

Operation Manual

SPH-DA110

AppRadio

Be sure to read Important Information for the User first!

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

MirrorLink

AppRadio
MODE

English

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.

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Manual overview

- Before using this product, be sure to read **Important Information for the User** (a separate manual), which contains warnings, cautions, and other important information that you should note.
- The screens shown in the examples may differ from actual screens. Actual screens may be changed without notice for performance and function improvements.

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 customisable settings

If you want to look up the settings of this product, refer to *Setting list* at the end of the manual.

Conventions used in this manual

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

- Buttons on this product are described in **bold** lettering:
e.g.)
Press the **Home** button to display the Home screen.
- Menu items, screen titles, and functional components are described in **bold** with double quotation marks " ":
e.g.)
Set "**Dimmer**" to "**OFF**".
- Touch panel keys that are available on the screen are described in **bold** in brackets []:
e.g.)
Tap [**Radio**] on the Home screen.
- 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, refer to *Answering a call automatically* on page 41.

Terms used in this manual

“iPhone”

In this manual, iPod and iPhone are referred to as iPhone.

“Android™ device”

In this manual, each Android mobile device is referred to as Android device.

“MirrorLink™ device”

In this manual, each device that supports MirrorLink connection is referred to as MirrorLink device.

“Mobile device”

In this manual, all “iPhone”, “Android device” and “MirrorLink device” are generically referred to as mobile device.

Introduction

iPhone / iPod compatibility

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

Made for

- iPhone 5: iOS 6.0
 - iPhone 4S: iOS 6.0
 - iPhone 4: iOS 6.0
 - iPhone 3GS: iOS 4.3.3
 - iPod touch (5th generation): iOS 6.0
 - iPod touch (4th generation): iOS 5.1.1
 - iPod touch (3rd generation): iOS 5.1.1
 - iPod touch (2nd generation): iOS 4.2.1
 - iPod classic 160GB (2009): Ver. 2.0.4
 - iPod classic 120GB: Ver. 2.0.1
 - iPod classic 80GB: Ver. 1.1.2
 - iPod classic 160GB (2007): Ver. 1.1.2
 - 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
- Operation methods may vary depending on the iPhone models and the software version of iPhone.
- Depending on the software version of the iPhone, it may not be compatible with this equipment.
For details about iPhone compatibility with this product, refer to the information on our website.

This manual applies to the following iPod models.

iPod with 30-pin connector

- iPod touch 4th generation
- iPod touch 3rd generation
- iPod touch 2nd generation
- iPod classic 160GB
- iPod classic 120GB
- iPod classic 80GB
- iPod nano 6th generation
- iPod nano 5th generation
- iPod nano 4th generation
- iPod nano 3rd generation
- iPhone 4S

- iPhone 4
- iPhone 3GS

iPod with Lightning connector

- iPod touch 5th generation
- iPhone 5

Android™ device compatibility

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

To ensure safe driving

Certain functions (such as viewing of app based visual content and certain touch panel key operations) offered by this product could be dangerous and/or unlawful if used while driving. To prevent such functions from being used while the vehicle is in motion, there is an interlock system that senses when the handbrake is set. If you attempt to use the functions described above while driving, they will become disabled until you stop the vehicle in a safe place, and apply the handbrake. Please keep the brake pedal pushed down before releasing the handbrake.

Protecting the LCD panel and screen

- ❑ Do not allow direct sunlight to fall on the LCD screen when this product is not being used. Extended exposure to direct sunlight can result in LCD screen malfunction due to the resulting high temperatures.
- ❑ 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 spots, coloured stripes, etc.
- ❑ To protect the LCD screen from damage, be sure to tap the touch panel keys with your finger only and gently touch the screen.

Notes on internal memory

Before removing the vehicle battery

If the battery is disconnected or discharged, all stored memory (except the registered Bluetooth device list) will be erased and must be reprogrammed.

About AppRadio

Features

Listening to the radio

You can listen to the radio using this product.

Playing iPod music and video

You can play and operate audio sources and video sources with the iPhone connected.

Viewing/operating mobile device applications

With the **App Mode**, you can view the screen image currently displayed on the mobile device with this product's display.

- When an iPhone with 30-pin connector is connected, the screen image of the application currently used is displayed with the **App Mode**.

With the **AppRadio Mode** and the **MirrorLink** mode, you can not only view the screen image but also operate compatible applications of the mobile device via the display with multi-touch gestures like tapping, dragging, scrolling, and flicking.

Voice recognition function

You can use the voice recognition function when an iPhone is connected via the Bluetooth® wireless technology.

Hands-free phoning

You can control the Bluetooth connection of the mobile device, and make a call using the incoming or outgoing call histories, transferred phone book, or by dialling.

Using the Bluetooth audio player

You can play and operate audio sources with the audio device connected via Bluetooth profile(s) (A2DP/AVRCP).

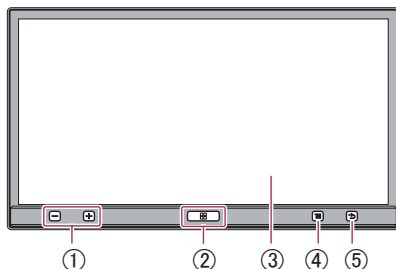
Displaying the rear view camera image

You can display what is behind the vehicle if a rear view camera (e.g. ND-BC6) (sold separately) is connected to the system.

Mixing audio output

You can mix the audio output of an application with the audio output of other sources (radio, iPod or Bluetooth audio) in the **AppRadio Mode** or the **MirrorLink** mode.

Checking part names and functions



- Available buttons will light according to the connected device.

① Volume (+/-) button

② Home button

- Press the **Home** button to display the Home screen.
In the **AppRadio Mode** and the **MirrorLink** mode, when you press the **Home** button, the Application menu screen is displayed. To display the main Home screen, press the **Home** button again.
- Press the **Home** button twice, the audio source control keys will be displayed on-screen.
- Press and hold the **Home** button to launch the voice recognition function when an iPhone is connected via the Bluetooth wireless technology.

③ LCD screen

④ Menu button (for Android devices and MirrorLink devices)

- Press the **Menu** button to display the menu screen. The **Menu** button is available while running the AppRadio app or other supported applications.
- The **Menu** button may be disabled by some models of the connected MirrorLink device.

⑤ Back button (for Android devices and MirrorLink devices)

- Press the **Back** button to return the previous screen. The **Back** button is available while running the AppRadio app or other supported applications.
- The **Back** button may be disabled by some models of the connected MirrorLink device.

Connecting and disconnecting mobile devices

WARNING

Certain uses of a mobile device 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.

CAUTION

- To prevent data loss and damage to the mobile device, never remove it from this product while data is being transferred.
- If data loss or corruption occurs on the mobile device for any reason, it is usually not possible to recover the data. Pioneer accepts no liability for damages, costs or expenses arising from data loss or corruption.
- For safety reasons, never operate this product or mobile devices while driving. To operate this product or mobile devices, stop the vehicle in a safe place, apply the hand-brake and operate them according to law.

About AppRadio

Connect your iPhone with Lightning connector

Using the following cable and adapter enables you to connect your iPhone to this product.

- High Speed HDMI® Cable (Type A - A) (supplied)
 - USB cable (supplied)
 - Lightning to USB Cable (CD-IU52) (sold separately)
 - Lightning Digital AV Adapter (Apple Inc. products) (sold separately)
- For connecting iPhone with Lightning connector, refer to *Installation Manual*.

- ❑ [iPod] is disabled when an iPhone with Lightning connector is connected. Please use the CarMediaPlayer to play music or videos in the **AppRadio Mode**.

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

1 Set “App Connection Settings” to “iPhone (Digital AV)” before connecting your iPhone with Lightning connector.

- For detailed procedures, refer to *Setting the type of the mobile device to be connected* on page 48.

2 Unlock your iPhone and then connect the iPhone to this product.

The [Apps] icon on the Home screen changes to the active state for iPhone, and you are now ready to view the screen image of iPhone (**App Mode**).

- For details of the **App Mode**, refer to Chapter 6.

3 Register your iPhone and connect it to this product via the Bluetooth wireless technology.

- For detailed procedures, refer to *Registering your Bluetooth devices* on page 29.

The [Apps] icon on the Home screen changes to the state for the **AppRadio Mode**, and you are now ready to use the **AppRadio Mode**.

- For details of **AppRadio Mode**, refer to Chapter 6.

- ❑ When you make hands-free phoning or use your iPhone with Lightning connector as a Bluetooth audio device, you must make the Bluetooth connection, but do not have to make the wired connection. The Bluetooth audio sound may not output sometimes when iPhone is wired.

Disconnecting your iPhone

- **Pull out the iPhone cable after checking that no data is being accessed, and disconnect Bluetooth connection.**

Connect your iPhone with 30-pin connector

Using the separately sold USB interface cable for iPod / iPhone (CD-IU201N) enables you to connect your iPhone to this product.

- ❑ Connection via a USB hub is not possible.

1 Set “App Connection Settings” to “Others” before connecting your iPhone with 30-pin connector.

- For detailed procedures, refer to *Setting the type of the mobile device to be connected* on page 48.

2 Unlock your iPhone and then connect the iPhone to this product.

The [Apps] and [iPod] icons on the Home screen change to active, and you are now ready to use the **AppRadio Mode** and to play iPod contents.

- For details of **AppRadio Mode**, refer to Chapter 6.
- For detailed procedure of playing iPod contents, refer to Chapter 5.

- ❑ When you make hands-free phoning or use your iPhone with 30-pin connector as a Bluetooth audio device, you must make the Bluetooth connection, but do not have to make the wired connection. The Bluetooth audio sound may not output sometimes when iPhone is wired.

- For detailed procedures, refer to *Registering your Bluetooth devices* on page 29.

Disconnecting your iPhone

- **Pull out the iPhone cable after checking that no data is being accessed.**

Connect your Android device (HDMI connection/MHL connection)

Using the separately sold App Connectivity Kit (CD-AH200) enables you to connect your Android device to this product.

1 Set “App Connection Settings” to “Others” before connecting your Android device.

➔ For detailed procedures, refer to *Setting the type of the mobile device to be connected* on page 48.

2 Unlock your Android device and connect the Android device to this product.

The [Apps] icon on the Home screen changes to the active state for Android device, and you are now ready to view the screen image of Android device (**App Mode**).

➔ For details of **App Mode** refer to Chapter 6.

- The cable connection method varies depending on your device.
 - ➔ For details, refer to the App Connectivity Kit (CD-AH200) manual.
- Follow the next procedure only when you use the **AppRadio Mode**.

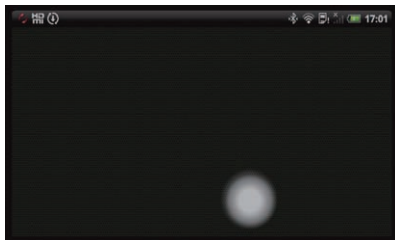
3 Register your Android device and connect it to this product via the Bluetooth wireless technology.

➔ For detailed procedures, refer to *Registering your Bluetooth devices* on page 29.

The [Apps] icon on the Home screen changes to the state for the **AppRadio Mode**, and you are now ready to use the **AppRadio Mode**.

- ➔ For details of **AppRadio Mode**, refer to Chapter 6.
- When you use the **AppRadio Mode**, you must make the Bluetooth connection with Serial Port Profile (SPP) from this product.

- When you make hands-free phoning or use your Android device as a Bluetooth audio device, you must make the Bluetooth connection, but do not have to make the wired connection. The Bluetooth audio sound may not output sometimes when Android device is wired.
- When an Android device is first connected to this product, touch the white dot to activate the connection.



Disconnecting your Android device

- **Pull out the cables after checking that no data is being accessed, and disconnect Bluetooth connection.**

About AppRadio

Connect your MirrorLink device

Using the supplied cable for MirrorLink enables you to connect your MirrorLink device to this product.

➔ For connecting MirrorLink device, refer to *Installation Manual*.

1 Set “App Connection Settings” to “Others” before connecting your MirrorLink device.

➔ For detailed procedures, refer to *Setting the type of the mobile device to be connected* on page 48.

2 Unlock your MirrorLink device and then connect the device to this product.

The [MirrorLink] icon on the Home screen changes to the active state for MirrorLink device, and you are now ready to use the **MirrorLink** mode.

➔ For details of **MirrorLink** mode, refer to Chapter 6.

❑ When you make hands-free phoning or use your MirrorLink device as a Bluetooth audio device, you must make the Bluetooth connection, but do not have to make the wired connection. The Bluetooth audio sound may not output sometimes when MirrorLink device is wired.

➔ For detailed procedures, refer to *Registering your Bluetooth devices* on page 29.

Disconnecting your MirrorLink device

● **Pull out the USB cable after checking that no data is being accessed.**

Available sources and conditions

The available sources varies according to conditions as follows.

Sources	Conditions
Radio	Always available.
iPod	Available only when an iPod or iPhone with 30-pin connector is connected to this product.
Apps	Available only when an iPhone or Android device is connected to this product. The state of the [Apps] icon varies according to the connected device and its state. ➔ For details, refer to <i>Using the touch panel keys</i> on page 12.
MirrorLink	Available only when a MirrorLink device is connected to this product.
Bluetooth (Bluetooth Audio)	Always available. When you listen to music, you must connect an audio device to this product via Bluetooth profiles (A2DP/ AVRCP).
Phone	Available only when your mobile device is connected to this product with Bluetooth wireless technology.

