setting is available when the source is turned off.
- Theme Settings
- Bluetooth Settings

A message confirming whether to initialise the settings appears.

- If you want to return settings or recorded content to the default, touch [All Settings].
- Some of the settings configured on the "Theme" setting will not be reset.

5 Touch [Restore].

When the selected item is successfully initialised, a completion message appears.


- The source is turned off and the Bluetooth connection is disconnected before the process starts.

Appendix

Troubleshooting

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

Problems with the AV screen

Symptom	Cause	Action (Reference)
CD or DVD playback is not possible.	The disc is inserted upside down.	Insert the disc with the label upward.
	The disc is dirty.	Clean the disc.
	The disc is cracked or otherwise damaged.	Insert a normal, round disc.
	The files on the disc are in an irregular file format.	Check the file format.
	The disc format cannot be played back.	Replace the disc.
The screen is covered by a caution message and the video cannot be shown.	The handbrake lead is not connected or applied.	Connect the handbrake lead correctly, and apply the handbrake.
	The handbrake interlock is activated.	Park your vehicle in a safe place and apply the handbrake.
No video output from the connected equipment.	The "AV Input" setting is incorrect.	Correct the settings. (Page 157)
The audio or video skips.	This product is not firmly secured.	Secure this product firmly.
No sounds are produced. The volume level will not rise.	Cables are not connected correctly.	Connect the cables correctly.
	The system is performing still, slow motion, or frame-by-frame playback with DVD-Video.	There is no sound during still, slow motion, or frame-by-frame playback with DVD-Video.
	The system is paused or performing fast reverse or forward during the disc playback.	For the media other than music CD (CD-DA), there is no sound on fast reverse or forward.
The icon  is displayed, and operation is impossible.	The operation is not compatible with the video configuration.	This operation is not possible. (For example, the DVD playing does not feature that angle, audio system, subtitle language, etc.)
The picture stops (pauses) and this product cannot be operated.	The reading of data is impossible during disc playback.	Stop playback once, then restart.
The picture is stretched, with an incorrect aspect ratio.	The aspect setting is incorrect for the display.	Select the appropriate setting for that image. (Page 193)
A parental lock message is displayed and DVD playback is not possible.	The parental lock is on.	Turn the parental lock off or change the level. (Page 193)
The parental lock for DVD playback cannot be cancelled.	The code number is incorrect.	Input the correct code number. (Page 193)

Appendix

Symptom	Cause	Action (Reference)
Playback is not with the audio language and subtitle language settings selected in "DVD/DivX Setup".	The DVD playing does not feature dialogue or subtitles in the language selected in "DVD/DivX Setup".	Switching to a selected language is not possible if the language selected in "DVD/DivX Setup" is not recorded on the disc. (Page 191)
The picture is extremely unclear/distorted and dark during playback.	The disc features a signal to prohibit copying. (Some discs may have this.)	Since this product is compatible with the copy guard analogue copy protect system, the picture may suffer from horizontal stripes or other imperfections when a disc with that kind of protection signal is viewed on some displays. This is not a malfunction.
iPod cannot be operated.	The iPod is frozen.	<ul style="list-style-type: none"> Reconnect the iPod with the USB interface cable for iPod / iPhone. Update the iPod software version.
	An error has occurred.	<ul style="list-style-type: none"> Reconnect the iPod with the USB interface cable for iPod / iPhone. Park your vehicle in a safe place, and then turn off the ignition switch (ACC OFF). Subsequently, turn the ignition switch to on (ACC ON) again. Update the iPod software version.
	Cables are not connected correctly.	Connect the cables correctly.
Sound from the iPod cannot be heard.	The audio output direction may switch automatically when the Bluetooth and USB connections are used at the same time.	Use the iPod to change the audio output direction.

Problems with the phone screen

Symptom	Cause	Action
Dialling is impossible because the touch panel keys for dialling are inactive.	Your phone is out of range for service.	Retry after re-entering the range for service.
	The connection between the mobile phone and this product cannot be established now.	Perform the connection process.

Problems with the Application screen

Symptom	Cause	Action
A black screen is displayed.	While operating an application, the application was ended on the smartphone side.	Press the HOME button to display the Top menu screen.
	The smartphone OS may be awaiting screen operation.	Stop the vehicle in a safe place and check the screen on the smartphone.
The screen is displayed, but operation does not work at all.	An error has occurred.	<ul style="list-style-type: none"> Park your vehicle in a safe place, and then turn off the ignition switch (ACC OFF). Subsequently, turn the ignition switch to on (ACC ON) again. When an Android device is connected, disconnect the Bluetooth connection from this product and then reconnect it.

Appendix

Symptom	Cause	Action
The smartphone was not charged.	Charging stopped because the temperature of the smartphone rose due to prolonged use of the smartphone during charging.	Disconnect the smartphone from the cable, and wait until the smartphone cools down.
	More battery power was consumed than was gained from charging.	This problem may be resolved by stopping any unnecessary services on the smartphone.



Error messages

When problems occur with this product, an error message appears on the display. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists, record the error message and contact your dealer or your nearest Pioneer service centre.

Common

Message	Cause	Action
AMP Error	This product fails to operate or the speaker connection is incorrect; the protective circuit is activated.	Check the speaker connection. If the message fails to disappear even after the engine is switched off/on, contact your dealer or an authorised Pioneer Service Station for assistance.
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.

Appendix

Message	Cause	Action
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

Message	Cause	Action
Check Antenna	The aerial connection is incorrect.	Check the aerial connection. If the message fails to disappear even after the engine is switched off/on, contact your dealer or the nearest authorised Pioneer service centre for assistance.

Aha Radio

Message	Cause	Action
Communication Error	iPod failure.	Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.
Error-02-6X	iPod failure.	Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.

Disc

Message	Cause	Action (Reference)
Error-02-XX/FF-FF	The disc is dirty.	Clean the disc.
	The disc is scratched.	Replace the disc.
	The disc is loaded upside down.	Check that the disc is loaded correctly.
	There is an electrical or mechanical error.	Press the RESET button. (Page 11)
Different Region Disc	The disc does not have the same region number as this product.	Replace the DVD with one bearing the correct region number.
Unplayable Disc	This type of disc cannot be played on this product.	Replace the disc with one that can be played on this product.
Unplayable File	This type of file cannot be played on this product.	Select a file that can be played. (Page 224, Page 237)
Skipped	The inserted disc contains DRM protected files.	The protected files are skipped.
Protect	All the files on the inserted disc are embedded with DRM.	Replace the disc.
This DivX rental has expired.	The inserted disc contains expired DivX VOD content.	Select a file that can be played.

