Operation Manual

SPH-DA100

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.

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.
Contents

08 Using hands-free phoning
- Starting procedure ............................................... 29
- Reading the screen ............................................... 29
- Using the touch panel keys ................................. 29
- Adjusting the phone volume ................................. 30
  - Making a phone call ........................................ 30
  - Direct dialing .................................................. 30
  - Calling a number in the phone book ...................... 30
  - Selecting a number using alphabet search mode ....... 31
  - Dialing from the history ..................................... 31
- Answering an incoming call ..................................... 32
- Using advanced functions ...................................... 32
  - Answering a call automatically ............................ 32
  - Switching the ring tone ....................................... 32
  - Storing a phone number ...................................... 32
  - Using the preset dial lists ................................... 33
  - Inverting the names .......................................... 33
  - Setting the private mode .................................... 33
  - Adjusting the other party’s listening volume ............ 33
- Notes for hands-free phoning .................................. 34
  - General notes .................................................. 34
  - Registration and connection ................................ 34
  - Making and receiving calls .................................. 34
  - The received call history and the dialed number history .................................................. 34
  - Phone book transfers ......................................... 34

09 Customizing preferences
- Customizing the audio settings ............................... 35
  - Using fader/balance adjustment ............................ 35
  - Using the equalizer .......................................... 35
  - Adjusting loudness .......................................... 37
  - Using the subwoofer output ................................ 37
  - Enhancing bass (Bass Booster) ......................... 37
  - Using the high pass filter .................................. 37
  - Adjusting source levels ..................................... 38
- Customizing the system settings .............................. 38
  - Setting the rear output ..................................... 38
  - Setting the RCA output ...................................... 39
  - Selecting the system language ............................ 39
  - Setting the keyboard layout ............................... 40
  - Switching the ever scroll function ......................... 40
  - Clearing Bluetooth memory ................................ 40
  - Updating Bluetooth connection software ................ 41
  - Displaying the Bluetooth system version ............... 41
  - Setting the rear view camera ............................. 41
  - Setting the video signal ..................................... 42
  - Adjusting the picture ........................................ 42
  - Adjusting the mix sound level .............................. 43
  - Setting the clock mode ...................................... 43
  - Selecting the background display ......................... 43
  - Restoring the default settings ............................. 44
  - Checking the connections of leads ....................... 44
- Customizing the favorites menu .............................. 45
  - Registering menu items ..................................... 45
  - Removing menu items ....................................... 45
- Turning off the screen .......................................... 45

Appendix
- Troubleshooting .................................................. 46
- Positioning technology ......................................... 49
  - Positioning by GPS .......................................... 49
- Handling large errors .......................................... 49
  - When positioning by GPS is impossible ................. 49
  - Conditions likely to cause noticeable positioning errors .................................................. 49
- Setting list .......................................................... 52
  - Audio settings ............................................... 52
  - System settings .............................................. 52
  - Other settings ................................................. 52
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 customizable 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 32.

Terms used in this manual

“Front display”

In this manual, the screen that is attached to the body of this product is referred to as the “Front display”.

“iPhone”

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

“Android™ device”

In this manual, each Android smartphone is referred to as Android device.
iPhone/iPod compatibility

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

Made for
- iPod touch (4th generation): iOS 5.0
- iPod touch (3rd generation): iOS 4.1
- 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. 1.1
- iPod nano (5th generation): Ver. 1.0.2
- iPod nano (4th generation): Ver. 1.0.4
- iPod nano (3rd generation): Ver. 1.1.3
- iPhone 4S: iOS 5.0.1
- iPhone 4: iOS 5.0.1
- iPhone 3GS: iOS 4.3.3

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.

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.

Parking brake interlock

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 parking brake 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 (1) apply the parking brake, (2) release the parking brake, and then (3) apply the parking brake again. Please keep the brake pedal pushed down before releasing the parking brake.

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 cellular phone, keep the antenna of the cellular phone away from the LCD screen to prevent disruption of the video in the form of spots, colored 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.
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.

Advanced App Mode
With Advanced App Mode, you can display the smartphone application screen on the AppRadio display. You can also operate AppRadio compatible smartphone applications (such as AppRadio app) via the display with multi-touch gestures like tapping, dragging, scrolling, and flicking.