Demonstration images

If you do not operate this product for 30 seconds while displaying the OFF screen, demonstration images are displayed.

When you turn the ignition switch off (ACC OFF) and then turn it on again (ACC ON), the demonstration images will not be displayed.

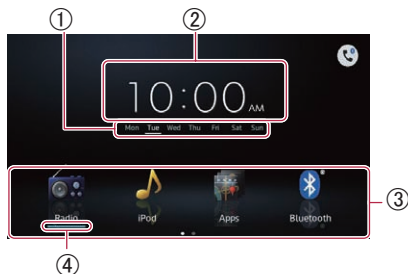
❑ If you reset the system, the demonstration images will be displayed again.

Home screen

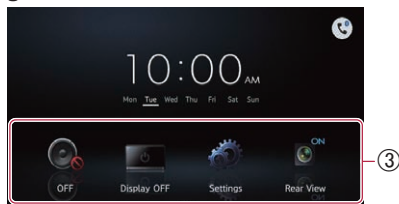
The Home screen is the main screen that allows access to your entertainment sources, apps, settings and more.

Reading the screen

Page one



Page two



- ① Day of the week indicator
- ② Current time
- ③ Scroll area
- ④ Current source indicator

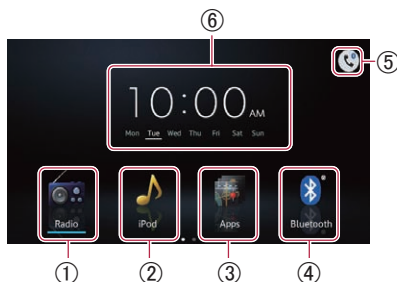
The current source indicator appears under the startup menu icon on the Home screen. When mixing sources, the indicators appear below both menu icons.

Scrolling the Home screen

- Display the second page by flicking the scroll area on the Home screen.
- When you scroll the Home screen, flick the scroll area on the Home screen.

Using the touch panel keys

Page one



- ① **Radio**
Displays the radio source screen.
➡ For details, refer to Chapter 4.
- ② **iPod**
Displays the iPod source screen.
➡ For details, refer to Chapter 5.
- ③ **Apps/MirrorLink**
Turns into the **AppRadio Mode**, the **MirrorLink** mode or the **App Mode**.
The icon state changes as follows:

Icons	States
	Appears when your iPhone with Lightning connector is connected via the supplied cable. This icon shows to be ready to start the App Mode for iPhone.
	Appears when your iPhone with Lightning connector is connected via the supplied cable and processing the Bluetooth connection.
	This icon shows to be ready to start the AppRadio Mode for iPhone. <ul style="list-style-type: none"> • Appears when your iPhone with Lightning connector is connected via the supplied cable and Bluetooth wireless connection is established. • Appears when your iPhone with 30-pin connector is connected via the separately sold USB interface cable for iPod / iPhone (CD-IU201N).
	Appears when your Android device is connected via the separately sold App Connectivity Kit. This icon shows to be ready to start the App Mode for Android device.

Basic operation

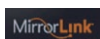


Appears when your Android device is connected via the separately sold App Connectivity Kit and processing the Bluetooth connection.



Appears when your Android device is connected via the separately sold App Connectivity Kit and Bluetooth wireless connection (SPP) is established.

This icon shows to be ready to start the **AppRadio Mode** for Android device.



Appears when your MirrorLink device is connected via the supplied cable for MirrorLink. This icon shows to be ready to start the **MirrorLink mode**.

➔ For details of Apps/MirrorLink, refer to Chapter 6.

- ❑ When two devices of iPhone, Android or MirrorLink are connected simultaneously, the preference of the connected devices is the following order: iPhone with Lightning connector or Android device, MirrorLink device, and iPhone with 30-pin connector.

④ Bluetooth

Displays the Bluetooth audio source screen.

➔ For details, refer to Chapter 8.

⑤ Phone

Displays the phone menu screen.

- ❑ When Bluetooth connection is established, a Bluetooth icon is displayed on this icon.

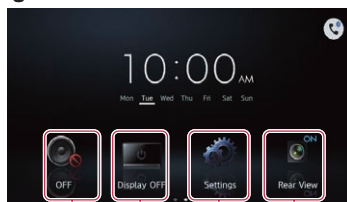
➔ For details, refer to Chapter 9.

⑥ Clock adjustment

Adjusts the current date and time.

➔ For details, refer to *Setting the clock* on page 14.

Page two



⑦ ⑧ ⑨ ⑩

⑦ OFF

Turns the source off.

⑧ Display OFF

Turns the screen off.

➔ For details, refer to *Turning off the screen* on page 58.

⑨ Settings

Displays the settings menu screen.

➔ For details, refer to Chapter 10.

⑩ Rear View

Displays the rear view camera image.

➔ For details, refer to *Setting the rear view camera* on page 53.

Touch panel keys common to each function



The touch panel keys for operations common to each function are described below.

E.g. “Connection” screen



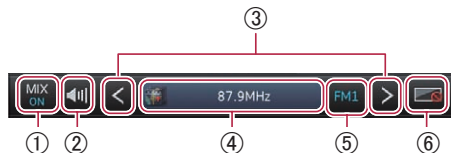
- ① Returns to the previous screen.
Returns to the previous list/category (the folder/category one level higher).
- ② Returns to the top category menu screen.
- ③ Scrolls through the list and allows you to view the remaining items.
 The selected item is highlighted.

Setting the clock

- 1 **Touch and hold the current time or week indicator on the Home screen.**
- 2 **Tap the item to set.**
- 3 **Tap  or  to set the current date and time.**
 Initially, the clock is set to 12-hour format. You can change the time format.
➔ For details, refer to *Setting the clock mode* on page 55.



Audio source control

When you press the **Home** button twice, the audio source control keys will be displayed on-screen. Using these keys, you can operate the audio source currently playing in the background without leaving the screen currently displayed.



- ① **In AppRadio Mode/MirrorLink mode:**
Selects whether to mix the audio output of the application in the **AppRadio Mode** or the **MirrorLink** mode with the audio output of the tuner, iPod* or Bluetooth audio.
The icon state changes as follows.

Icons	Conditions
MIX Radio	Appears when the radio audio source is mixed.
MIX iPod*	Appears when the iPod audio source is mixed.
MIX BT Audio	Appears when the Bluetooth audio source is mixed.

* The iPod audio source cannot be mixed in the **AppRadio Mode** when an iPhone is connected. When the icon is tapped, the source list and volume controller appear on the screen. You can select a source to be mixed, and also change the volume of audio output in the **AppRadio Mode** or the **MirrorLink** mode by tapping  or .

In audio source:



Selects whether to mix the audio output of the tuner, iPod* or Bluetooth audio with the audio output of the application in the **AppRadio Mode** or the **MirrorLink** mode.



* In iPod source, the audio output of the application in the **AppRadio Mode** cannot be mixed when an iPhone is connected.

Basic operation

The icon state changes as follows.

Icons	Conditions
MIX ON	Appears when the audio sources are mixed.
MIX OFF	Appears when there is no mixable source.

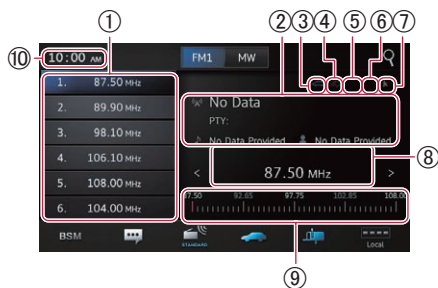
When the icon is tapped, the switching list and the volume controller appear on the screen. You can switch the function between on and off, and also change the volume of audio output in the **AppRadio Mode** or the **MirrorLink** mode by tapping  or .

- ② Switches between muted and unmuted audio source.
When muted,  is displayed, and when unmuted,  is displayed.
 - ③ Moves to the next or previous song, file or chapter when [**iPod**], [**Apps**], [**MirrorLink**] or [**Bluetooth**] is selected as the source.
Moves to the next or previous preset channel when [**Radio**] is selected as the source.
 - ④ When **MIX** is on: switches the source screen to be controlled in the **Apps** or **MirrorLink** source.
When **MIX** is off: displays the Home screen in the **Apps** or the **MirrorLink** source.
This function is disabled in other sources.
 - ⑤ Switches between playback and pause when [**iPod**], [**Apps**], [**MirrorLink**] or [**Bluetooth**] is selected as the source.
Switches the frequency bands when [**Radio**] is selected as the source.
 - ⑥ Turns the screen off. To turn it back on, tap anywhere on the screen or press the **Home**, **Menu** or **Back** buttons.
- When you turn the ignition switch off (ACC OFF) and then turn it on again (ACC ON), these settings will be reset.

Starting procedure

- 1 Press the Home button to display the Home screen.
- 2 Tap [Radio] on the Home screen.
➔ For details, refer to *Home screen* on page 12.
- 3 Use the touch panel keys on the screen to control the radio.

Reading the screen



- 1 **Preset channel keys**
➔ For details, refer to *Storing the strongest broadcast frequencies* on page 17.
- 2 **Current broadcast information**
The following information is displayed:
 - : Programme service (PS) name
 - : PTY information
 - : Song title
 - : Artist name
- 3 **TRFC indicator**
Shows the status of traffic announcements.
➔ For details, refer to *Interruption icon status* on page 19.
- 4 **NEWS indicator**
Shows the status of news programmes.
➔ For details, refer to *Interruption icon status* on page 19.
- 5 **TEXT indicator**
Shows when radio text is received.

- 6 **STEREO indicator**
Shows that the frequency selected is being broadcast in stereo.
- 7 **Signal level indicator**
Shows the signal strength of the selected frequency.
- 8 **Frequency indicator**
- 9 **Frequency scale**
- 10 **Current time**

Using the touch panel keys



- 1 Recalls the desired broadcast frequency. Holding down the key stores the current tuning frequency in memory.
➔ For details, refer to *Recalling broadcast frequencies* on page 17.
- 2 Switches the band between FM1, FM2 and FM3. Also switches to the FM band while receiving the MW/LW band.
- 3 Switches to the MW/LW band while receiving the FM band.
- 4 Searches for an RDS station using PTY information.
➔ For details, refer to *Searching for an RDS station using PTY information* on page 18.
- 5 Raises frequencies in one-step increments. Holds down the key and the tuner will scan frequencies until a broadcast strong enough for good reception is found.

Using the radio


- ⑥ Lowers frequencies in one-step increments. Holds down the key and the tuner will scan frequencies until a broadcast strong enough for good reception is found.
- ⑦ Switches the reception level.
 - ➔ For details, refer to *Tuning in to strong signals* on page 17.
- ⑧ Turns news programme interruption on and off.
 - ➔ For details, refer to *Using news programme interruption* on page 19.
- ⑨ Turns the TA (traffic announcement standby) function on and off.
 - ➔ For details, refer to *Receiving traffic announcements* on page 18.
- ⑩ Switches the sound quality while receiving the FM band.
 - ➔ For details, refer to *Switching the sound quality* on page 17.
- ⑪ Displays the radio text (when radio text is received).
 - ➔ For details, refer to *Displaying radio text* on page 18.
- ⑫ Stores the strongest broadcast frequencies.
 - ➔ For details, refer to *Storing the strongest broadcast frequencies* on page 17.
- If you touch and hold the ⑧, ⑨, ⑪, ⑫ icons, pop-up text explaining the function of the icon is displayed.

Using the functions

Storing the strongest broadcast frequencies

This function automatically assigns frequencies with good reception to the preset channels in the selected band.

You can update six channels in each band.

- Storing broadcast frequencies may replace broadcast frequencies you have already saved.
- The lowest frequency is registered for channels that could not be registered automatically.
- Tap .

Recalling broadcast frequencies

- Tap any frequency on the preset channel keys.

Tuning in to strong signals


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

- Tap  or  to switch the reception level between the following levels:

FM:  (OFF)  (LEVEL1)  (LEVEL2)

 (LEVEL3)  (LEVEL4)

MW/LW:  (OFF)  (LEVEL1)

 (LEVEL2)

- The highest level setting allows reception of only the strongest stations, while lower levels allow the reception of weaker stations.

Switching the sound quality

You can switch the sound quality mode while receiving the FM band.

- Tap  to changes the setting as follows:

- **STANDARD** (default):
Sets to the normal sound quality mode.
- **STABLE**:
Sets to the noise suppression mode (emphasis on monaural output, etc.).
- **Hi-Fi** :
Sets to the high sound quality mode (emphasis on stereophonic output, etc.).

- To enable the setting, you have to restart [Radio] source.

RDS functions

The functions related to RDS (Radio Data System) are available only in areas with FM stations broadcasting RDS signals. Even if this product is receiving an RDS station, not all the functions related with RDS will be available.

Displaying radio text

This tuner can display radio text data transmitted by RDS stations, such as station information, the title of the currently broadcast song and the name of the artist.

When no radio text is received, "No Text" is displayed.

- Tap 



The "Radio Text" screen appears.

- Touch and hold the [Memo] key while receiving the radio text to store the text in memory. You can call the text later by tapping the [Memo] key.

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).

- Tap  to changes the setting as follows:

-  (default): Turns off the TA function.
- : Turns on the TA function.

Setting the volume for traffic announcements

- Use the Volume (+/-) 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.

Searching for an RDS station using PTY information

You can search for general types of broadcasting programmes.

- 1 Tap  to open the search menu.

- 2 Tap  or  to select a programme type.

There are four programme types.