Appendix

Message	Cause	Action (Reference)
Video resolution not supported	Files that cannot be played on this product are included in the file.	Select a file that can be played. (Page 224, Page 237)
Unable to write to flash memory	The playback history for VOD contents cannot be saved for some reason.	<ul style="list-style-type: none"> • Retry. • If the message appears frequently, consult your dealer.
Your device is not authorized to play this DivX protected video.	This product's DivX registration code has not been authorised by the DivX VOD contents provider.	Register this product to the DivX VOD contents provider.
Video frame rate not supported	DivX file's frame rate is more than 30 fps.	Select a file that can be played.
Audio Format not supported	This type of file is not supported on this product.	Select a file that can be played. (Page 224, Page 237)

External storage device (USB, SD)

Message	Cause	Action (Reference)
Error-02-9X/-DX	Communication failed.	<ul style="list-style-type: none"> • Turn the ignition switch OFF and back ON. • Disconnect the USB storage device. • Change to a different source. Then, return to the USB storage device.
Unplayable File	This type of file cannot be played on this product. Security for the connected external storage device (USB, SD) is enabled.	Select a file that can be played. (Page 224, Page 237) Follow the external storage device (USB, SD) instructions to disable security.
Skipped	The connected external storage device (USB, SD) contains DRM protected files.	The protected files are skipped.
Protect	All the files on the connected external storage device (USB, SD) are embedded with DRM.	Replace the external storage device (USB, SD).
Incompatible USB	The connected USB storage device is not supported by this product.	Disconnect your device and replace it with a compatible USB storage device.
Incompatible SD	The SD memory card is not supported by this product.	<ul style="list-style-type: none"> • Remove your device and replace it with a compatible SD memory card. • Format the SD memory card. It is recommended that you use SD Formatter for formatting SD memory cards. (Page 222)
Check USB	The USB connector or USB cable is short-circuited. The connected USB storage device consumes more than maximum allowable current.	Check that the USB connector or USB cable is not caught in something or damaged. 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.
Video resolution not supported	Files that cannot be played on this product are included in the file.	Select a file that can be played. (Page 224, Page 237)

Appendix

Message	Cause	Action (Reference)
USB1 was disconnected for device protection. Do not re-insert this USB memory into the unit. Press reset to restart USB memory.	The USB connector or USB cable is short-circuited.	Check that the USB connector or USB cable is not caught in something or damaged.
USB2 was disconnected for device protection. Do not re-insert this USB memory into the unit. Press reset to restart USB memory.	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.
USB2 was disconnected for device protection. Do not re-insert this USB memory into the unit. Press reset to restart USB memory.	The USB interface cable for iPod / iPhone is short-circuited.	Confirm that the USB interface cable for iPod / iPhone or USB cable is not caught in something or damaged.
Audio Format not supported	This type of file is not supported on this product.	Select a file that can be played. (Page 224, Page 237)

iPod

Message	Cause	Action
Error-02-6X/-9X/-DX	iPod failure.	Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.
Error-02-67	The iPod firmware version is old.	Update the iPod version.

iTunes tagging

Message	Cause	Action
Error-8D	Built-in FLASH ROM encountered an error.	Turn the ignition switch to OFF and then to ON.
Tag store failed.	Tag information cannot be stored in this product.	Try again.
Already stored.	This tag information is already stored in memory.	Tag information can only be saved once for any given song. Tag information cannot be saved for the same song more than once.
Memory full. Connect iPod.	The tag information is successfully stored. The flash memory of this product has become full.	The tag information on this product is transferred to the iPod automatically when an iPod is connected.
Memory full. Tags not stored. Connect iPod.	This product's flash memory used as the temporary storage area is full.	The tag information on this product is transferred to the iPod automatically when an iPod is connected.
iPod full. Tags not transferred.	Memory used for tag information on the iPod is full.	Synchronize the iPod with iTunes and clean up the tagged playlist.
Tag transfer failed. Reconnect your iPod.	This product's tag information cannot transfer to the iPod.	Check the iPod and try again.

Appendix

Bluetooth

Message	Cause	Action
Error-10	The power failed for the Bluetooth module of this product.	Turn the ignition switch to OFF and then to ON. If the error message is still displayed after performing the above action, please contact your dealer or an authorised Pioneer Service Station.

Android Auto

Message	Cause	Action (Reference)
Android Auto has stopped.	The connected device is not compatible with Android Auto . The startup of Android Auto failed for some reasons.	Check if the device is compatible with Android Auto . <ul style="list-style-type: none"> • 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. (Page 70, Page 73)

MirrorLink

Message	Cause	Action
The application list could not be read out.	Failed to load the application list.	<ul style="list-style-type: none"> • Disconnect the cable from the smartphone, and then connect the smartphone again after a few seconds. • Turn the ignition switch to OFF and then to ON. If the error message is still displayed after performing the above action, reset the smartphone. If the error message is still displayed after performing the above action, please contact your dealer or an authorised Pioneer Service Station.
There is no supported application on your MirrorLink device.	No supported applications can be found.	Install MirrorLink compliant applications to your MirrorLink device.

Appendix

Message	Cause	Action
Communication error occurred.	There was a communication error.	<ul style="list-style-type: none"> • Disconnect the cable from the smartphone, and then connect the smartphone again after a few seconds. • Turn the ignition switch to OFF and then to ON. <p>If the error message is still displayed after performing the above action, reset the smartphone.</p> <p>If the error message is still displayed after performing the above action, please contact your dealer or an authorised Pioneer Service Station.</p>
Launching the application failed.	Failed to launch the application.	Try again.
Failed to display the screen of your device because of irregular resolution.	The image size is too large.	The size of the images transferred from the device exceeds 800 × 480.
If your MirrorLink device is locked, please unlock it when it is safe and lawful for you to do so.	The MirrorLink device is locked.	Unlock the MirrorLink device.



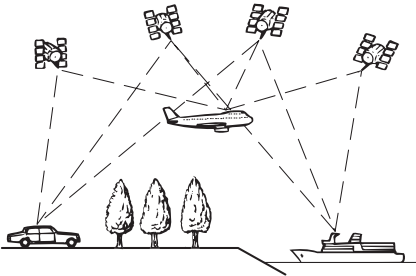
Appendix

Positioning technology

Positioning by GPS

The Global Positioning System (GPS) uses a network of satellites orbiting the Earth. Each of the satellites, which orbit at a height of 21 000 km, continually broadcasts radio signals giving time and position information. This ensures that signals from at least three can be picked up from any open area on the earth's surface.

The accuracy of the GPS information depends on how good the reception is. When the signals are strong and reception is good, GPS can determine latitude, longitude and altitude for accurate positioning in three dimensions. But if signal quality is poor, only two dimensions, latitude and longitude, can be obtained and positioning errors are somewhat greater.



Positioning by dead reckoning

The built-in sensor in the navigation system also calculates your position. The current location is measured by detecting driving distance with the speed pulse, the turning direction with the gyro sensor and inclination of the road with the G sensor.

The built-in sensor can even calculate changes of altitude, and correct the discrepancies in the distance travelled caused by driving along winding roads or up slopes.

If you use this navigation system with connecting the speed pulse, the system will become more accurate than no connection of speed

pulse. So you connect the speed pulse without fail to get the accuracy of positioning.

- ❑ The position of the speed detection circuit vary depending on the vehicle model. For details, consult your authorised Pioneer dealer or an installation professional.
- ❑ Some types of vehicles may not output a speed signal while driving at just a few kilometres per hour. In such a case, the current location of your vehicle may not be displayed correctly while in traffic jam or in a car park.

How do GPS and dead reckoning work together?

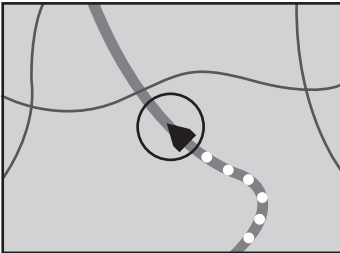
For maximum accuracy, your navigation system continually compares GPS data with your estimated position as calculated from the data of built-in sensor. However, if only the data from the built-in sensor is available for a long period, positioning errors are gradually compounded until the estimated position becomes unreliable. For this reason, whenever GPS signals are available, they are matched with the data of the built-in sensor and used to correct it for improved accuracy.

- ❑ If you use chains on your wheels for winter driving or put on the spare wheel, errors may suddenly increase because of difference in wheel diameter. Initialise the sensor status and it may recover the accuracy to normal condition.
 - ➔ For details, refer to *Clearing the status* on page 171.