For details of Advanced App Mode, refer to the Operation Manual for AppRadio app.

Hands-free phoning
You can control the Bluetooth connection of the smartphone, and make a call using the incoming or outgoing call histories, transferred phone book, or by dialing.

Displaying the rear view camera image
You can display what is behind the vehicle if a rear view camera (e.g. ND-BC5) (sold separately) is connected to the system.

Mixing audio output
You can mix Apps audio output with the radio audio output or the iPod audio output.

Checking part names and functions

1 Volume (+/-) button
2 Home button
   - Press the Home button to display the Home screen. In Advanced App Mode, when you press the Home button, the AppRadio app home 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.
3 LCD screen
4 Menu button (for Android devices)
   - Press the Menu button to display the menu screen. The Menu button is available while running the AppRadio app or other supported applications for Android devices.
5 Back button (for Android devices)
   - Press the Back button to return the previous screen. The Back button is available while running the AppRadio app or other supported applications for Android devices.

Available buttons will light according to the connected device.

➀ ➁ ➂ ➃ ➄

Press the Home button to display the Home screen. In Advanced App Mode, when you press the Home button, the AppRadio app home 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 the Menu button to display the menu screen. The Menu button is available while running the AppRadio app or other supported applications for Android devices.

Press the Back button to return the previous screen. The Back button is available while running the AppRadio app or other supported applications for Android devices.
About AppRadio

Connecting and disconnecting smartphones

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

**CAUTION**
- To prevent data loss and damage to the smartphone, never remove it from this product while data is being transferred.
- If data loss or corruption occurs on the smartphone 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 smartphones while driving. To operate this product or smartphones, stop the vehicle in a safe place, apply the parking brake and operate them according to law.

**Connect your iPhone**
Using the supplied iPhone cable enables you to connect your iPhone to this product.

- Connection via a USB hub is not possible.

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

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

- The **AppRadio app** may not launch depending on the state of the connected iPhone. In that case, launch the **AppRadio app** according to the application startup message.

- When you connect an iPhone with the application corresponding to **Advanced App Mode** started, the application operation screen appears on this product’s screen.

**Disconnecting your iPhone**

- Pull out the iPhone cable after checking that no data is being accessed.
Connect your Android device

1. Unlock your Android device.

2. Connect your Android device to this product via the separately sold App Connectivity Kit (CD-AH200C).
   - The cable connection method varies depending on your device.
   - For details, refer to the App Connectivity Kit (CD-AH200C) manual.

3. Register your Android device and connect it to this product via the Bluetooth® wireless technology.
   - When you use Advanced App Mode and Pandora® internet radio, you must make the Bluetooth connection with Serial Port Profile (SPP) from this product.
   - For detailed procedures, refer to Registering your Bluetooth devices on page 22.

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

Disconnecting your Android device

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

Connection states and usable functions

When a smartphone is connected, the following functions are available.

No connection state

When this product is not connected to a smartphone.

<table>
<thead>
<tr>
<th>Function</th>
<th>Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuner</td>
<td>O</td>
</tr>
<tr>
<td>iPod</td>
<td>×</td>
</tr>
<tr>
<td>Apps (iPhone)</td>
<td>×</td>
</tr>
<tr>
<td>Apps (Android)</td>
<td>×</td>
</tr>
<tr>
<td>Pandora® (iPhone)</td>
<td>×</td>
</tr>
<tr>
<td>Pandora® (Android)</td>
<td>×</td>
</tr>
<tr>
<td>Phone</td>
<td>△*1</td>
</tr>
</tbody>
</table>

*1 “Phone” is available only when your iPhone is connected to this product with the Bluetooth wireless technology.

Connect your iPhone

When your iPhone is connected to this product.