News&Info, Popular, Classics, Others

- 3 Tap [Start] to begin the search.

The product searches for and displays stations broadcasting that type of programme service name. PTY (programme type ID code) information is listed in the following section.

- To cancel the search, tap [Cancel].

PTY list

News&Info

News (News), **Affairs** (Current affairs), **Info** (Information), **Sport** (Sports), **Weather** (Weather), **Finance** (Finance)

Popular

Pop Mus (Pop music), **Rock Mus** (Rock music), **Easy Mus** (Easy listening), **Oth Mus** (Other music), **Jazz** (Jazz), **Country** (Country music), **Nat Mus** (National music), **Oldies** (Oldies music), **Folk Mus** (Folk music)

Classics

L. Class (Light classical), **Classic** (Classical)

Others

Educate (Education), **Drama** (Drama), **Culture** (Culture), **Science** (Science), **Varied** (Varied), **Children** (Children's), **Social** (Social affairs), **Religion** (Religion), **Phone In** (Phone in), **Touring** (Travel), **Leisure** (Leisure), **Document** (Documentaries)

- The programmes of some stations may differ from that indicated by the transmitted PTY.

Using the radio



- If no station is broadcasting the type of programme you searched for, "**Not Found**" is displayed for about four seconds and then the tuner returns to the original station.

Using news programme interruption

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

- Tap .

Tapping  changes the setting as follows:




-  (default):
Turns off news programme interruption.
- :
Turns on news programme interruption.

Interruption icon status




When the information interruption setting is enabled, the interruption icon is displayed. The interruption icon display may change depending on the programme reception status.

- ➔ For details of the operation, refer to *Receiving traffic announcements* on page 18.
- ➔ For details of the operation, refer to *Using news programme interruption* on page 19.

TRFC indicator

Indicator	Meaning
	The information interruption is turned ON, and currently receiving data.
	The information interruption is ON, but you will not receive data since there is none.
	Even if the information interruption is turned OFF, data is still received. (You can receive when information interruption is turned ON.)

NEWS indicator

Indicator	Meaning
	The information interruption is turned ON, and currently receiving data.
	The information interruption is ON, but you will not receive data since there is none.
	Even if the information interruption is turned OFF, data is still received. (You can receive when information interruption is turned ON.)

[iPod] source is enabled only when an iPod or iPhone with 30-pin connector is connected to this product. When an iPhone with Lightning connector is connected, [iPod] is disabled. Please use the CarMediaPlayer to play music or videos in the **AppRadio Mode**.

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

Starting procedure

1 Set “App Connection Settings” to “Others”.

- For detailed procedures, refer to *Setting the type of the mobile device to be connected* on page 48.

2 Connect your iPod.

- For details, refer to *Connect your iPhone with 30-pin connector* on page 9.

3 Press the Home button to display the Home screen.

4 Tap [iPod] on the Home screen.

- For details, refer to *Home screen* on page 12.

5 Select the song (episode) or video source you want to play, and switch the operation screen.

- For details, refer to *Selecting song (episode) or video sources from the playlist screen* on page 23.

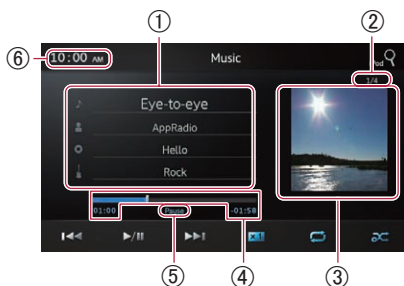
6 Use the touch panel keys on the screen to control your iPod.

- For details, refer to *Using the touch panel keys* on page 21.

- ☐ When playing music with an application installed to an iPhone, the playback information may be displayed. You may be able to operate the playback information with the touch panel keys.

Reading the screen

Music



① Current song (episode) information

• 🎵 : Song title (episode)

Shows the title of the current song.

When a podcast is played, the episode is displayed (when available).

• 👤 : Artist name (podcast title)

Shows the artist name currently playing.

When a podcast is played, the podcast title is displayed (when available).

• 📀 : Album title (release date)

Shows the title of the album for the song.

When a podcast is played, the release date is displayed (when available).

• 🎵 : Genre indicator

Shows the genre of the current song (when available).

- ☐ If there is no corresponding information, the following messages are displayed.

- **Artist name** : No Name

- **Album title** : No Title

- **Genre indicator** : No Genre

② Song number

Shows the song number and the total number of songs.

③ Album artwork

Album art work for the current song (episode) is displayed if it is available.

④ Play time

Shows the elapsed time, remaining time and time bar of the current song (episode).

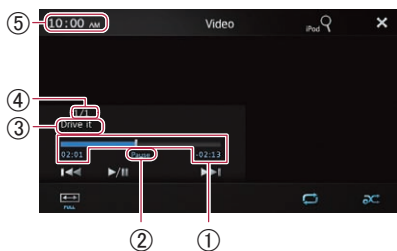
⑤ Pause indicator

Appears the pause indicator while pausing playback.

⑥ Current time

Playing iPod music and video

Video



① Play time

Shows the elapsed time, remaining time and time bar of the current video.

② Pause indicator

Appears the pause indicator while pausing playback.

③ Current video title

Shows the title of the current video.

If there is no corresponding information, "No Name" is displayed.

④ File number

Shows the file number and the total number of files.

⑤ Current time

Using the touch panel keys

Music



① Displays the playlist screen.

• **🎵 : Song list**

Displays the songs in the connected iPod in alphabetical order.

• **👤 : Artist list**

Displays a list of all artists saved in the connected iPod.

• **📀 : Album list**

Displays a list of all albums saved in the connected iPod.

• **🎵 : Genre list**

Displays a list of all genres saved in the connected iPod.

➔ For details, refer to *Narrowing down song (episode) or video sources with the list* on page 22.

② Displays the album playlist.

➔ For details, refer to *Narrowing down song (episode) or video sources with the list* on page 22.

③ Displays the playlist screen that can be used to search for song or video sources in your iPod.

➔ For details, refer to *Selecting song (episode) or video sources from the playlist screen* on page 23.

④ Plays songs in random order.

➔ For details, refer to *Random play (shuffle)* on page 23.

⑤ Selects the repeat range.

➔ For details, refer to *Repeating playback* on page 22.

⑥ Changes the audiobook speed.

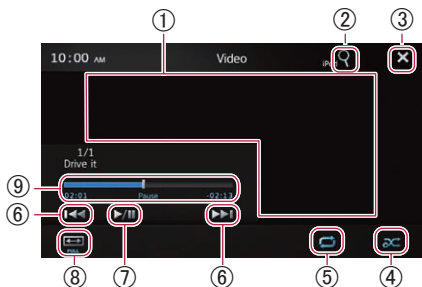
➔ For details, refer to *Changing the audiobook speed* on page 23.

⑦ Tapping the **⏮** key skips to the start of the next song or chapter. Tapping the **⏮** key once skips to the start of the current song or chapter. Tapping the **⏮** key twice quickly will skip to the previous song or chapter. Touching and holding the **⏮** key or the **⏭** key performs fast reverse or fast forward.

⑧ Switches between playback and pause.

⑨ Performs fast reverse or fast forward by dragging the playback point.

Video



- ① Switches to full-screen mode.
- ② Displays the playlist screen that can be used to search for song (episode) or video sources in your iPod.
 - ➔ For details, refer to *Selecting song (episode) or video sources from the playlist screen* on page 23.
- ③ Hides the touch panel keys. If you want to display the touch panel keys again, tap anywhere on the screen.
- ④ Plays videos in random order.
 - ➔ For details, refer to *Random play (shuffle)* on page 23.
- ⑤ Selects the repeat range.
 - ➔ For details, refer to *Repeating playback* on page 22.
- ⑥ Tapping the key skips to the start of the next video or chapter. Tapping once skips to the start of the current video or chapter. Tapping twice quickly will skip to the previous video or chapter. Touching and holding or performs fast reverse or fast forward.
- ⑦ Switches between playback and pause.
- ⑧ Changes the screen mode.
 - ➔ For details, refer to *Changing the wide screen mode* on page 24.
- ⑨ Performs fast reverse or fast forward by dragging the playback point.

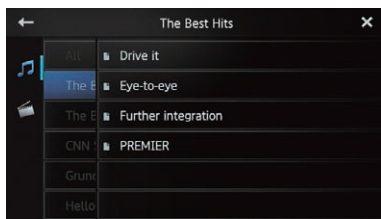
Using the functions

Narrowing down song (episode) or video sources with the list

Tapping an item on a list allows you to search for song (episode) or video sources and play them in your iPod.

1 Tap the category list you want to search.

- ➔ For details, refer to *Using the touch panel keys* on page 21.
- If you tap the key, return to the playback screen.
- If you tap the key in the playlist, the previously selected menu screen is displayed.
- If you tap a category list in the upper folder, the playlist screen changes to the selected category.



2 Search for the song (episode) you want to play from the playlist.

- ➔ For details, refer to *Selecting song (episode) or video sources from the playlist screen* on page 23.

Repeating playback

There are two repeat play types for playback.

- **Tap .** Tapping changes the setting as follows:
 - (**All**): Repeats all songs or videos in the selected list.
 - (**One**): Repeats just the current song or video.




Playing iPod music and video

Random play (shuffle)

This function shuffles songs, albums or videos and plays them in random order.

- Tap .


Tapping  changes the setting as follows:




-  (Off): Does not shuffle.
-  (Songs): Plays back songs or videos in random order within the selected list.
-  (Albums): Selects an album randomly, and then plays back all songs in that album in order.

Changing the audiobook speed

The playback speed can be changed while playing an audiobook.

- Tap .

Tapping  changes the setting as follows:

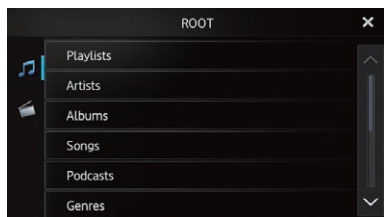
-  (Normal): Playback in normal speed.
-  (Faster): Playback faster than normal speed.
-  (Slower): Playback slower than normal speed.


Selecting song (episode) or video sources from the playlist screen

You can search for the song (episode) or video you want to play from the playlist screen.

1 Tap the  key to display the playlist screen.

2 Tap  or , then select the category you want to search for.



- If you tap the  key, return to the playback screen.

Category lists (for music):


- Playlists
- Artists
- Albums
- Songs
- Podcasts
- Genres
- Composers
- Audiobooks

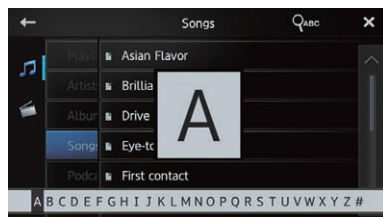
Category lists (for video):


- Video Playlists
- Movies
- Music Videos
- TV Shows
- Video Podcasts
- Rented Movies
- Video iTunesU

- Category items that do not correspond to the connected iPod are not displayed.

3 Tap the key to display the alphabet search screen.

- The  key is not displayed in the top category list or the song list.



- If you tap the  key in the playlist, the previously selected menu screen is displayed.
- If you tap a category list in the upper folder, the playlist screen changes to the selected category.

4 Tap the first letter of the title of the song/video you are looking for.

While searching, touch panel key operation is not available.

- To refine the search with a different letter, tap [**Cancel**].


5 Tap the title of the list that you want to play.

Repeat this operation until you find the desired song/video.

6 Start playback of the selected list.

Changing the wide screen mode

- Tap .

Tapping  to change the setting as follows:

- **Full (full screen)**: 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.
 - **Zoom (zoom)**: A 4:3 picture is enlarged in the same proportion both vertically and horizontally; ideal for a cinema-sized picture (wide screen picture).
 - **Normal (normal)**: A 4:3 picture is displayed normally, giving you no sense of disparity since its proportions are the same as that of the normal picture.
- You cannot operate this function while driving.
 - When a video is viewed in a wide screen mode that does not match its original aspect ratio, it may appear different.
 - Remember that using the wide mode feature of this system for commercial or public viewing purposes may constitute an infringement on the author's rights protected by Copyright Law.
 - The video image will appear coarser when viewed in "**Zoom**" mode.

Viewing/operating mobile device applications

Using Apps/MirrorLink source

This product provides the **AppRadio Mode**, the **MirrorLink** mode, and the **App Mode** for viewing and operating the mobile device applications that are installed in the mobile device connected.

Available modes change according to the connected device.



WARNING

Certain uses of a mobile device 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.

- 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 the **AppRadio Mode**, functionality through the product is limited while driving, with available functions determined by the App providers.
- Availability of the **AppRadio Mode** functionality is determined by the App provider, and not determined by Pioneer.
- The **AppRadio Mode** allows access to applications other than those listed (subject to limitations while driving), but the extent to which content can be used is determined by the App providers.

AppRadio Mode

When you connect a mobile device with the **AppRadio Mode** compatible applications (such as AppRadio app) installed, you can control applications for the mobile device directly on this product (**AppRadio Mode**).

You can view and operate the compatible applications via the display with multi-touch gestures like tapping, dragging, scrolling, and flicking.

AppRadio Mode for iPhone

You can automatically start the **AppRadio Mode** when the “**App launch assist**” setting is set to “**On**” (default).

The procedure changes depending on the type of your iPhone to be connected.