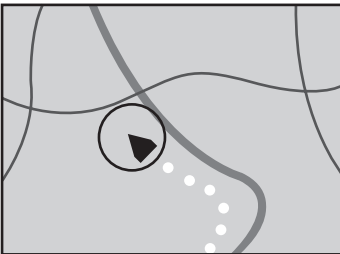
Appendix

Map matching

As mentioned, the positioning systems used by this navigation system are susceptible to certain errors. Their calculations may, on occasion, place you in a location on the map where no road exists. In this situation, the processing system understands that vehicles travel only on roads, and can correct your position by adjusting it to a nearby road. This is called map matching.



With map matching



Without map matching



Handling large errors

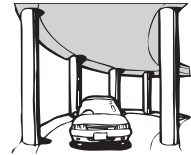
Positioning errors are kept to a minimum by combining GPS, dead reckoning and map matching. However, in some situations, these functions may not work properly, and the error may become bigger.

When positioning by GPS is impossible

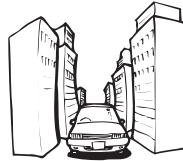
- GPS positioning is disabled if signals cannot be received from more than two GPS satellites.
- In some driving conditions, signals from GPS satellites may not reach your vehicle. In this case, it is impossible for the system to use GPS positioning.



In tunnels or enclosed parking garages



Under elevated roads or similar structures



When driving among high buildings



When driving through a dense forest or tall trees

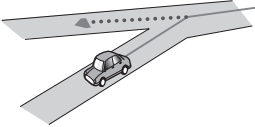
- If a car phone or mobile phone is used near the GPS aerial, GPS reception may be lost temporarily.
- Do not cover the GPS aerial with spray paint or car wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals, so keep the aerial clear.
- If a GPS signal has not been received for a long time, your vehicle's actual position and the current position mark on the map may diverge considerably or may not be updated. In such case, once GPS reception is restored, accuracy will be recovered.

Appendix

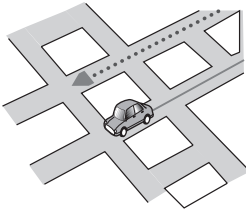
Conditions likely to cause noticeable positioning errors

For various reasons, such as the state of the road you are travelling on and the reception status of the GPS signal, the actual position of your vehicle may differ from the position displayed on the map screen.

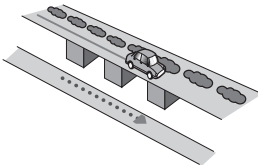
- If you make a slight turn.



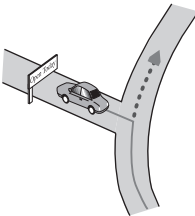
- If there is a parallel road.



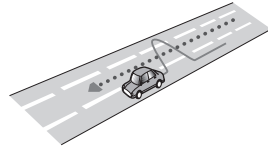
- If there is another road very nearby, such as in the case of an elevated motorway.



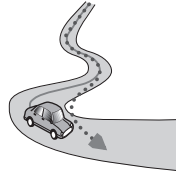
- If you take a recently opened road that is not on the map.



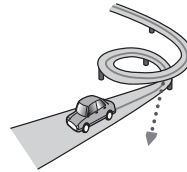
- If you drive in zigzags.



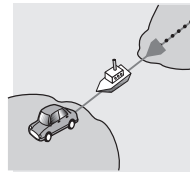
- If the road has a series of hairpin bends.



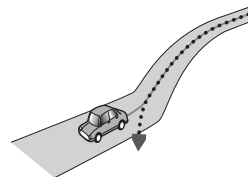
- If there is a loop or similar road configuration.



- If you take a ferry.

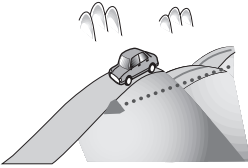


- If you are driving on a long, straight road or a gently curving road.

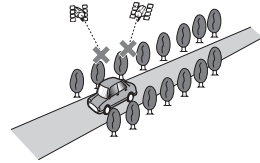


Appendix

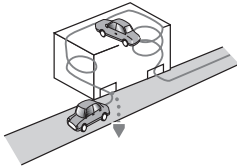
- If you are on a steep mountain road with many height changes.



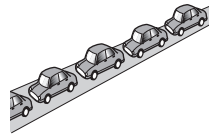
- If trees or other obstacles block the GPS signals for a considerable period.



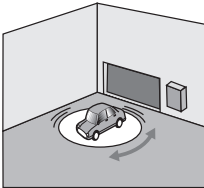
- If you enter or exit a multi-storey car park or similar structure using a spiral ramp.



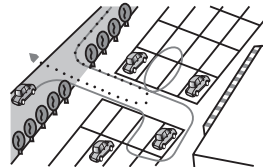
- If you drive very slowly, or in a start-and-stop manner, as in a traffic jam.



- If your vehicle is turned on a turntable or similar structure.



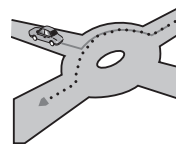
- If you join the road after driving around a large car park.



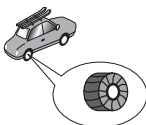
- If your vehicle's wheels spin, such as on a rough track or in snow.



- When you drive around a roundabout.



- If you put on chains, or change your tyres for ones with a different size.



- When starting driving immediately after starting the engine. ■

Appendix

Route setting information

Route search specifications

Your navigation system sets a route to your destination by applying certain built-in rules to the map data. This section provides some useful information about how a route is set.

CAUTION

When a route is calculated, the route and voice guidance for the route are automatically set. Also, for day or time traffic regulations, only information about traffic regulations applicable at the time when the route was calculated is considered. One-way streets and street closures may not be taken into consideration. For example, if a street is open during the morning only, but you arrive later, it would be against the traffic regulations so you cannot drive along the set route. When driving, please follow the actual traffic signs. Also, the system may not know some traffic regulations.

- The calculated route is one example of the route to your destination decided by the navigation system while taking the type of streets or traffic regulations into account. It is not necessarily an optimum route. (In some cases, you may not be able to set the streets you want to take. If you need to take a certain street, set a waypoint on that street.)
- If the destination is too far, there may be instances where the route cannot be set. (If you want to set a long-distance route going across several areas, set waypoints along the way.)
- During voice guidance, turns and intersections from the motorway are announced. However, if you pass intersections, turns, and other guidance points in rapid succession, some may delay or not be announced.
- It is possible that guidance may direct you off a motorway and then back on again.
- In some cases, the route may require you to travel in the opposite direction to your


current heading. In such cases, you are instructed to turn around, so please turn around safely by following the actual traffic rules.

- In some cases, a route may begin on the opposite side of a railway or river from your actual current location. If this happens, drive towards your destination for a while, and try route calculation again.
- When there is a traffic jam ahead, a detour route may not be suggested if driving through the traffic jam would still be better than taking the detour.
- There may be instances when the starting point, the waypoint and the destination point are not on the highlighted route.
- The number of roundabout exits displayed on the screen may differ from the actual number of roads.

Route highlighting

- Once set, the route is highlighted in bright colour on the map.
- The immediate vicinity of your starting point and destination may not be highlighted, and neither will areas with particularly complex road layouts. Consequently, the route may appear to be cut off on the display, but voice guidance will continue.

Auto reroute function

- If you deviate from the set route, the system will re-calculate the route from that point so that you remain on track to the destination.
- This function may not work under certain conditions. 