<table>
<thead>
<tr>
<th>Function</th>
<th>Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuner</td>
<td>O</td>
</tr>
<tr>
<td>iPod</td>
<td>O</td>
</tr>
<tr>
<td>Apps (iPhone)</td>
<td>O</td>
</tr>
<tr>
<td>Apps (Android)</td>
<td>×</td>
</tr>
<tr>
<td>Pandora® (iPhone)</td>
<td>O</td>
</tr>
<tr>
<td>Pandora® (Android)</td>
<td>×</td>
</tr>
<tr>
<td>Phone</td>
<td>△*1</td>
</tr>
</tbody>
</table>

*1 “Phone” is available only when your iPhone is connected to this product with the Bluetooth wireless technology.
Connect your Android device

When your Android device is connected to this product via the separately sold App Connectivity Kit and the Bluetooth profile (SPP).

<table>
<thead>
<tr>
<th>Source</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuner</td>
<td>○</td>
</tr>
<tr>
<td>iPod</td>
<td>△ &quot;1&quot;</td>
</tr>
<tr>
<td>Apps (iPhone)</td>
<td>×</td>
</tr>
<tr>
<td>Apps (Android)</td>
<td>○</td>
</tr>
<tr>
<td>Pandora® (iPhone)</td>
<td>×</td>
</tr>
<tr>
<td>Pandora® (Android)</td>
<td>○</td>
</tr>
<tr>
<td>Phone</td>
<td>△ &quot;2&quot;</td>
</tr>
</tbody>
</table>

*1 When your iPod is connected to this product, you can play and operate the audio sources and video sources in your iPod.

*2 “Phone” is available only when your iPhone is connected to this product with Bluetooth wireless technology.

☐ When iPhone and Android devices are connected simultaneously, the Apps of the Android device take precedence.

Disclaimer

When you turn on this product, a disclaimer is displayed on the screen.
Read the disclaimer carefully, checking its details, and then touch [OK] if you agree to the conditions.

Demonstration images

If you do not operate this product for 30 seconds while displaying the source 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

Day of the week indicator
Current time
Scroll area
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

Radio
Displays the radio source screen.
- For details, refer to Chapter 4.

iPod
Displays the iPod source screen.
- For details, refer to Chapter 5.

Apps
Displays the Advanced App Mode.
The apps icon changes as follows:
- : Appears when your iPhone is connected via the supplied iPhone cable.
- : Appears when your Android is connected via the separately sold App Connectivity Kit.
- : Appears when your Android is connected via the separately sold App Connectivity Kit and processing the Bluetooth connection.
- : Appears when your Android is connected via the separately sold App Connectivity Kit and Bluetooth wireless technology (SPP).
  - For details, refer to Advanced App Mode on page 6.

Pandora® internet radio
Displays the Pandora application screen when a smartphone with the Pandora application installed is connected.
- For details, refer to Using Pandora® internet radio on page 20.

Phone
Displays the phone menu screen.
- For details, refer to Chapter 8.
Basic operation

6 Rear view camera
Switches to the rear view mode.
➲ For details, refer to Setting the rear view camera on page 41.

7 Clock adjustment
Adjusts the current date and time.
➲ For details, refer to Setting the clock on this page.

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

e.g. “Special Device” 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 Tap 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 43.
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. Turns the screen off. To turn it back on, tap anywhere on the screen or press the Home, Menu or Back buttons.
2. Moves to the next or previous song, file or chapter when “iPod” or “Apps” is selected as the source.
   Moves to the next or previous preset channel when “Radio” is selected as the source.
3. Switches between playback and pause when “iPod” or “Apps” is selected as the source.
   Switches the frequency bands when “Radio” is selected as the source.
4. Displays information about the currently playing source.
5. **In Apps source:**
   Selects whether to mix Apps audio output with the radio audio output or the iPod audio output (only when an Android device is connected via the separately sold App Connectivity Kit).
   When the radio audio source is mixed, “MIX Radio” is displayed, and when the iPod audio source is mixed, “MIX iPod” is displayed. When there is no mixable source, “MIX OFF” is displayed.

6. **In radio source:**
   Selects whether to mix radio audio output with the Apps audio output.
   When the Apps audio source is mixed, “MIX ON” is displayed. When there is no mixable source, “MIX OFF” is displayed.
7. Switches between muted and unmuted audio source.
   When muted, is displayed, and when unmuted, is displayed.