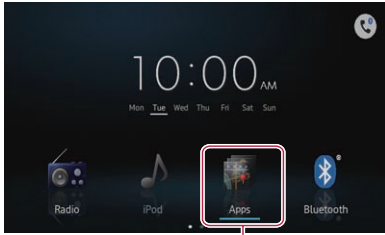
- For details of the App launch assist setting, refer to *Switching the App launch assist function (for iPhone)* on page 56.

1 Unlock your device and then connect your iPhone to this product.

- For details, refer to *Connecting and disconnecting mobile devices* on page 8.
- When an iPhone with 30-pin connector is connected, the application startup message appears and the AppRadio app launches, then the Application menu screen appears. Follow the procedure on step 4.
- When an iPhone with Lightning connector is connected, follow the next procedure.

2 Press the Home button to display the Home screen.

3 Tap [Apps] on the Home screen.



Apps in the AppRadio Mode (iPhone)

The application startup message appears and the AppRadio app launches, then the Application menu screen appears.

- ❑ When the AppRadio app does not launch, the “**App launch assist**” setting may set to “**Off**”. In this case, you have to operate your iPhone to launch the AppRadio app.

4 Tap the application icon to be used.



- ❑ Some applications may not launch depending on the state of the connected device. In that case, launch the application according to the application startup message.
 - ➔ When a black screen is displayed during viewing or operating mobile device applications, refer to *Problems with AppRadio Mode* screen on page 61.

AppRadio Mode for Android device

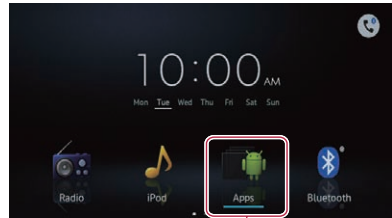
1 Unlock your device and then connect your device to this product.

- ➔ For details, refer to *Connecting and disconnecting mobile devices* on page 8.

The [Apps] icon on the Home screen will be active.

2 Press the Home button to display the Home screen.

3 Tap [Apps] on the Home screen.



Apps in the AppRadio Mode (Android)

The application startup message appears and the AppRadio app launches, then the Application menu screen appears.

4 Tap the application icon to be used.



- ❑ Some applications may not launch depending on the state of the connected device. In that case, launch the application according to the application startup message.
 - ➔ When a black screen is displayed during viewing or operating mobile device applications, refer to *Problems with AppRadio Mode* screen on page 61.

Viewing/operating mobile device applications

MirrorLink mode

When you connect a MirrorLink device with the compatible applications installed, you can control the applications for the mobile device directly on 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 by some models of the MirrorLink device to be connected.

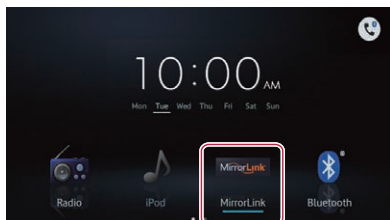
1 Unlock your device and then connect your device to this product.

- ➔ For details, refer to *Connect your MirrorLink device* on page 11.

The [**Apps**] icon on the Home screen will change to [**MirrorLink**].

2 Press the Home button to display the Home screen.

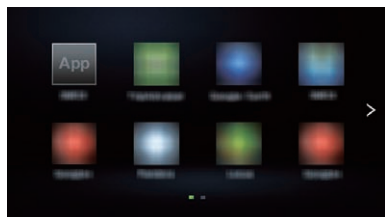
3 Tap [MirrorLink] on the Home screen.



MirrorLink

If the launcher application is installed in the MirrorLink device, the application launches. If not, the Application menu screen appears.

4 Tap the application icon to be used.



- ❑ Some applications may not launch depending on the state of the connected device. In that case, launch the application according to the application startup message.

App Mode

When a mobile device is wired to this product, you can view the screen image currently displayed on the mobile device (iPhone with Lightning connector, Android device) or the screen image of the application currently used (iPhone with 30-pin connector) is displayed with this product's display.

- ❑ When you touch this product's display in the **App Mode**, "Don't Touch" mark appears on the upper right corner of the screen.

App Mode for iPhone with Lightning connector and Android device

Both the Bluetooth wireless technology and the compatible applications are not required in the **App Mode**. You can view any screen image of the wired device with this product's display (mirroring function).

- ❑ Before using the **App Mode** for iPhone with Lightning connector, make sure that the "**App launch assist**" is set to "**Off**".
 - ➔ For details of the App launch assist setting, refer to *Switching the App launch assist function (for iPhone)* on page 56.

1 Unlock your device and then connect your device to this product.

- ➔ For details, refer to *Connecting and disconnecting mobile devices* on page 8.

The [**Apps**] icon on the Home screen will be active.

2 Press the Home button to display the Home screen.

3 Tap [**Apps**] on the Home screen.

The current screen image of the connected device appears on the display.

4 Launch an application to be used on iPhone side or Android device side.

- ❑ If you lock the connected device in the **App Mode**, the mirroring function turns off and the Home screen appears on this product's display.

App Mode for iPhone with 30-pin connector

In the **App Mode**, you can view the screen image of the **App Mode** compatible applications in the connected iPhone with this product's display.

- ❑ Before using the **App Mode**, make sure that the "**App launch assist**" is set to "**Off**".
 - ➔ For details of the App launch assist setting, refer to *Switching the App launch assist function (for iPhone)* on page 56.

1 Unlock your device and then connect your device to this product.

- ➔ For details, refer to *Connecting and disconnecting mobile devices* on page 8.

The [**Apps**] icon on the Home screen will be active.

2 Press the Home button to display the Home screen.

3 Tap [**Apps**] on the Home screen.

A message appears on the black screen.

4 Launch an application to be used on iPhone side.

Registering and connecting a Bluetooth device

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

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

Preparing communication devices

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

- ❑ When you use the **AppRadio Mode** to connect an Android device, the device needs to support Serial Port Profile (SPP). When connecting a device with SPP, you must perform the pairing or connection from this product.
- ❑ When you use audio device with the Bluetooth function, the device needs to support Advanced Audio Distribution Profile (A2DP) or A2DP with Audio/Video Remote Control Profile (AVRCP). When connecting a device with A2DP/AVRCP, you must perform the pairing or connection from this product.
- ❑ When this product is turn off, the Bluetooth connection is also disconnected. When this product restarts, the system automatically attempts to reconnect the previously connected device.
- ❑ The Bluetooth connection menu cannot be selected while driving.

Registering your Bluetooth devices

You need to register your devices featuring Bluetooth wireless technology when you connect them 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 you try to register more than three devices, the system will ask you to select one of the registered devices to delete.

➔ For details, refer to *Deleting a registered device* on page 31.

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.

1 Activate the Bluetooth wireless technology on your devices.

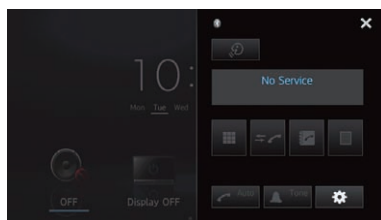
For some Bluetooth devices, no specific action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your devices.

2 Tap on the Home screen.

➔ For details, refer to *Home screen* on page 12.

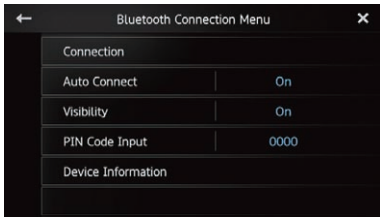
The phone menu screen appears.

3 Tap on the phone menu.



The “**Bluetooth Connection Menu**” screen appears.

4 Tap [Connection] on the “Bluetooth Connection Menu”.




The registered device list screen appears.

5 Tap on the registered device list.

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




- When the device is already connected,  becomes inactive.
- Up to 30 devices will be listed in the order that the devices are found.

6 Wait until your Bluetooth device appears in the list.

- If you want to switch between the device names and Bluetooth device addresses, tap [Device Name].
- If you cannot find the Bluetooth device that you want to connect, check that the device is waiting for a Bluetooth wireless technology connection.

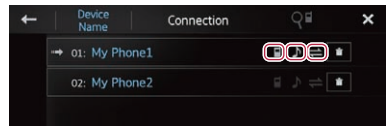
7 Tap the Bluetooth device name you want to register.




- If a PIN code input is required, enter a PIN code. (The default PIN code is “0000”.)
- If you tap , the system starts searching for Bluetooth devices waiting for connection, and displays them in list format when any devices are detected.

When the message “Paired” appears, the device is registered in the system.

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

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



Icons	Conditions
	Illuminates when your mobile device is successfully connected with the HFP (Hands-Free Profile).
	Illuminates when your audio device is successfully connected with the A2DP (Advanced Audio Distribution Profile)/AVRCP (Audio/Video Remote Control Profile).
	Illuminates when the Bluetooth connection is established with the SPP (Serial Port Profile).

- After pairing, the phone book registered in the device may be automatically transmitted to this product.

Registering and connecting a Bluetooth device

Pairing from your Bluetooth devices

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

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

➔ For details, refer to *Switching product visibility* on page 34.

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 device.

- ❑ The device name is **“AppRadio SPH-DA110”**.
- ❑ 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.

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.

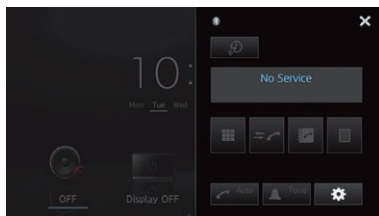
- ❑ If a registered phone is deleted, all the phone book entries and call history lists that correspond to the phone will be also cleared.

1 Tap on the Home screen.

- ➔ For details, refer to *Home screen* on page 12.

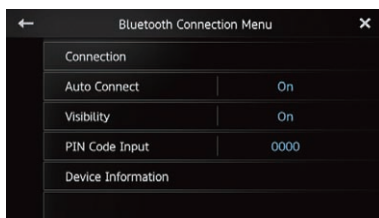
The phone menu screen appears.

2 Tap on the phone menu.



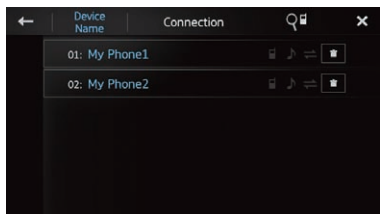
The **“Bluetooth Connection Menu”** screen appears.

3 Tap [Connection] on the “Bluetooth Connection Menu”.



The registered device list screen appears.

- 4 Tap  for the registered device you want to delete.



The message “Delete OK?” appears.

- 5 Tap [Yes] to delete the device.

The message “Deleting” appears, and the device is deleted.

Connecting a registered Bluetooth device manually

This product automatically connects the Bluetooth device selected as the target of connection. However, connect the Bluetooth device manually in the following cases:

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

If you start connection manually, carry out the following procedure. You can also connect the Bluetooth device by having this product detect it automatically.

- 1 **Activate the Bluetooth wireless technology on your devices.**

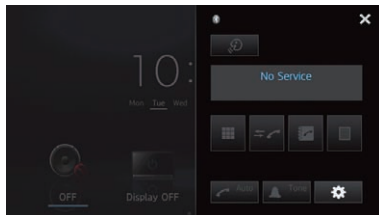
For some Bluetooth devices, no specific action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your devices.

- 2 Tap  on the Home screen.

➔ For details, refer to *Home screen* on page 12.

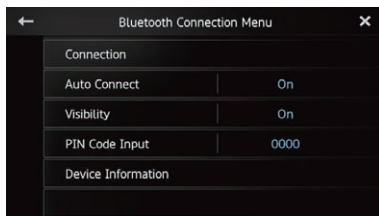
The phone menu screen appears.

- 3 Tap  on the phone menu.




The “Bluetooth Connection Menu” screen appears.

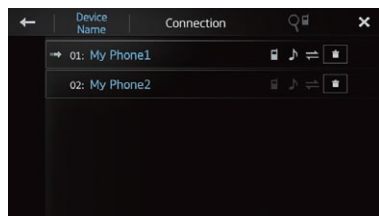
- 4 Tap [Connection] on the “Bluetooth Connection Menu”.



The registered device list screen appears.

- 5 **Tap the Bluetooth device name you want to connect.**

When a connection is successfully established,  is displayed on the selected device name line.



- ☐ If a device is already connected with the same profile, that device is disconnected and the new device will be connected.

Registering and connecting a Bluetooth device

Setting the Bluetooth auto connect function

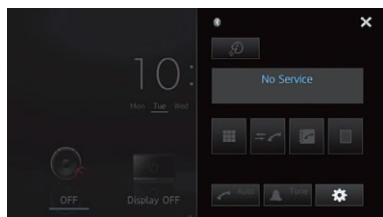
If this function is set on, a connection between your Bluetooth device and this product will take place automatically as soon as the two devices are less than a few metres apart. Initially, this function is set to "On".

1 Tap on the Home screen.

➤ For details, refer to *Home screen* on page 12.

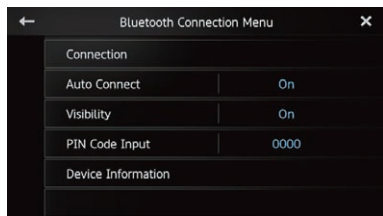
The phone menu screen appears.

2 Tap on the phone menu.



The "Bluetooth Connection Menu" screen appears.

3 Tap [Auto Connect] to turn automatic connection on.



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

- To turn automatic connection off, tap [Auto Connect] again.