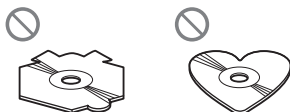
Handling and care of discs

Some basic precautions are necessary when handling your discs.

Appendix

Built-in drive and care

- Use only conventional, fully circular discs. Do not use shaped discs.



- Do not use cracked, chipped, warped, or otherwise damaged discs as they may damage the built-in drive.
- Use 12-cm discs. Do not use 8-cm discs or an adapter for 8-cm discs.
- When using discs that can be printed on label surfaces, check the instructions and the warnings of the discs. Depending on the discs, inserting and ejecting may not be possible. Using such discs may result in damage to this equipment.
- Do not touch the recorded surface of the discs.
- Store discs in their cases when not in use.
- Avoid leaving discs in excessively hot environments including under direct sunlight.
- Do not attach labels, write on or apply chemicals to the surface of the discs.
- Do not attach commercially available labels or other materials to the discs.
 - The discs may warp making the disc unplayable.
 - The labels may come off during playback and prevent ejection of the discs, which may result in damage to the equipment.
- To clean a disc, wipe it with a soft cloth, moving outward from the centre.



- Condensation may temporarily impair the built-in drive's performance. Leave it to adjust to the warmer temperature for about one hour. Also, wipe any damp discs with a soft cloth.

- Playback of discs may not be possible because of disc characteristics, disc format, recorded application, playback environment, storage conditions and so on.
- Road shocks may interrupt disc playback.
- Read the precautions for discs before using them.

Ambient conditions for playing a disc

- At extremely high temperatures, a temperature cutout protects this product by switching it off automatically.
- Despite our careful design of the product, small scratches that do not affect actual operation may appear on the disc surface as a result of mechanical wear, ambient conditions for use or handling of the disc. This is not a sign of the malfunction of this product. Consider it to be normal wear and tear.

Playable discs

DVD-Video and CD

DVD and CD discs that display the logos shown below generally can be played on this built-in DVD drive.

DVD-Video



CD



- DVD** is a trademark of DVD Format/Logo Licensing Corporation.

Appendix

- ❑ It is not possible to play DVD-Audio discs. This DVD drive may not be able to play all discs bearing the marks shown above.

AVCHD recorded discs

This unit is not compatible with discs recorded in AVCHD (Advanced Video Codec High Definition) format. Do not insert AVCHD discs. If inserted, the disc may not be ejected.

Playing DualDisc

- DualDiscs are two-sided discs that have a recordable CD for audio on one side and a recordable DVD for video on the other.
- Playback of the DVD side is possible with this product. However, since the CD side of DualDiscs is not physically compatible with the general CD standard, it may not be possible to play the CD side with this product.
- Frequent loading and ejecting of a DualDisc may result in scratches to the disc.
- Serious scratches can lead to playback problems on this product. In some cases, a DualDisc may become stuck in the disc-loading slot and will not eject. To prevent this, we recommend you refrain from using DualDisc with this product.
- Please refer to the manufacturer for more detailed information about DualDiscs.

Dolby Digital

This product will down-mix Dolby Digital signals internally and the sound will be output in stereo.

- ❑ Manufactured under licence from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.



Detailed information for playable media

Compatibility

Common notes about disc compatibility

- Certain functions of this product may not be available for some discs.
- Compatibility with all discs is not guaranteed.
- It is not possible to playback DVD-ROM/ DVD-RAM discs.
- Playback of discs may become impossible with direct exposure to sunlight, high temperatures, or depending on the storage conditions in the vehicle.

DVD-Video discs

- DVD-Video discs that have incompatible region numbers cannot be played on this DVD drive. The region number of the player can be found on this product's chassis.

DVD-R/DVD-RW/DVD-R SL (Single Layer)/DVD-R DL (Dual Layer) discs

- Unfinalised discs which have been recorded with the Video format (video mode) cannot be played back.
- Discs which have been recorded with the Video Recording format (VR mode) cannot be played back.
- DVD-R DL (Dual Layer) discs which have been recorded with Layer Jump recording cannot be played back.
- For detailed information about recording mode, please contact the manufacturer of media, recorders, or writing software.

CD-R/CD-RW discs

- Unfinalised discs cannot be played back.
- It may not be possible to playback CD-R/ CD-RW discs recorded on a music CD recorder or a computer because of disc characteristics, scratches or dirt on the disc, or dirt, scratches or condensation on the lens of the built-in drive.

Appendix

- Playback of discs recorded on a computer may not be possible, depending on the recording device, writing software, their settings, and other environmental factors.
- Please record with the correct format. (For details, please contact manufacturer of media, recorders, or writing software.)
- Titles and other text information recorded on a CD-R/CD-RW disc may not be displayed by this product (in the case of audio data (CD-DA)).
- Read the precautions with CD-R/CD-RW discs before using them.

Common notes about the external storage device (USB, SD)

- Do not leave the external storage device (USB, SD) in any location with high temperatures.
- Depending on the kind of the external storage device (USB, SD) you use, this product may not recognise the storage device or files may not be played back properly.
- The text information of some audio and video files may not be correctly displayed.
- File extensions must be used properly.
- There may be a slight delay when starting playback of files on an external storage device (USB, SD) with complex folder hierarchies.
- Operations may vary depending on the kind of an external storage device (USB, SD).
- It may not be possible to play some music files from SD or USB because of file characteristics, file format, recorded application, playback environment, storage conditions, and so on.

Notes on SD memory cards

- Some SD memory cards may not be recognised by this unit even if the SD memory cards can be recognised by a computer. Formatting the SD memory cards using a dedicated formatter may resolve the problem. SD memory cards formatted using

the standard formatting function on a computer do not comply with the SD standard. Problems such as that those cards cannot be read or written could occur. It is recommended that you use a dedicated formatter to avoid such problems. All of the data stored on an SD memory card will be deleted when the card is formatted. Back up any needed data beforehand as necessary. A dedicated formatter for SD memory cards can be obtained from the following site.
<https://www.sdcard.org/>

USB storage device compatibility

- ⇒ For details about USB storage device compatibility with this product, refer to *Specifications* on page 237.
- Protocol: bulk
- You cannot connect a USB storage device to this product via a USB hub.
- Partitioned USB storage device is not compatible with this product.
- Firmly secure the USB storage device when driving. Do not let the USB storage device fall onto the floor, where it may become jammed under the brake or accelerator pedal.
- There may be a slight delay when starting playback of audio files encoded with image data.
- Some USB storage devices connected to this product may generate noise on the radio.
- Do not connect anything other than the USB storage device.

The sequence of audio files on USB storage device

For USB storage device, the sequence is different from that of USB storage device.

SD memory card and SDHC memory card

- ⇒ For details about SD memory card compatibility with this product, refer to *Specifications* on page 237.

Appendix

Handling guidelines and supplemental information

- This product is not compatible with the Multi Media Card (MMC).
- Copyright protected files cannot be played back.

Notes specific to DivX files

- Only DivX files downloaded from DivX partner sites are guaranteed for proper operation. Unauthorised DivX files may not operate properly.
- DRM rental files cannot be operated until playing back is started.
- This product corresponds to a DivX file display of up to 1 590 minutes 43 seconds. Search operations beyond this time limit are prohibited.
- DivX VOD file playback requires supplying the ID code of this product to the DivX VOD provider. Regarding the ID code, refer to *Displaying your DivX VOD registration code* on page 194.
- Plays all versions of DivX video, except for DivX 7 with standard playback of DivX media files.
- For more details about DivX, visit the following site:
<http://www.divx.com/>

DivX subtitle files

- Srt format subtitle files with the extension ".srt" can be used.
- Only one subtitle file can be used for each DivX file. Multiple subtitle files cannot be associated.
- Subtitle files that are named with the same character string as the DivX file before the extension are associated with the DivX file. The character strings before the extension must be exactly the same. However, if there is only one DivX file and one subtitle file in a single folder, the files are associated even if the file names are not the same.
- The subtitle file must be stored in the same folder as the DivX file.