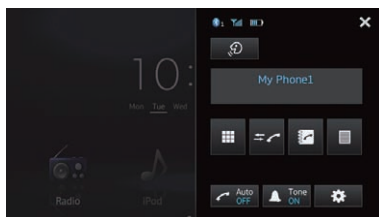
Disconnecting a Bluetooth device

1 Tap on the Home screen.

➤ For details, refer to *Home screen* on page 12.

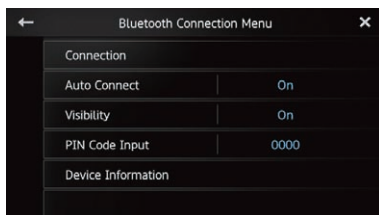
The phone menu screen appears.

2 Tap on the phone menu.




The "Bluetooth Connection Menu" screen appears.

3 Tap [Connection] on the "Bluetooth Connection Menu".



The registered device list screen appears.

4 Tap the Bluetooth device name you want to disconnect.

When the device is disconnected,  is disappeared from the selected device name line.

- To connect the device, tap the Bluetooth device name again.

Switching product visibility

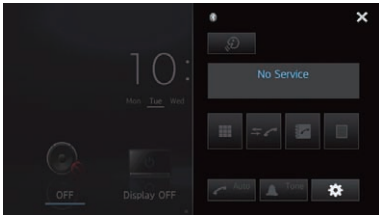
This function sets whether or not to make this product visible to the other device. Initially, this function is set to “On”.

1 Tap on the Home screen.

- ➔ For details, refer to *Home screen* on page 12.

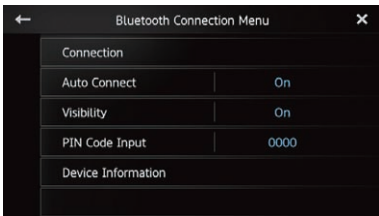
The phone menu screen appears.

2 Tap on the phone menu.



The “Bluetooth Connection Menu” screen appears.

3 Tap [Visibility] to turn visibility off.



- To turn visibility on, tap [Visibility] again.

Changing a PIN code

When connecting your Bluetooth device to this product via Bluetooth wireless technology, you may be required to enter a PIN code on your Bluetooth device. You can change the PIN code.

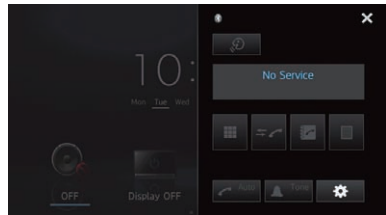
- The default PIN code is “0000”.

1 Tap on the Home screen.

- ➔ For details, refer to *Home screen* on page 12.

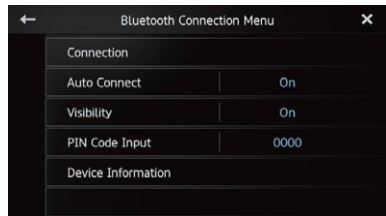
The phone menu screen appears.

2 Tap on the phone menu.



The “Bluetooth Connection Menu” screen appears.

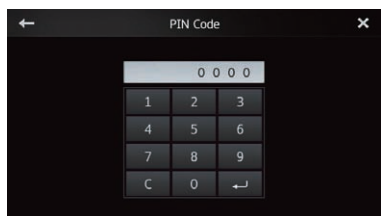
3 Tap [PIN Code Input] on the “Bluetooth Connection Menu”.



The “PIN Code” screen appears.

Registering and connecting a Bluetooth device



- 4 Enter an arbitrary PIN code (up to 8 digits).



- 5 Tap  to store the PIN code.

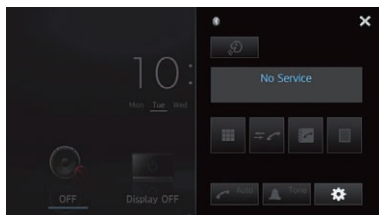
Displaying Bluetooth device address

This product displays its Bluetooth device address.

- 1 Tap  on the Home screen.
 For details, refer to *Home screen* on page 12.

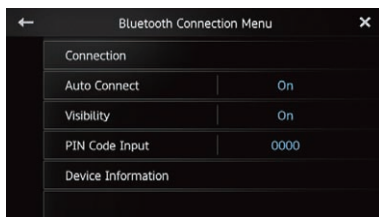
The phone menu screen appears.

- 2 Tap  on the phone menu.



The “Bluetooth Connection Menu” screen appears.

- 3 Tap [Device Information] on the “Bluetooth Connection Menu”.



The “Device Information” screen appears. The “Device Name” and “BD Address” are displayed.

You can control the Bluetooth connection of the audio device that supports Advanced Audio Distribution Profile (A2DP) or A2DP with Audio/Video Remote Control Profile (AVRCP), to operate the audio source. To connect using the Bluetooth function, you must first use the audio device to pair this product with the device.

➔ For detailed procedures, refer to *Registering your Bluetooth devices* on page 29.

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

Starting 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 Home screen.

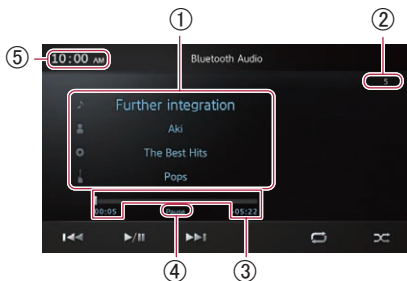
3 Tap [Bluetooth] on the Home screen.

➔ For details, refer to *Home screen* on page 12.

4 Use the touch panel keys on the screen to control your audio device.

- When a device is connected via Bluetooth profiles (A2DP and AVRCP), the playback information may be displayed. You may be able to operate the playback information with the touch panel keys.
- When you use your mobile device as a Bluetooth audio device, the Bluetooth audio sound may not output sometimes when the mobile device is wired.

Reading the screen



① Current song information

- **[🎵] : Song title**
Shows the title of the current song (when available).
- **[👤] : Artist name**
Shows the artist name currently playing (when available).
- **[📀] : Album title**
Shows the title of the album for the song (when available).
- **[🎵] : Genre indicator**
Shows the genre of the current song (when available).
 - When a device is connected without AVRCP, "No data provided" is showing on this space.
 - If there is no corresponding information for any item, "No data provided" is also showing.

② Song number

Shows the song number.

③ Play time

Shows the elapsed time, remaining time and time bar of the current song.

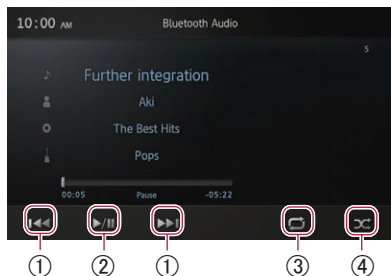
④ Pause indicator

Appears the pause indicator while pausing playback.

⑤ Current time

Using the Bluetooth audio player

Using the touch panel keys



- ① Tapping the **▶▶** key skips to the start of the next song. Tapping the **◀◀** key once skips to the start of the current song. Tapping the **◀◀** key twice quickly will skip to the previous song.
- ② Switches between playback and pause.
- ③ Tapping the **🔄** key switches the range of repeat play (a song or all songs).
- ④ Tapping the **🎲** key shuffles songs or albums and plays them in random order.

! CAUTION

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

You can control the Bluetooth connection of the mobile device, and make a call using the incoming or outgoing call histories, transferred phone book, or by dialling.

To connect using the hands-free phoning function, you must first use the mobile device to pair this product with the mobile device.

➔ For detailed procedures, refer to *Registering your Bluetooth devices* on page 29.

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

Starting procedure

1 Press the Home button to display the Home screen.

2 Tap  on the Home screen.

➔ For details, refer to *Home screen* on page 12.

The phone menu screen appears.

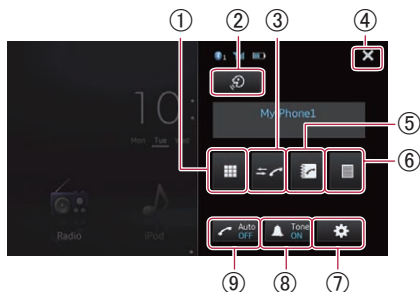
Reading the screen



- ① **Number of the Bluetooth connection device**
- ② **Reception status of the mobile device**
- ③ **Battery status of the mobile device**
- ④ **Name of connected device**

❑ Depending on the device, the phone menu screen may be different from the actual screen.

Using the touch panel keys



- ① Switches to the mode for entering phone numbers.
➔ For details, refer to *Direct dialling* on page 39.
- ② Launches the voice recognition function when iPhone is connected via the Bluetooth wireless technology.
➔ For details, refer to *Using the voice recognition function (for iPhone)* on page 43.
- ③ Switches to the call history list.
➔ For details, refer to *Dialling from the history* on page 40.
- ④ Closes the phone menu screen and return the previous menu screen.
- ⑤ Switches to the phone book mode.
➔ For details, refer to *Calling a number in the phone book* on page 39.
➔ For details, refer to *Selecting a number using alphabet search mode* on page 40.
- ⑥ Displays the preset dial screen.
➔ For details, refer to *Using the preset dial lists* on page 42.
- ⑦ Displays the **"Bluetooth Connection Menu"**.
➔ For details, refer to *Registering your Bluetooth devices* on page 29.
- ⑧ Turns the ring tone for incoming calls on or off.
➔ For details, refer to *Switching the ring tone* on page 41.
- ⑨ Turns automatic answering on or off.
➔ For details, refer to *Answering a call automatically* on page 41.

Using hands-free phoning


Adjusting the phone volume

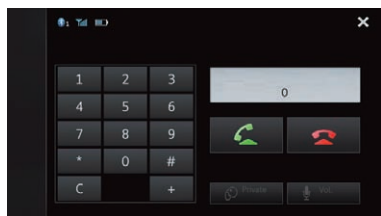
During the hands-free phoning, you can adjust the phone volume using the **Volume (+/-)** button when you are talking. The ring tone volume also can be adjusted while the phone rings.

Making a phone call

You can make a phone call in many different ways.


Direct dialling

- 1 Tap .
- 2 Tap the number keys to enter the phone number.
 - If you tap the **C** key, the entered number is deleted one digit at a time from the end of the number.
 - If you touch and hold the **C** key, the entered number is cleared.



3 Tap .

Dialling starts.

- To cancel the call, tap .

4 Tap to end the call.

Calling a number in the phone book

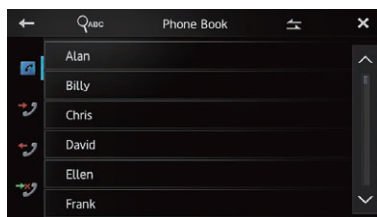
You can select and call a contact from the phone book entries transferred to this product.

- ❑ Before using this function, you need to transfer the phone book entries stored in your mobile device to this product.
 - ➔ For details, refer to *Phone book transfers* on page 44.
- ❑ Depending on the settings of the connected mobile device, the phone book may not be automatically transferred to this product. When the phone book is not transferred, transfer the phone book from the mobile device.

1 Tap .

The “Phone Book” screen appears.

2 Tap the desired name on the list.



The details screen of the phone book appears.

3 Tap the phone number you want to dial.

The dial confirm screen appears.

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

4 Tap .

Dialling starts.

- To cancel the call, tap .

5 Tap to end the call.

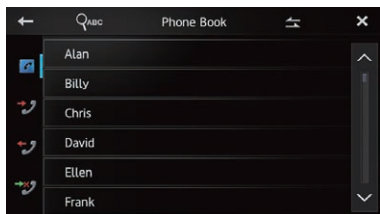
Selecting a number using alphabet search mode

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

1 Tap .



The “Phone Book” screen appears.

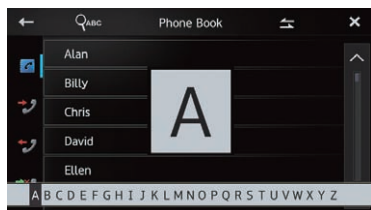
2 Tap to switch to the alphabet search mode.



3 Tap the first letter of the entry you are looking for.

The screen jumps to the top of the page displaying the entries that start with the selected letter.

- If you want to change the character to Russian, tap  on the alphabet search mode. To return to English, tap  again.
- The order of the first name and last name may be different from that of the mobile device.



4 Tap the list to display the phone number list of the selected entry.

The details screen of the phone book appears.

5 Tap the phone number you want to dial.

The dial confirm screen appears.

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

6 Tap .

Dialling starts.

- To cancel the call, tap .

7 Tap to end the call.

Dialling from the history

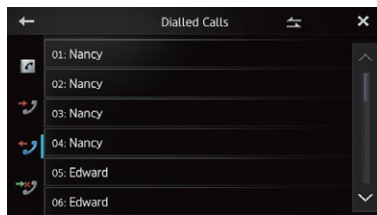
The most recent calls made dialled, received and missed are stored in the call history list. You can browse the call history list and call numbers from it.

- Each call history saves 80 calls per registered mobile device. If the number of calls exceeds 80, the oldest entry will be deleted.

1 Tap .

The latest updated call history list appears.

2 Tap (Received calls), (Dialled calls) or (Missed calls).



3 Tap an entry on the list.

The dial confirm screen appears.

4 Tap .

Dialling starts.

- To cancel the call, tap .

5 Tap to end the call.


Using hands-free phoning

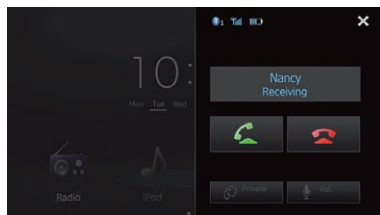
Answering an incoming call

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

- ❑ You can set this product to automatically answer incoming calls. If not set to automatically answer incoming calls, you will have to answer the calls manually.
 - ➔ For details, refer to *Answering a call automatically* on page 41.
- ❑ The registered name appears if the phone number of the received call is already registered in “**Phone book**”.