- Up to 255 subtitle files may be used. Any more subtitle files will not be recognised.
- Up to 64 characters can be used for the name of the subtitle file, including the extension. If more than 64 characters are used for the file name, the subtitle file may not be recognised.
- The character code for the subtitle file should comply with ISO-8859-1. Using characters other than ISO-8859-1 may cause the characters to be displayed incorrectly.
- The subtitles may not be displayed correctly if the displayed characters in the subtitle file include control code.
- For materials that use a high transfer rate, the subtitles and video may not be completely synchronised.
- If multiple subtitles are programmed to display within a very short time frame, such as 0.1 seconds, the subtitles may not be displayed at the correct time.

Appendix

Media compatibility chart

General

Media	CD-R/-RW	DVD-R/-R SL/-R DL/DVD-RW	USB storage device	SD memory card
File system	<ul style="list-style-type: none"> ISO9660 level 1 ISO9660 level 2 Romeo, Joliet UDF 1.02 / 1.50 / 2.00 / 2.01 / 2.50 	<ul style="list-style-type: none"> ISO9660 level 1 ISO9660 level 2 Romeo, Joliet UDF 1.02 / 1.50 / 2.00 / 2.01 / 2.50 	FAT16/FAT32/NTFS	
Maximum number of folders	700		1 500	
Maximum number of files	999	3 500	15 000	
Playable file types	MP3, WMA, AAC, DivX, MPEG-1, MPEG-2, MPEG-4		MP3, WMA, AAC, WAV, FLAC, H.264, MPEG-2, MPEG-4, WMV, FLV, MKV, JPEG	
Notes:				
<ul style="list-style-type: none"> Maximum playback time of audio file stored in the disc: 60 h Maximum playback time of audio file stored on an external storage device (USB, SD): 7.5 h (450 minutes) 				

MP3 compatibility

Media	CD-R/-RW	DVD-R/-R SL/-R DL/DVD-RW	USB storage device	SD memory card
File extension	.mp3		.mp2, .mp3, .m2a, .mka	
Bit rate	8 kbps to 320 kbps (CBR), VBR			
Sampling frequency	16 kHz to 48 kHz (32 kHz, 44.1 kHz, 48 kHz for emphasis)		8 kHz to 48 kHz	
ID3 tag	ID3 tag Ver. 1.0, 1.1, 2.2, 2.3		ID3 tag Ver. 1.0, 1.1, 2.2, 2.3, 2.4	
Notes:				
<ul style="list-style-type: none"> Ver. 2.x of ID3 tag is prioritised when both Ver. 1.x and Ver. 2.x exist. This product is not compatible with the following: MP3i (MP3 interactive), mp3 PRO, m3u playlist 				

Appendix

WMA compatibility

Media	CD-R/-RW	DVD-R/-R SL/-R DL/DVD-RW	USB storage device	SD memory card
File extension	.wma			
Bit rate	5 kbps to 320 kbps (CBR), VBR			
Sampling frequency	8 kHz to 48 kHz			
Note: This product is not compatible with the following: Windows Media™ Audio 9 Professional, Lossless, Voice				

WAV compatibility

Media	CD-R/-RW	DVD-R/-R SL/-R DL/DVD-RW	USB storage device	SD memory card
File extension	WAV files on the CD-R/-RW, DVD-R/-RW/-R SL/-R DL cannot be played.		.wav	
Format			Linear PCM (LPCM)	
Sampling frequency			16 kHz to 48 kHz	
Quantisation bits			8 bits and 16 bits	
Note: The sampling frequency shown in the display may be rounded.				

AAC compatibility

Media	CD-R/-RW	DVD-R/-R SL/-R DL/DVD-RW	USB storage device	SD memory card
File extension	.m4a		.aac, .adts, .mka, .m4a	
Bit rate	8 kbps to 320 kbps (CBR)			
Sampling frequency	8 kHz to 44.1 kHz		8 kHz to 48 kHz	
Note: This product plays back AAC files encoded by iTunes.				

Appendix

DivX compatibility

Media	CD-R/-RW	DVD-R/-R SL/-R DL/DVD-RW	USB storage device	SD memory card
File extension	.avi/.divx		DivX files on the external storage device (USB, SD) cannot be played.	
Profile (DivX version)	Home Theater Ver. 3.11/Ver. 4.x/Ver. 5.x/Ver. 6.x			
Compatible audio codec	MP3, Dolby Digital			
Bit rate (MP3)	8 kbps to 320 kbps (CBR), VBR			
Sampling frequency (MP3)	16 kHz to 48 kHz (32 kHz, 44.1 kHz, 48 kHz for emphasis)			
Maximum image size	720 pixels × 576 pixels			
Maximum file size	4 GB			
Notes:				
<ul style="list-style-type: none"> This product is not compatible with the following: DivX Ultra format, DivX files without video data, DivX files encoded with LPCM (Linear PCM) audio codec Depending on the file information composition, such as the number of audio streams, there may be a slight delay in the start of playback on discs. If a file contains more than 4 GB, playback stops before the end. Some special operations may be prohibited because of the composition of DivX files. Files with high transfer rates may not be played back correctly. The standard transfer rate is 4 Mbps for CDs and 10.08 Mbps for DVDs. 				

Appendix

Video files compatibility (USB, SD)

File extension	.avi	.mkv	.mov	.f4v	.mp4
Compatible video codec	MPEG-4, H.264, H.263, Xvid	MPEG-4, H.264, VC-1, Xvid	MPEG-4, H.264, H.263	H.264, H.263	MPEG-4, H.264, H.263
Compatible audio codec	MP3, AAC, LPCM	MP3, AAC, Vorbis	MP3, AAC	MP3, AAC	MP3, AAC
Maximum frame rate	30 fps				
Maximum file size	4 GB				
Maximum playback time	150 minutes				

File extension	.3gp	.wmv	.asf	.flv	.vob
Compatible video codec	MPEG-4, H.264, H.263	WMV, VC-1	WMV, VC-1	H.264	H.264, MPEG-2
Compatible audio codec	AAC	WMA	WMA	MP3, AAC	MP3, AAC, LPCM
Maximum frame rate	30 fps				
Maximum file size	4 GB				
Maximum playback time	150 minutes				

Common notes

- Files may not be played back properly depending on the environment in which the file was created or on the contents of the file.
- This product may not 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.
- Regardless of the length of blank section between the songs of original recording, compressed audio discs play with a short pause between songs.

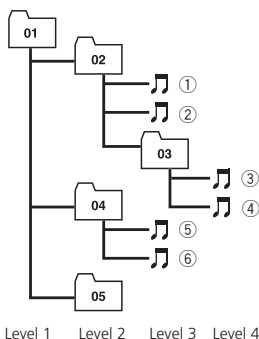
Appendix

Example of a hierarchy

The following figure is an example of the tier structure in the disc. The numbers in the figure indicate the order in which folder numbers are assigned and the order to be played back.

Folder

File



Notes

- This product assigns folder numbers. The user cannot assign folder numbers.
- If there is a folder that does not contain any playable file, the folder itself will display in the folder list but you cannot check any files in the folder. (A blank list will appear.) Also, these folders will be skipped without displaying the folder number. ▣

Bluetooth



- The *Bluetooth*® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by PIONEER CORPORATION is under licence. Other trademarks and trade names are those of their respective owners. ▣

SDHC



SDHC Logo is a trademark of SD-3C, LLC. ▣

WMA/WMV

Windows Media is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.

- ▣ This product includes technology owned by Microsoft Corporation and cannot be used or distributed without a licence from Microsoft Licensing, Inc. ▣

DivX



DivX Certified® devices have been tested for high-quality DivX® (.divx, .avi) video playback. When you see the DivX logo, you know you have the freedom to play your favorite DivX movies.


DivX®, DivX Certified® and associated logos are trademarks of DivX, LLC and are used under license.

This DivX Certified® device has passed rigorous testing to ensure it plays DivX® videos. To play purchased DivX movies, first register your device at vod.divx.com. Find your registration code in the DivX VOD section of your device setup menu.

- ➔ For details, refer to *Displaying your DivX VOD registration code* on page 194. ▣


Appendix

AAC


AAC is short for Advanced Audio Coding and refers to an audio compression technology standard used with MPEG-2 and MPEG-4. Several applications can be used to encode AAC files, but file formats and extensions differ depending on the application which is used to encode. This unit plays back AAC files encoded by iTunes. 

Google, Google Play, Android™, and Android Auto



Google, Google Play, Android, Android Auto and other marks are trademarks of Google Inc. 

MirrorLink

MirrorLink Certified™, the Design Only™ Certification Logo, MirrorLink™ and the MirrorLink™ Logo are certification marks and trademarks of the Car Connectivity Consortium LLC. Unauthorized use is strictly prohibited. 

MIXTRAX

MIXTRAX is a trademark of the PIONEER CORPORATION. 

Detailed information regarding connected iPod devices

CAUTION

- Pioneer accepts no responsibility for data lost from an iPod, even if that data is lost while using this product. Please back up your iPod data regularly.
- Do not leave the iPod in direct sunlight for extended amounts of time. Extended exposure to direct sunlight can result in iPod malfunction due to the resulting high temperature.
- Do not leave the iPod in any location with high temperatures.
- Firmly secure the iPod when driving. Do not let the iPod fall onto the floor, where it may become jammed under the brake or accelerator pedal.

For details, refer to the iPod manuals.

iPod and iPhone



“Made for iPod” and “Made for iPhone” mean that an electronic accessory has been designed to connect specifically to iPod or iPhone, respectively, and has been certified by the developer to meet Apple performance standards.

Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

Please note that the use of this accessory with iPod or iPhone may affect wireless performance.

iPhone, iPod, iPod classic, iPod nano, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries.

Appendix

Lightning

Lightning is a trademark of Apple Inc.


App Store

App Store is a service mark of Apple Inc.

iOS

iOS is a trademark on which Cisco holds the trademark right in the US and certain other countries.

iTunes

iTunes is a trademark of Apple Inc., registered in the U.S. and other countries. 

Using app-based connected content

IMPORTANT

Requirements to access app-based connected content services using this product:

- Latest version of the Pioneer compatible connected content application(s) for the smartphone, available from the service provider, downloaded to your smartphone.
- A current account with the content service provider.
- Smartphone Data Plan.

Note: if the Data Plan for your smartphone does not provide for unlimited data usage, additional charges from your carrier may apply for accessing app-based connected content via 3G, EDGE and/or LTE (4G) networks.

- Connection to the Internet via 3G, EDGE, LTE (4G) or Wi-Fi network.
- Optional Pioneer adapter cable connecting your iPhone to this product.


Limitations:

- Access to app-based connected content will depend on the availability of cellular and/or Wi-Fi network coverage for the purpose of al-

lowing your smartphone to connect to the Internet.

- Service availability may be geographically limited to the region. Consult the connected content service provider for additional information.
- Ability of this product to access connected content is subject to change without notice and could be affected by any of the following: compatibility issues with future firmware versions of smartphone; compatibility issues with future versions of the connected content application(s) for the smartphone; changes to or discontinuation of the connected Content application(s) or service by its provider.
- Pioneer is not liable for any issues that may arise from incorrect or flawed app-based content.
- The content and functionality of the supported applications are the responsibility of the App providers.
- In **AppRadio Mode** and **Android Auto**, functionality through the product is limited while driving, with available functions determined by the App providers.
- Availability of **AppRadio Mode** and **Android Auto** functionalities is determined by the App provider, and not determined by Pioneer.
- **AppRadio Mode** 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.

Aha Radio

Aha, Aha Radio and the Aha and Aha Radio logos are either the trademarks or the registered trademarks of Harman International Industries, Incorporated. 

Appendix

HDMI



The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing, LLC in the United States and other countries. □

MHL

MHL, the MHL Logo, and Mobile High-Definition Link are trademarks or registered trademarks of MHL, LLC in the United States and other countries. □

IVONA Text-to-Speech



□

Notice regarding video viewing

Remember that use of this system for commercial or public viewing purposes may constitute an infringement on the author's rights as protected by the Copyright Law. □

Notice regarding DVD-Video viewing

This item incorporates copy protection technology that is protected by U.S. patents and other intellectual property rights of Rovi Corporation. Reverse engineering and disassembly are prohibited. □

Notice regarding MP3 file usage

Supply of this product only conveys a licence for private, non-commercial use and does not convey a licence nor imply any right to use this product in any commercial (i.e. revenue-generating) real time broadcasting (terrestrial, satellite, cable and/or any other media), broadcasting/streaming via internet, intranets and/or other networks or in other electronic content distribution systems, such as pay-audio or audio-on-demand applications. An independent licence for such use is required. For details, please visit <http://www.mp3licensing.com>. □

Notice regarding open source licences

For details about the open source licences 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. □

Appendix

Using the LCD screen correctly

Handling the LCD screen

- When the LCD screen is subjected to direct sunlight for a long period of time, it will become very hot, resulting in possible damage to the LCD screen. When not using this product, avoid exposing it to direct sunlight as much as possible.
- The LCD screen should be used within the temperature ranges shown in *Specifications*.
- Do not use the LCD screen at temperatures higher or lower than the operating temperature range, because the LCD screen may not operate normally and could be damaged.
- The LCD screen is exposed in order to increase its visibility within the vehicle. Please do not press strongly on it as this may damage it.
- Do not push the LCD screen with excessive force as this may scratch it.
- Never touch the LCD screen with anything besides your finger when operating the touch panel functions. The LCD screen can scratch easily.

Liquid crystal display (LCD) screen

- If the LCD screen is near the vent of an air conditioner, make sure that air from the air conditioner is not blowing on it. Heat from the heater may break the LCD screen, and cool air from the cooler may cause moisture to form inside this product, resulting in possible damage.
- Small black dots or white dots (bright dots) may appear on the LCD screen. These are due to the characteristics of the LCD screen and do not indicate a malfunction.
- The LCD screen will be difficult to see if it is exposed to direct sunlight.
- When using a mobile phone, keep the aerial of the mobile phone away from the LCD screen to prevent disruption of the video in


the form of disturbances such as spots or coloured stripes.

Maintaining the LCD screen

- When removing dust from or cleaning the LCD screen, first turn this product off and then wipe the screen with a soft dry cloth.
- When wiping the LCD screen, take care not to scratch the surface. Do not use harsh or abrasive chemical cleaners.