1 To answer an incoming call, tap

- If you tap  an incoming call is rejected. The rejected call is recorded in the missed call history list.



2 Tap to end the call.


Using advanced functions

Answering a call automatically

You can enable or disable auto answer for handling incoming calls.

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

- Tap .

Tapping  changes the setting as follows:

- **OFF** (default):
No automatic response. Respond manually.
- **ON**:
Answers incoming calls automatically.

Switching the ring tone

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

- Tap .

Tapping  changes the setting as follows:

- **ON** (default):
The ring tone sounds.
- **OFF**:
The ring tone is muted.

Storing a phone number

You can easily store up to 6 phone numbers as presets from the phone book and the call history list.

- **Touch and hold the desired phone number in the phone book or the call history list.**

The phone number is registered on the “**Preset Dial**” list.

Using the preset dial lists

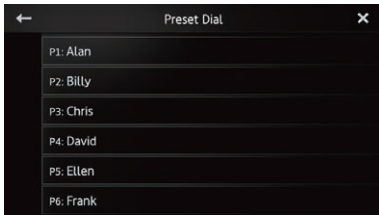
1 Tap .

The “Preset Dial” list appears.

2 Tap one of preset dial keys to select the desired phone number.

The dial confirm screen appears.

- If you want to delete a preset phone number, touch and hold the preset phone number.



3 Tap .

Dialling starts.

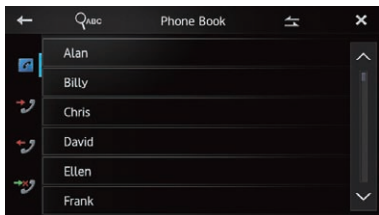
- To cancel the call, tap .

4 Tap to end the call.

Inverting the names

You can invert the order of first and last names in the phone book and the call history list.

1 Tap on the phone book or the call history list.



The message “Would you like to invert all names?” appears.


2 Tap [Yes] to invert the names.

The order of all first and last names is inverted.

Setting the private mode

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

• Tap .

Tapping  changes the setting as follows:

- **OFF** (default):
Hands-free phoning
- **ON**:
Talk directly on your mobile device

Adjusting the other party's listening volume

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

• Tap .

Tapping  switches between the three levels:



- This function is not effective when the private mode is set to “ON”.
 - ➔ For details, refer to *Setting the private mode* on page 42.
- This function can be performed even while talking on the phone.
- Settings can be stored for each device.

Using hands-free phoning

Using the voice recognition function (for iPhone)

You can use the voice recognition function of iPhone.

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

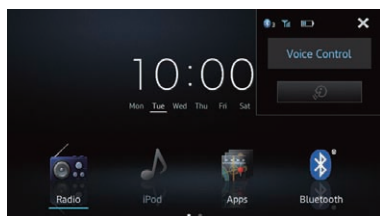
1 Tap on the phone menu screen.

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

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

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

2 Tap on the voice control screen.



Notes for hands-free phoning

General notes

- Connection to all mobile devices featuring Bluetooth wireless technology is not guaranteed.
- The line-of-sight distance between this product and your mobile device 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 devices, the ring sound may not be output from the speakers.
- If private mode is selected on the mobile device, hands-free phoning may be disabled.

Registration and connection

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

Making and receiving calls

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

The received call history and the dialled number history

- Calls made or editing performed only on your mobile device will not be applied to the dialled number history or phone book in this product.
- 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 device, no history data will be recorded in this product.

Phone book transfers

- You can register up to five numbers per entry.
- If there are more than 1 000 phone book entries on your mobile device, all entries may not be downloaded completely.
- With some mobile devices, 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 device.
- Depending on the mobile device, this product may not display the phone book correctly. (Some characters may be garbled, or first and last names may be reversed.)
- If the phone book in the mobile device contains image data, the phone book may not be transferred correctly. (Image data cannot be transferred from the mobile device.)
- Depending on the mobile device, phone book transfer may not be available.

Customising preferences

Customising the audio settings

❑ The audio settings cannot be set when the source is set to "OFF".

1 Press the Home button to display the Home screen.

2 Flick the scroll area on the Home screen.

➔ For details, refer to *Home screen* on page 12.

3 Tap [Settings] on the Home screen.


The setting menu screen appears.

4 Tap .

The "Audio" screen appears.



5 Tap the item that you want to change the settings for.

6 After changing the settings, tap  to return the Home screen.

Using fader/balance adjustment

You can select a fader/balance setting that provides an ideal listening environment in all occupied seats.



1 Display the "Audio" screen.



➔ For details, refer to *Customising the audio settings* on page 45.

2 Tap [Fader/Balance].

When "Rear Speaker" in the "System" settings is set to "Subwoofer", "Balance" will be displayed instead of "Fader/Balance" and front/rear speaker balance cannot be adjusted.

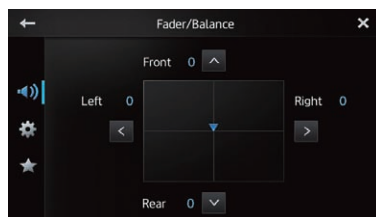
➔ For details, refer to *Setting the rear output* on page 49.



3 Tap  or  to adjust front/rear speaker balance.



Each time you tap  or , the front/rear speaker balance moves towards the front or the rear.

"Front 15" to "Rear 15" is displayed as the front/rear speaker balance moves from front to rear.

Set "Front" and "Rear" to "0" when using a two-speaker system.



4 Tap  or  to adjust left/right speaker balance.

Each time you tap  or , the left/right speaker balance moves towards the left or the right.

"Left 15" to "Right 15" is displayed as the left/right speaker balance moves from left to right.

Using the equaliser

The equaliser lets you adjust equalisation to match 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 (Super Bass) is a curve in which only low-pitched sound is boosted.

Powerful (default) is a curve in which low-pitched and high-pitched sounds are boosted.

Natural is a curve in which low-pitched and high-pitched sounds are slightly boosted.

Vocal is a curve in which the midrange, which is the human vocal range, is boosted.

Flat is a flat curve in which nothing is boosted.

Custom1 is an adjusted equaliser curve that you create. A separate custom curve can be created for each source.

Custom2 is an adjusted equaliser curve that you create. If you select this curve, the effect is applied to all audio sources.

- 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 Display the “Audio” screen.

- ➔ For details, refer to *Customising the audio settings* on page 45.

2 Tap [Graphic EQ].

3 Tap the equaliser curve you want.



Adjusting the 5-band graphic equaliser

You can adjust the level of each band for the equaliser curves.

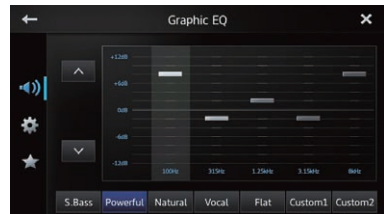
- A separate “Custom1” curve can be created for each source. If you make adjustments when a curve other than “Custom2” is selected, the equaliser curve settings will be recorded in “Custom1”.
- A “Custom2” curve that is common for all sources can be created. If you make adjustments when the “Custom2” curve is selected, the “Custom2” curve will be updated.

1 Display the “Audio” screen.

- ➔ For details, refer to *Customising the audio settings* on page 45.

2 Tap [Graphic EQ].

3 Tap one of the keys to select a curve that you want to use as the basis of customising.



4 Tap the frequency that you want to adjust the level for.

You can select the following frequencies: **100Hz — 315Hz — 1.25kHz — 3.15kHz — 8kHz**

5 Tap the screen to adjust the level of the equaliser band.

You can adjust the equaliser band level between “+12dB” and “-12dB”.

Customising preferences

Adjusting loudness

Loudness compensates for deficiencies in the low- and high-sound ranges at low volume.

1 Display the “Audio” screen.

➤ For details, refer to *Customising the audio settings* on page 45.

2 Tap ◀ or ▶ next to “Loudness”.

Each time you tap ◀ or ▶, the level is selected in the following order:

Off (default) — **Low** — **Mid** — **High**

Using the subwoofer output

This product is equipped with a subwoofer output that can be turned on or off.

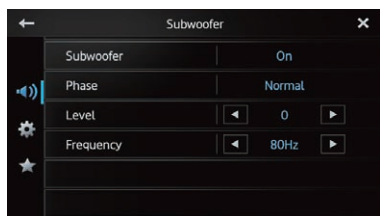
□ The cut-off frequency and output level can be adjusted when the subwoofer output is on.

1 Display the “Audio” screen.

➤ For details, refer to *Customising the audio settings* on page 45.

2 Tap [Subwoofer].

The “**Subwoofer**” screen appears.



3 Tap [Subwoofer] to set to “On”.

The subwoofer output is turned on.

▪ If you select “**Off**”, the subwoofer output is turned off.

4 Tap [Phase] to select “Normal” or “Reverse” to set the phase of subwoofer output.

5 Tap ◀ or ▶ next to “Level” to adjust the output level.

“+6” to “-24” is displayed as the level is increased or decreased.

6 Tap ◀ or ▶ next to “Frequency” to select cut-off frequency.

Each time you tap ◀ or ▶, cut-off frequencies are selected in the following order:

50Hz — **63Hz** — **80Hz** (default) — **100Hz** — **125Hz**

Only frequencies lower than those in the selected range are output from the subwoofer.

Enhancing bass (Bass Booster)

You can enhance bass sounds that are often muted by driving noise.

1 Display the “Audio” screen.

➤ For details, refer to *Customising the audio settings* on page 45.

2 Tap ◀ or ▶ next to “Bass Booster” to adjust the range from 0 to +6.

Using the high pass filter

When you cut lower sounds from the subwoofer output frequency, activate “**High Pass Filter**”. Only frequencies higher than those in the selected range are output from the front or rear speakers.

1 Display the “Audio” screen.

➤ For details, refer to *Customising the audio settings* on page 45.

2 Tap ◀ or ▶ next to “High Pass Filter”.

Each time you tap ◀ or ▶, cut-off frequencies are selected in the following order:

Off (default) — **50Hz** — **63Hz** — **80Hz** — **100Hz** — **125Hz**

Adjusting source levels

“**Source Level Adjuster**” lets you adjust the volume level of each source to prevent radical changes in volume when switching between the sources.

- Settings are based on the FM volume level, which remains unchanged.

1 Play the source you want to adjust the volume level for.

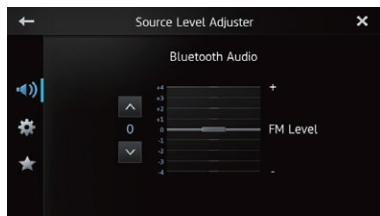
The adjustable sources are “iPod”, “Apps”, “MirrorLink”, “Bluetooth” and “MW/LW” band.

2 Display the “Audio” screen.

- ➔ For details, refer to *Customising the audio settings* on page 45.

3 Tap [Source Level Adjuster].

The “**Source Level Adjuster**” screen appears.



4 Tap or to adjust the source volume.

“+4” to “-4” is displayed as the source volume is increased or decreased.

Customising the system settings

1 Press the Home button to display the Home screen.

2 Flick the scroll area on the Home screen.

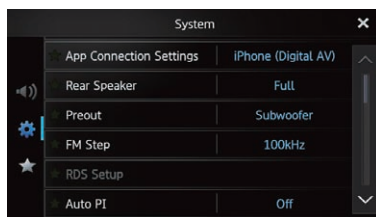
- ➔ For details, refer to *Home screen* on page 12.

3 Tap [Settings] on the Home screen.

The setting menu screen appears.

4 Tap .

The “**System**” screen appears.



5 Tap the item that you want to change the settings for.

6 After changing the settings, tap to return the Home screen.

Setting the type of the mobile device to be connected

Before connecting your device, set the type of the device.

- “**App Connection Settings**” can be set only when the source is set to “**OFF**” without any mobile device connection.

1 Display the “System” screen.

- ➔ For details, refer to *Customising the system settings* on page 48.

2 Tap [App Connection Settings].

Tapping [App Connection Settings] changes the settings as follows:

Customising preferences

- **iPhone (Digital AV)** (default):
When an iPhone with Lightning connector will be connected, select "**iPhone (Digital AV)**".
- **Others:**
When an iPhone with 30-pin connector, Android device or MirrorLink device will be connected, select "**Others**".

Setting the rear output

This product's rear output (rear speaker leads output) can be used for a full-range speaker (**Full**) or subwoofer (**Subwoofer**) connection. If you switch the rear output setting to "**Subwoofer**", you can connect a rear speaker lead directly to a subwoofer without using an auxiliary amp.

Initially, the product is set for a rear full-range speaker connection (**Full**).

- "**Rear Speaker**" can be set only when the source is set to "**OFF**".

1 Display the "System" screen.

- For details, refer to *Customising the system settings* on page 48.

2 Tap [Rear Speaker].

Tapping [Rear Speaker] changes the settings as follows:

- **Full** (default):
When no subwoofer is connected to the rear output, select "**Full**".
- **Subwoofer:**
When a subwoofer is connected to the rear output, select "**Subwoofer**".
- Even if you change this setting, there will be no output unless you turn the subwoofer output on.
 - For details, refer to *Using the subwoofer output* on page 47.
- If you change this setting, subwoofer output in the audio menu will return to the factory settings.