LED (light-emitting diode) backlight

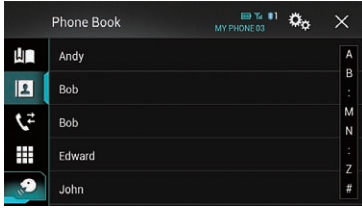
A light emitting diode is used inside the display to illuminate the LCD screen.

- At low temperatures, using the LED backlight may increase image lag and degrade the image quality because of the characteristics of the LCD screen. Image quality will improve with an increase in temperature.
- The product lifetime of the LED backlight is more than 10 000 hours. However, it may decrease if used in high temperatures.
- If the LED backlight reaches the end of its product lifetime, the screen will become dimmer and the image will no longer be visible. In that case, please consult your dealer or the nearest authorised Pioneer Service Station. 

Appendix

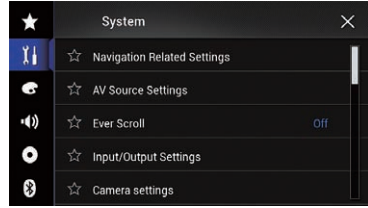
Display information

Phone menu



	Page
Preset Dial	79
Phone Book	77
History	78
Dial	77
Voice recognition function	82

System menu

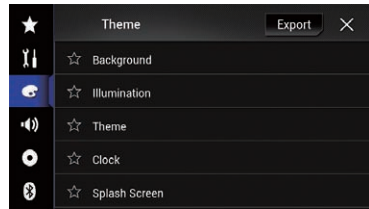


	Page
Navigation Related Settings	
Navigation info window	155
AV/App Guide Mode	155
AV Source Settings	
MIXTRAX Settings	154
	91
	92
	93
Radio Settings	94
	95
	96
	155
DAB Settings	101
	156
Tag Forwarding	201
Bluetooth Audio	157
Ever Scroll	157
Input/Output Settings	
Smartphone Setup	84
AV Input	157
AUX Input	149
AppRadio Video Adjustment	135
Camera settings	

Appendix

	Page
Camera View	160
Back Camera Input	158
2nd Camera Input	162
Camera Polarity	159
Parking Assist Guide	160
Back Camera: Reverse Video	159
2nd Camera: Reverse video	163
Parking Assist Guide Adjust	161
Safe Mode	163
Demo Mode	164
System Language	164
Climate Reverse	164
Restore Settings	206
All Settings	206
Audio Settings	206
Theme Settings	206
Bluetooth Settings	206
Keyboard	165
Beep Tone	165
Touch Panel Calibration	165
Dimmer Settings	166
Dimmer Trigger	166
Day/Night	167
Dimmer Duration	167
Driving Position	138
Picture Adjustment	168
System Information	
Firmware Information	169
Firmware Update	169
3D Calibration Status	170
Connection Status	171

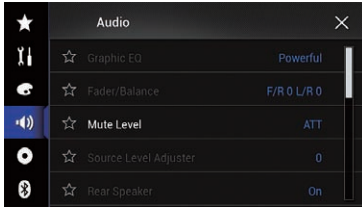
Theme menu



	Page
Background	185
Illumination	186
Theme	187
Clock	188
Splash Screen	188
Export	189

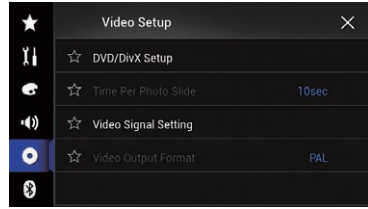
Appendix

Audio menu



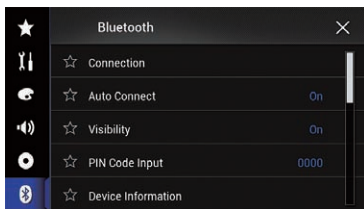
	Page
Graphic EQ	181
Fader/Balance	173
Balance	173
Mute Level	174
Source Level Adjuster	174
Rear Speaker	176
Subwoofer	177
Speaker Level	178
Crossover	176
Subwoofer Settings	177
Listening Position	177
Time Alignment	179
Auto EQ&TA	182
A-EQ&TA Measurement	183
ASL	180

Video Setup menu



	Page
DVD/DivX Setup	
Subtitle Language	191
Audio Language	191
Menu Language	192
Multi Angle	192
TV Aspect	193
Parental	193
DivX® VOD	194
DVD Auto Play	195
Time Per Photo Slide	121
Video Signal Setting	
AV	152
AUX	150
Camera	195
Video Output Format	196

Bluetooth menu



	Page
Connection	70
Auto Connect	72
Visibility	73
PIN Code Input	73
Device Information	74
Auto Answer	81
Ring Tone	81
Invert Name	81
Bluetooth Memory Clear	74
BT Software Update	74
Bluetooth Version Information	75



Appendix

Specifications

General

Rated power source	14.4 V DC (allowable voltage range: 12.0 V to 14.4 V DC)
Earthing system	Negative type
Maximum current consumption	10.0 A
Dimensions (W × H × D):	
AVIC-F77DAB	
DIN	
Chassis	178 mm × 100 mm × 157 mm
Nose	188 mm × 118 mm × 29 mm
D	
Chassis	178 mm × 100 mm × 164 mm
Nose	171 mm × 97 mm × 21 mm
AVIC-F70DAB	
DIN	
Chassis	178 mm × 100 mm × 157 mm
Nose	188 mm × 118 mm × 27 mm
D	
Chassis	178 mm × 100 mm × 164 mm
Nose	171 mm × 97 mm × 20 mm
AVIC-F970DAB	
DIN	
Chassis	178 mm × 100 mm × 157 mm
Nose	188 mm × 118 mm × 16 mm
D	
Chassis	178 mm × 100 mm × 164 mm
Nose	170 mm × 97 mm × 8 mm
AVIC-F970BT	
DIN	
Chassis	178 mm × 100 mm × 157 mm
Nose	188 mm × 118 mm × 16 mm
D	
Chassis	178 mm × 100 mm × 164 mm
Nose	170 mm × 97 mm × 8 mm
AVIC-F9770DAB	
DIN	
Chassis	178 mm × 100 mm × 157 mm

Nose	188 mm × 118 mm × 16 mm
D	
Chassis	178 mm × 100 mm × 164 mm
Nose	170 mm × 97 mm × 8 mm
AVIC-F9770BT	
DIN	
Chassis	178 mm × 100 mm × 157 mm
Nose	188 mm × 118 mm × 16 mm
D	
Chassis	178 mm × 100 mm × 164 mm
Nose	170 mm × 97 mm × 8 mm

Weight:

AVIC-F77DAB	2.1 kg
AVIC-F70DAB	2.1 kg
AVIC-F970DAB	1.8 kg
AVIC-F970BT	1.8 kg
AVIC-F9770DAB	1.8 kg
AVIC-F9770BT	1.8 kg
NAND flash memory	16 GB

Navigation

GPS receiver:

System	L1, C/Acode GPS SPS (Standard Positioning Service)
Reception system	50-channel multi-channel reception system
Reception frequency ...	1575.42 MHz
Sensitivity	-140 dBm (typ)
Position update frequency	Approx. once per second

GPS aerial:

Aerial	Micro strip flat aerial/right- handed helical polarisation
Aerial cable	3.55 m
Dimensions (W × H × D)	33 mm × 14.7 mm × 36 mm
Weight	73.7 g

Display

Screen size/aspect ratio:

AVIC-F77DAB	6.95 inch wide/16:9
AVIC-F70DAB	6.95 inch wide/16:9
AVIC-F970DAB	6.2 inch wide/16:9
AVIC-F970BT	6.2 inch wide/16:9
AVIC-F9770DAB	6.2 inch wide/16:9
AVIC-F9770BT	6.2 inch wide/16:9