Setting the RCA output

This product's preout (RCA rear output or subwoofer output) can be used for a full-range speaker (**Full**) or subwoofer (**Subwoofer**) connection.

Initially, the product is set for a subwoofer connection (**Subwoofer**).

- "**Preout**" can be set only when the source is set to "**OFF**".

1 Display the "System" screen.

- For details, refer to *Customising the system settings* on page 48.

2 Tap [Preout].

Tapping [Preout] changes the settings as follows:

- **Subwoofer** (default):
When a subwoofer is connected to the RCA rear output, select "**Subwoofer**".
- **Full:**
When no subwoofer is connected to the RCA rear output, select "**Full**".
- Even if you change this setting, there will be no output unless you turn the subwoofer output on.
 - For details, refer to *Using the subwoofer output* on page 47.
- If you change this setting, subwoofer output in the audio menu will return to the factory settings.

Setting the FM tuning step

Normally the FM tuning step employed by seek tuning is 50 kHz. When "AF" (Alternative Frequencies) or "TA" (Traffic Announcements) is on, the tuning step automatically changes to 100 kHz. But you can set the tuning step to 50 kHz when "AF" or "TA" is on.

Initially, this function is set to "**100kHz**".

- "**FM Step**" can be set only when the source is set to "**OFF**".

1 Display the "System" screen.

- For details, refer to *Customising the system settings* on page 48.

2 Tap [FM Step].

Each time you tap [FM Step] will switch the FM tuning step between "50kHz" and "100kHz" while "AF" or "TA" is on.

- The tuning step remains at "50kHz" during manual tuning.

RDS setting

Limiting stations to regional programming

When "Alternative FREQ" is used, the regional function limits the selection of stations to those broadcasting regional programmes.

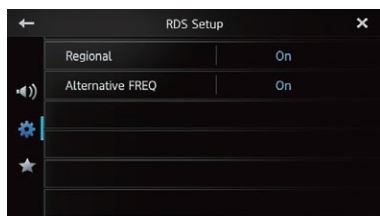
- This function is effective only when the radio source is set to FM tuner.

1 Display the "System" screen.

- ➔ For details, refer to *Customising the system settings* on page 48.

2 Tap [RDS Setup].

The "RDS Setup" screen appears.



3 Tap [Regional] to turn the regional function on.

- To turn the regional function off, tap [Regional] again.

Selecting alternative frequencies

When the tuner cannot get a good reception, this product automatically searches for a different station in the same network.

1 Display the "System" screen.

- ➔ For details, refer to *Customising the system settings* on page 48.

2 Tap [RDS Setup].

The "RDS Setup" screen appears.

3 Tap [Alternative FREQ] to turn the alternative frequencies function on.

- To turn AF off, tap [Alternative FREQ] again.
- Sound may be temporarily interrupted by another programme during AF frequency search.

Switching Auto PI seek

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 set to "OFF".

1 Display the "System" screen.

- ➔ For details, refer to *Customising the system settings* on page 48.

2 Tap [Auto PI].

Tapping [Auto PI] changes the settings as follows:

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

Customising preferences

Selecting the system language

The system language can be selected from eighteen languages.

If text information such as the title name, artist name or a comment is embedded in a European language or Russian, they can also be displayed on this product.

- ❑ 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. Text that cannot be displayed is displayed as “_” (underscore).

1 Display the “System” screen.

- ➔ For details, refer to *Customising the system settings* on page 48.

2 Tap [System Language].

The “System Language” screen appears.




3 Tap the desired language.

English (default), **Deutsch**, **Italiano**, **Français**, **Español**, **Português**, **Nederlands**, **Svenska**, **Dansk**, **Norsk**, **Polski**, **Ελληνικά**, **Suomi**, **Čeština**, **Magyar**, **Română**, **Türkçe**, **Русский**

Setting the keyboard layout

You can select the keyboard layout displayed on this product for text input in the **AppRadio Mode**.

This setting is valid only when connecting an iPhone with the AppRadio app installed.

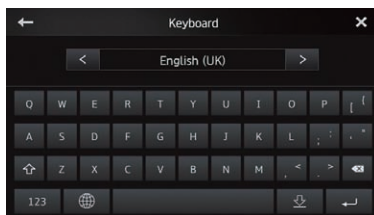
- ❑ The keyboard layout depends on the system language settings.
 - ➔ For details, refer to *Selecting the system language* on page 51.
- ❑ When you tap  on the virtual keyboard, the language setting of iPhone is changed, but the language on the virtual keyboard is not changed. If you change the language setting of the virtual keyboard, refer to the following procedure.
- ❑ The iPhone keyboard layouts depends on the Hardware Keyboard Layout setting of your iPhone.
 - For details on iPhone operating procedures, refer to your iPhone User Guide.



1 Display the “System” screen.

- ➔ For details, refer to *Customising the system settings* on page 48.

2 Tap [Keyboard].

The “Keyboard” screen appears.



- 3 Tap  or  to select the desired keyboard layout.

Switching the ever scroll function

If a character string is too long for the specified frame, the string scrolls automatically to display the full text.

This function is used to set whether to repeat the automatic scrolling of a string.

1 Display the “System” screen.

- ➔ For details, refer to *Customising the system settings* on page 48.

2 Tap [Ever Scroll].

Tapping [Ever Scroll] changes the settings as follows:

- **Off** (default):
Deactivates the ever scroll function.
- **On**:
Activates the ever scroll function. Repeats the automatic scrolling of a string.

Clearing Bluetooth memory

This function is used to initialise the registered devices and PIN code.

- “Bluetooth Memory Clear” can be set only when the source is set to “OFF”.

1 Display the “System” screen.

- ➔ For details, refer to *Customising the system settings* on page 48.

2 Tap [Bluetooth Memory Clear].

The “Bluetooth Memory Clear” screen appears.

3 Tap [Clear].

After the confirmation display appears, tap [OK] to delete the memory.

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

Updating Bluetooth connection software

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

CAUTION

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

- “Bluetooth Software Update” can be set only when the source is set to “OFF”.

1 Display the “System” screen.

- ➔ For details, refer to *Customising the system settings* on page 48.

2 Tap [Bluetooth Software Update].

The “Bluetooth Software Update” screen appears.

3 Tap [Start] to display the data transfer mode.

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

Displaying the Bluetooth system 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 system version. Perform the following procedure to check the version of this product.

- “Bluetooth Version Information” can be set only when the source is set to “OFF”.

1 Display the “System” screen.

- ➔ For details, refer to *Customising the system settings* on page 48.

2 Tap [Bluetooth Version Information] to display to the version of the Bluetooth module of this product.

Customising preferences

Setting safe mode

For safety reasons, you can limit the functions that are available while your vehicle is in motion.

1 Display the “System” screen.

- ➔ For details, refer to *Customising the system settings* on page 48.

2 Tap [Safe Mode].

Tapping [Safe Mode] changes the settings as follows:

- **On** (default):
Activates the safe mode function.
- **Off**:
Deactivates the safe mode function.

Setting the rear view camera

The following two functions are available. The rear view camera feature requires a separately sold rear view camera (e.g. ND-BC6). (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 a full-screen rear view camera image.

Camera for Rear view mode

Rear view can be displayed at all times (e.g. when monitoring an attached trailer, etc.). Please be aware that with this setting, the camera image is not resized to fit, and a portion of what is seen by the camera is not viewable.

When the “**Camera Polarity**” setting is set, [Rear View] icon on the Home screen becomes active and “**OFF**” appears on the upper right corner of the icon.

To switch to the rear view mode, tap [Rear View].

- ❑ In the rear view mode, “**ON**” appears on the upper right corner of the icon.

- ❑ To cancel the rear view mode, tap [Rear View] again.
- ❑ Tapping the screen while displaying the rear view screen returns to the current screen.
- ❑ In the rear view mode, if you do not touch the screen for seven seconds while displaying the following screens, the screen switches to the rear view screen automatically.
 - Radio, iPod, Bluetooth audio source screen
 - Source OFF screen
 - **AppRadio Mode** screen

CAUTION

Pioneer recommends the use of a camera which outputs mirror-reversed images. Otherwise, the screen image will appear reversed.

- ❑ Immediately verify whether the display changes to a rear view camera image when the gearstick is moved to REVERSE (R) from another position.
- ❑ When the screen changes to full-screen rear view camera image during normal driving, switch to the opposite setting in “**Camera Polarity**”.

1 Display the “System” screen.

- ➔ For details, refer to *Customising the system settings* on page 48.

2 Tap [Camera Polarity].

You can select the following polarity:

- **Off** (default): When the rear view camera is not connected to this product.
- **Battery**: 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.

Setting the video signal

You can select the suitable video signal setting for your rear view camera.

- ❑ As this function is initially set to “**Auto**”, the product will automatically adjust the video signal setting.

However, the screen may turn black or images may not be displayed properly when “**Auto**” has been selected. Normally, select the appropriate video signal.

1 Display the “System” screen.

- ➔ For details, refer to *Customising the system settings* on page 48.

2 Tap [Video Signal Setting].

The “**Video Signal Setting**” screen appears.

3 Tap ◀ or ▶ to select the desired video signal.

Auto (default) — **PAL** — **NTSC** — **PAL-M** — **PAL-N** — **SECAM**

Adjusting the picture

You can adjust the brightness, contrast, colour, hue, dimmer and temperature for each source and rear view camera.

1 Playback the source you want to adjust the picture.

2 Display the “System” screen.

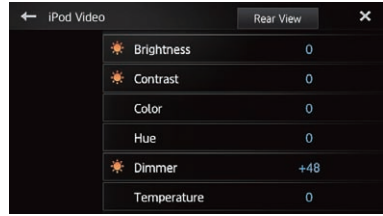
- ➔ For details, refer to *Customising the system settings* on page 48.

3 Tap [Picture Adjustment].

The picture adjustment screen appears.

4 If you are adjusting the picture adjustment, select the source.

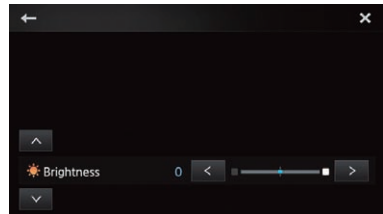
- **Rear View:** Adjusts the picture for the rear view camera.
- **Source:** Adjusts the picture for the source. The current source name is displayed on the picture adjustment screen.



5 Tap any of the following touch panel keys to select the function to be adjusted.

Picture adjustment items are displayed.

- **Brightness:** Adjusts the black intensity.
- **Contrast:** Adjusts the contrast.
- **Color:** Adjusts the colour saturation.
- **Hue:** Adjusts the tone of colour (red or green is emphasized).
- **Dimmer:** Adjusts the brightness of the display.
- **Temperature:** Adjusts the colour temperature, resulting in a better white balance.



- ❑ You can adjust “**Hue**” only when “**Video Signal Setting**” is set to “**NTSC**”.
- ❑ With some rear view cameras, picture adjustment may not be possible.

Customising preferences

6 Tap ◀ or ▶ to adjust the selected item.

Each time you tap ◀ or ▶ the level of the selected item increases or decreases.

- If you want to switch the adjustment item, tap ◀ or ▶.
- “**Brightness**”, “**Contrast**”, “**Color**”, “**Hue**” can be adjusted from “+24” to “-24”.
- “**Dimmer**” can be adjusted from “+1” to “+48”.
- “**Temperature**” can be adjusted from “+3” to “-3”.
- You cannot operate this function while driving.
- Different “**Brightness**”, “**Contrast**”, “**Dimmer**” settings can be set for when the illumination switch is on and when it is off.
- The same specifications are applied to all sources (Home screen, Settings screen, Radio, iPod music) other than the video source.
- The “**Dimmer**” setting is set to a common setting in all sources.

Setting the clock mode

You can change the time format.

1 Display the “System” screen.

- For details, refer to *Customising the system settings* on page 48.

2 Tap [Clock Mode].

Tapping [Clock Mode] changes the settings as follows:

- **12H** (default):
Changes the display to 12-hour format.
- **24H**:
Changes the display to 24-hour format.

Selecting the background display

You can change the audio source screen background and Home screen background.

1 Display the “System” screen.

- For details, refer to *Customising the system settings* on page 48.

2 Tap [Background].

The background screen appears.

3 Tap the desired background display.

Restoring the default settings

Resets various settings registered to this product and restores them to the default settings.

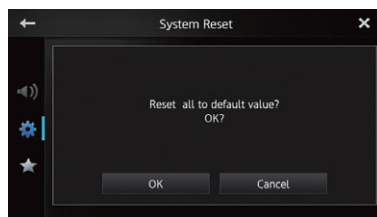
- “**System Reset**” can be set only when the source is set to “**OFF**”.

1 Display the “System” screen.

- For details, refer to *Customising the system settings* on page 48.

2 Tap [System Reset].

A message confirming whether to restore the settings appears.



3 Tap [OK].

- If you do not want to restore the settings, tap [Cancel].

Checking the connections of leads

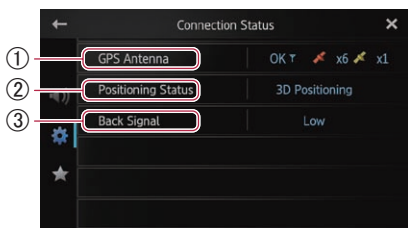
Check that leads are properly connected between this product and the vehicle. Please also check whether they are connected in the correct positions.

1 Display the “System” screen.

- ➔ For details, refer to *Customising the system settings* on page 48.

2 Tap [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, “Not OK” is displayed.
- If reception is poor, please change the installation position of the GPS aerial.

② Positioning Status

Indicates the current GPS positioning status.

- **2D Positioning:**
The status when the signals from three satellites are received.
- **3D Positioning:**
The status when the signals from four or more satellites are received.

③ 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.)

Switching the App launch assist function (for iPhone)

You can set whether to launch the AppRadio app automatically when you tap [Apps] icon on the Home screen.

1 Display the “System” screen.

- ➔ For details, refer to *Customising the system settings* on page 48.

2 Tap [App launch assist].

Tapping [App launch assist] changes the settings as follows:

- **On** (default):
Activates the App launch assist function.
- **Off:**
Deactivates the App launch assist function.

Displaying the firmware 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 system version. Perform the following procedure to check the firmware version of this product.

1 Display the “System” screen.

- ➔ For details, refer to *Customising the system settings* on page 48.

2 Tap [Firmware Version Information] to display the firmware version of this product.

Customising preferences

Updating the firmware version

You can update the firmware version of this product by using the USB memory device connected.

- ❑ Before updating, check your firmware version and prepare the firmware update USB memory device by downloading the newer firmware file from the pioneer web site.
- ❑ “**Firmware Update**” can be set only when the vehicle is stopped.

! CAUTION

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

1 Connect the firmware update USB memory device to the USB port on this product.

2 Display the “System” screen.

- ➔ For details, refer to *Customising the system settings* on page 48.

3 Tap [Firmware Update].

The “**Firmware Update**” screen appears.

4 Tap [Continue] to display the data transfer mode.

- Follow the on-screen instructions to finish updating the firmware.

Customising the favourites menu

You can register the desired menu items on the “**Favorites**” screen. Registering your favourite menu items allows you to quickly jump to the registered menu screen by a simple touch on the favourites menu.

- ❑ Up to 12 menu items can be registered on the favourites menu list.

1 Press the Home button to display the Home screen.

2 Flick the scroll area on the Home screen.

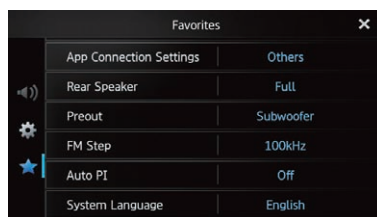
- ➔ For details, refer to *Home screen* on page 12.

3 Tap [Settings] on the Home screen.


The setting menu screen appears.

4 Tap .

The “**Favorites**” screen appears.



5 Tap the item that you want to change the settings for.

6 After changing the settings, tap  to return the Home screen.

Registering menu items

1 Press the Home button to display the Home screen.

2 Flick the scroll area on the Home screen.

- ➔ For details, refer to *Home screen* on page 12.


Customising preferences

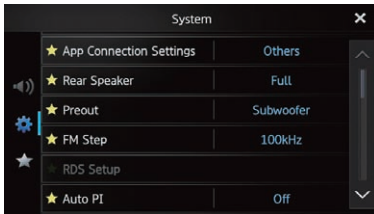
3 Tap [Settings] on the Home screen.

The setting menu screen appears.

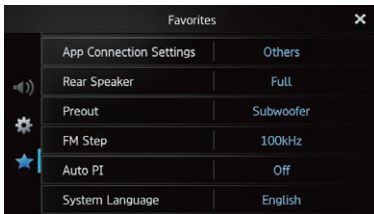
4 Touch the tab on the left edge and/or scroll the bar on the right edge to display the desired menu item.

5 Touch and hold the menu item you want to register.

- A  icon will appear next to the menu item name.



6 The menu item is registered on the “Favorites” screen.



Removing menu items

- Touch and hold the menu item you want to remove from the “Favorites” screen.

Turning off the screen

You can turn off the backlight of the LCD screen.

1 Press the Home button to display the Home screen.

2 Flick the scroll area on the Home screen.

- ➔ For details, refer to *Home screen* on page 12.

3 Tap [Display OFF] on the Home screen.

The screen is turned off.

- Tap anywhere on the screen to turn it back on.

Appendix

Troubleshooting

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

Problems with this product

Symptom	Cause	Action (Reference)
The power doesn't turn on. This product doesn't operate.	Leads and connectors are incorrectly connected.	Confirm once more that all connections are correct.
	The fuse is blown.	Rectify the reason for the fuse blowing, then replace the fuse. Be very sure to install a correct fuse with the same rating.
	Noise and other factors are causing the built-in microprocessor to operate incorrectly.	Park your vehicle in a safe place, and turn off the engine. Turn the ignition key back to off (ACC OFF). Then start the engine again, and turn the power to this product back on.
GPS signal can not be obtained.	The GPS aerial is in an unsuitable location.	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Check the GPS signal reception and the position of the GPS aerial if necessary.
	Obstacles are blocking signals from the satellites.	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Check the GPS signal reception and the position of the GPS aerial if necessary, or continue driving until reception improves. Keep the aerial clean.
	The position of satellites relative to your vehicle is inadequate.	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Continue driving until reception improves.
	Signals from the GPS satellites have been modified to reduce accuracy. (GPS satellites are operated by the US Department of Defense, and the US government reserves the right to distort positioning data for military reasons. This may lead to greater positioning errors.)	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Wait until reception improves.
	If a vehicle phone or mobile phone is used near the GPS aerial, GPS reception may be lost temporarily.	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. When using a mobile phone, keep the aerial of the mobile phone away from the GPS aerial.
	Something is covering the GPS aerial.	Do not cover the GPS aerial with spray paint or vehicle wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals.
	The screen is too bright.	Picture quality adjustment of the display is not correct.

Appendix

Symptom	Cause	Action (Reference)
The display is very dim.	Picture quality adjustment of the display is not correct.	Adjust the picture quality. (Page 54)
No sounds are produced from an audio source. The volume level will not rise.	The volume level is low.	Adjust the volume level.
	The mute is on.	Turn the mute off.
	A speaker lead is disconnected.	Check the connection.
The person on the other end of the phone call cannot hear the conversation due to an echo.	The voice from the person on the other end of the phone call is output from the speakers and then picked up by the microphone again, creating an echo.	Use the following methods to reduce the echo: —Lower the volume on the receiver —Have both parties pause slightly before speaking
There is no picture.	The handbrake cord is not connected.	Connect the handbrake cord, and apply the handbrake.
	The handbrake is not applied.	Connect the handbrake cord, and apply the handbrake.
	The backlight of the LCD panel is turned off.	Turn on the backlight. (Page 58)
Nothing is displayed and the touch panel keys cannot be used.	The setting for the rear view camera is incorrect.	Select the appropriate setting for the rear view camera.
	The gearstick was placed in [R] when the rear view camera was not connected.	Select the correct polarity setting for 'Camera Polarity' . (Page 53)

Problems with the audio screen

Symptom	Cause	Action (Reference)
iPod cannot be operated.	The iPod is frozen.	Reconnect the iPod with the suitable cable.
	An error has occurred.	Reconnect the iPod with the suitable cable.
No sounds are produced. The volume level will not rise.	Cables are not connected correctly.	Connect the cables correctly.
Music in an iPod cannot be played.	A playable music is not selected.	Select music using the search function.

Problems with the phone screen

Symptom	Cause	Action (Reference)
Dialling is not possible.	Your mobile device is out of range for service.	Retry after re-entering the range for service.
	The connection between the mobile device and this product cannot be established now.	Perform the connection process.

Appendix

Problems with AppRadio Mode screen

Symptom	Cause	Action (Reference)
A black screen is displayed.	While operating an application, the application was ended on the mobile device side.	Press the Home button and display the Home screen.
	The mobile device OS may be waiting for screen operation.	Stop the vehicle in a safe place and check the screen on the mobile device.
A message prompting reconnection is displayed.	A mobile device with a security function was connected to this product.	Unlock and reconnect the mobile device.
	The OS version installed in the mobile device is old.	Upgrade the OS version.
	An incompatible mobile device was connected to this product.	Connect a compatible mobile device to this product.
The screen is displayed, but operation does not work at all.	An error has occurred.	When an iPhone is connected, turn the ignition switch off (ACC OFF) and then turn it on again (ACC ON).
		When an Android device is connected, disconnect the Bluetooth connection from this product and then reconnect it.
The radio audio is not output.	The radio audio mixing is turned off.	Turn on the radio audio mixing.

Problems with MirrorLink mode screen

Symptom	Cause	Action (Reference)
A message prompting reconnection is displayed.	A mobile device with a security function was connected to this product.	Unlock and reconnect the mobile device.
	The OS version installed in the mobile device is old.	Upgrade the OS version.
	An incompatible mobile device was connected to this product.	Connect a compatible mobile device to this product.
The screen is displayed, but operation does not work at all.	An error has occurred.	When an iPhone is connected, turn the ignition switch off (ACC OFF) and then turn it on again (ACC ON).
		When an Android device is connected, disconnect the Bluetooth connection from this product and then reconnect it.
The radio audio is not output.	The radio audio mixing is turned off.	Turn on the radio audio mixing.

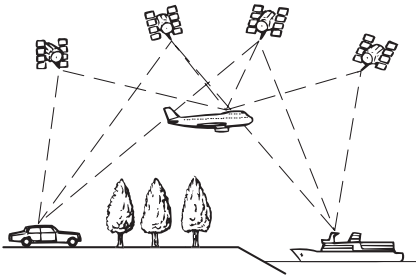
Appendix

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.



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 larger.

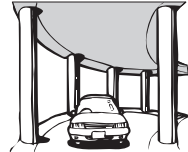
When positioning by GPS is impossible

- GPS positioning is disabled if signals cannot be received from more than two GPS satellites.

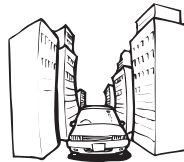
- In some driving conditions, signals from GPS satellites may not reach your vehicle. In this case, it is impossible for the system to use GPS positioning.



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

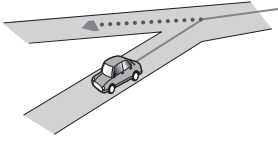
- If a car phone or mobile phone is used near the GPS aerial, GPS reception may be lost temporarily.
- Do not cover the GPS aerial with spray paint or car wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals, so keep the aerial clear.
- ☐ If a GPS signal 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 a case, once GPS reception is restored, accuracy will recover.

Conditions likely to cause noticeable positioning errors

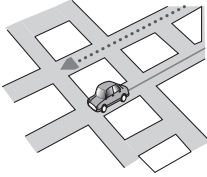
For various reasons, such as the state of the road you are travelling on and the reception status of the GPS signal, the actual position of your vehicle may differ from the position displayed on the map screen.

Appendix

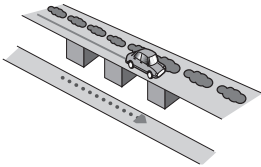
- If you make a slight turn.



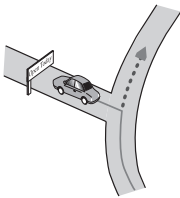
- If there is a parallel road.



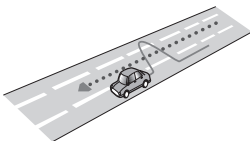
- If there is another road very nearby, such as in the case of an elevated motorway.



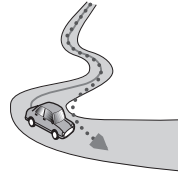
- If you take a recently opened road that is not on the map.



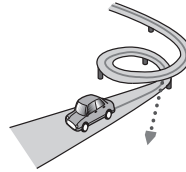
- If you drive in zigzags.



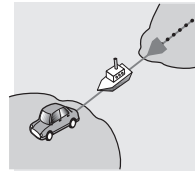
- If the road has a series of hairpin bends.



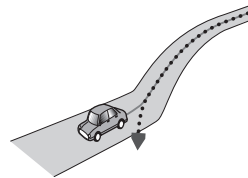
- If there is a loop or similar road configuration.



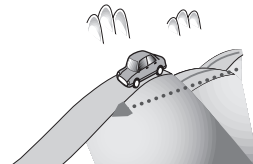
- If you take a ferry.



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

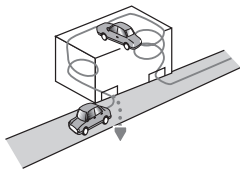


- If you are on a steep mountain road with many height changes.

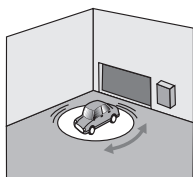


Appendix

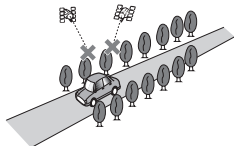
- If you enter or exit a multi-storey car park or similar structure using a spiral ramp.



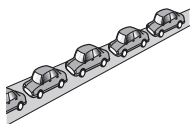
- If your vehicle is turned on a turntable or similar structure.



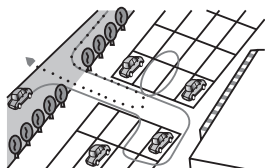
- If trees or other obstacles block the GPS signals for a considerable period.



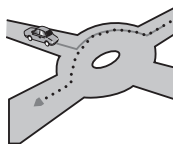
- If you drive very slowly, or in a start-and-stop manner, as in a traffic jam.



- If you join the road after driving around a large car park.



- When you drive around a roundabout.



- When starting driving immediately after starting the engine.

Appendix

Setting list

The customisable settings of this product are listed below. For details about changing each setting, refer to the page for that item.

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