Effective display area:

AVIC-F77DAB	156.6 mm × 81.6 mm
-------------------	--------------------

Appendix

AVIC-F70DAB	156.6 mm × 81.6 mm
AVIC-F970DAB	137.5 mm × 77.3 mm
AVIC-F970BT	137.5 mm × 77.3 mm
AVIC-F9770DAB	137.5 mm × 77.3 mm
AVIC-F9770BT	137.5 mm × 77.3 mm
Pixels	1 152 000 (2 400 × 480)
Display method	TFT Active matrix driving
Colour system	PAL/NTSC/PAL-M/PAL-N/ SECAM compatible
Tolerable temperature range:	
Power off	-20 °C to +80 °C

Audio

Maximum power output	50 W × 4
Continuous power output ...	22 W × 4 (50 Hz to 15 kHz, 5%THD, 4Ω LOAD, Both Channels Driven)
Load impedance	4Ω (4Ω to 8Ω allowable)
Preout output level (max)	4.0 V
Equaliser (13-Band Graphic Equaliser):	
Frequency	50 Hz/80 Hz/125 Hz/200 Hz/ 315 Hz/500 Hz/800 Hz/ 1.25 kHz/2 kHz/3.15 kHz/ 5 kHz/8 kHz/12.5 kHz
Gain	±12 dB
HPF:	
Frequency	50 Hz/63 Hz/80 Hz/100 Hz/ 125 Hz/160 Hz/200 Hz
Slope	-6 dB/oct, -12 dB/oct, -18 dB/oct
Subwoofer (mono):	
Frequency	50 Hz/63 Hz/80 Hz/100 Hz/ 125 Hz/160 Hz/200 Hz
Slope	-6 dB/oct, -12 dB/oct, -18 dB/oct
Gain	-24 dB to +10 dB
Phase	Normal/Reverse
Time alignment	0 to 200 step (2.5 cm/step)

DVD drive

System	DVD-Video, VCD, CD, MP3, WMA, AAC, DivX, JPEG, MPEG player
Region number	2
Usable discs	DVD-VIDEO, VIDEO-CD, CD, CD-R, CD-RW, DVD-R, DVD- RW, DVD-RDL
Frequency response	5 Hz to 44 000 Hz (with DVD, at sampling frequency 96 kHz)
Signal-to-noise ratio	96 dB (1 kHz) (IEC-A net- work) (RCA level)
Output level:	
Video	1.0 Vp-p/75Ω (±0.2 V)

Number of channels	2 (stereo)
MP3 decoding format	MPEG-1, 2 & 2.5 Audio Layer 3
WMA decoding format	Ver.7, 8, 9 (2 ch audio) (Windows Media Player)
AAC decoding format	MPEG-4 AAC (only encoded by iTunes): .m4a (Ver.11 and earlier)
DivX decoding format	Home Theater Ver.3.11, Ver.4.X, Ver.5.X, Ver.6.X : .avi, .divx
MPEG video decoding format	
.....	MPEG-1: mpg, mpeg, dat MPEG-2 PS: mpg, mpeg MPEG-4 Part2 (Visual), MS MPEG-4 Ver.3: avi

USB

USB standard spec.	USB1.1, USB2.0 High Speed
Max current supply	1.6 A
USB Class	MSC (Mass Storage Class) device, iPod (AudioClass, HID Class) device
File system	FAT16, FAT32, NTFS
MP3 decoding format	MPEG-1/Layer 1, MPEG-1/ Layer 2, MPEG-1/Layer 3 MPEG-2/Layer 1, MPEG-2/ Layer 2, MPEG-2/Layer 3 MPEG-2.5/Layer 3
WMA decoding format	WMA10 Std , WMA10 Pro, WMA9 Lossless
AAC decoding format	MPEG-2 AAC-LC, MPEG-4 AAC-LC
WAVE signal format	Linear-PCM
H.264 video decoding format	
.....	BaseLine Profile, Main Pro- file, High Profile
WMV video decoding format	
.....	VC-1 SP/MP/AP, WMV 7/8
MPEG4 video decoding format	
.....	SimpleProfile, Advanced- SimpleProfile (except GMC)
JPEG decoding format	JPEG

SD (AVIC-F77DAB, AVIC-F70DAB)

SD memory card, SDHC memory card	
Compatible physical format	
.....	Version 2.0
File system	FAT16, FAT32, NTFS

Appendix

MP3 decoding format	S/N ratio	85 dB
..... MPEG-1/Layer 1, MPEG-1/ Layer 2, MPEG-1/Layer 3 MPEG-2/Layer 1, MPEG-2/ Layer 2, MPEG-2/Layer 3 MPEG-2.5/Layer 3		
WMA decoding format		
..... WMA10 Std , WMA10 Pro, WMA9 Lossless		
AAC decoding format		
..... MPEG-2 AAC-LC, MPEG-4 AAC-LC		
WAVE signal format	.....	Linear-PCM
H.264 video decoding format	.....	BaseLine Profile, Main Pro- file, High Profile
WMV video decoding format	.....	VC-1 SP/MP/AP, WMV 7/8
MPEG4 video decoding format	.....	SimpleProfile, Advanced- SimpleProfile (except GMC)
JPEG decoding format	.....	JPEG



Note

Specifications and design are subject to possible modifications without notice due to improvements. ■

Bluetooth

Version	Bluetooth 3.0+EDR certified
Output power	+4 dBm Max. (Power class 2)

FM tuner

Frequency range	87.5 MHz to 108.0 MHz
Usable sensitivity	11 dBf (0.8 μ V/75 Ω , mono, S/N: 30 dB)
Signal-to-noise ratio	72 dB (IEC-A network)

MW tuner

Frequency range	531 kHz to 1 602 kHz (9 kHz)
Usable sensitivity	25 μ 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	28 μ V (S/N: 20 dB)
Signal-to-noise ratio	62 dB (IEC-A network)

DAB tuner (AVIC-F77DAB, AVIC-F70DAB, AVIC-F970DAB, AVIC-F9770DAB)

Frequency range	
Band III	174.928 MHz to 239.200 MHz (5A-13F)
L Band	1 452.960 MHz to 1 490.624 MHz (LA-LW)
Usable sensitivity	-100 dBm

<http://www.pioneer.eu>

Visit **www.pioneer.co.uk** (or **www.pioneer.eu**) to register your product.

Visitez **www.pioneer.fr** (ou **www.pioneer.eu**) pour enregistrer votre appareil.

Si prega di visitare il sito **www.pioneer.it** (o **www.pioneer.eu**) per registrare il prodotto.

Visite **www.pioneer.es** (o **www.pioneer.eu**) para registrar su producto.

Zum Registrieren Ihres Produktes besuchen Sie bitte **www.pioneer.de** (oder **www.pioneer.eu**).

Bezoek **www.pioneer.nl** (of **www.pioneer.eu**) 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:

<http://pioneer.naviextras.com>



pioneer.naviextras.com

PIONEER CORPORATION

1-1, Shin-ogura, Saiwai-ku, Kawasaki-shi,
Kanagawa 212-0031, JAPAN

PIONEER EUROPE NV

Haven 1087, Keetberglaan 1, B-9120 Melsele, Belgium/Belgique
TEL: (0) 3/570.05.11

PIONEER ELECTRONICS (USA) INC.

P.O. Box 1540, Long Beach, California 90801-1540, U.S.A.
TEL: (800) 421-1404

© 2015 PIONEER CORPORATION.
All rights reserved.