8. 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.
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 the next page.
2. Current broadcast information
   The following information is displayed:
   - [Program service (PS) name]
   - [Song title]
   - [Artist name]
3. STEREO indicator
   Shows that the frequency selected is being broadcast in stereo.
4. Signal level indicator
   Shows the signal strength of the selected frequency.
5. Frequency indicator
6. Frequency scale
7. 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 the next page.
2. Switches the band between FM1, FM2 and FM3. Also switches to the FM band while receiving the AM band.
3. Switches to the AM band while receiving the FM band.
4. 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.
5. 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.
6. Switches the reception level. ➡ For details, refer to Tuning in to strong signals on the next page.
7. Stores the strongest broadcast frequencies. ➡ For details, refer to Storing the strongest broadcast frequencies on the next page.

If you touch and hold the 6, 7 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 BSM.

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
  AM: OFF → LEVEL1 → LEVEL2
- The highest level setting allows reception of only the strongest stations, while lower levels allow the reception of weaker stations.
Playing iPod music and video

Starting procedure

1 Connect your iPod.
   ➢ For details, refer to Connect your iPhone on page 7.

2 Press the Home button to display the Home screen.

3 Tap [iPod] on the Home screen.
   ➢ For details, refer to Home screen on page 10.

4 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 18.

5 Use the touch panel keys on the screen to control your iPod.
   ➢ For details, refer to Using the touch panel keys on the next page.

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.**
   - **A**: Song list
     Displays the songs in the connected iPod in alphabetical order.

   • **Artist list**
     Displays an album list for the artist currently being played.

   • **C**: Album list
     Displays a song list for the album currently being played.

   • **H**: Genre list
     Displays an artist list for the genre currently being played.

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

   ➤ Displays the album playlist.

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

   ➤ 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 18.

   ➤ Plays songs in random order.

     ➤ For details, refer to Random play (shuffle) on page 18.

   • **Selects the repeat range.**

     ➤ For details, refer to Repeating playback on the next page.

   • **Changes the audiobook speed.**

     ➤ For details, refer to Changing the audiobook speed on page 18.

   • **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.**

   • **Switches between playback and pause.**

   • **Performs fast reverse or fast forward by dragging the playback point.**
Playing iPod music and video

Chapter 17

Using the functions

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

Tapping an item on a list allows you to search for a 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 the previous page.
   - If you tap the **X** key, return to the playback screen.
   - If you tap the **X** 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 Step 3 in *Selecting song (episode) or video sources from the playlist screen* on the next page.

Repeating playback

There are two repeat play types for playback.

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

Video

1  Switches to full-screen mode.
2  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 the next page.
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 the next page.
5  Selects the repeat range.
   - For details, refer to *Repeating playback* on this page.
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 19.
9  Performs fast reverse or fast forward by dragging the playback point.
Random play (shuffle)
This function shuffles songs, albums or videos and plays them in random order.

- Tap **Random play (shuffle)**
  Tapping **Random play (shuffle)** 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 **Changing the audiobook speed**
  Tapping **Changing the audiobook speed** 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 item 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.
Playing iPod music and video

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.
Using Pandora® internet radio

CAUTION
For safety reasons, never operate this product and smartphones while driving. To operate this product and smartphones, stop the vehicle in a safe place and apply the parking brake and operate them according to law.

You can experience Pandora by connecting a smartphone that has the Pandora application installed.

Before performing operations described in this chapter, be sure to read Using app-based connected content in Important Information for the Users.

Certain features of the Pandora service are not available when accessing the service through this product, including, but not limited to, creating new stations, deleting stations, emailing current stations, buying songs from iTunes or Google Play, viewing additional text information and adjusting Cell Network Audio Quality.

Pandora internet radio is a music service not affiliated with Pioneer. More information is available at http://www.pandora.com

Pandora is a registered trademark of Pandora Media, Inc.

Starting procedure

1 Connect your smartphone.
   ➤ For details, refer to Connecting and disconnecting smartphones on page 7.

2 Press the Home button to display the Home screen.

3 Tap [Pandora] on the Home screen.
   ➤ For details, refer to Home screen on page 10.
   ➤ When you use Pandora internet radio in Android devices, you must make the Bluetooth connection with Serial Port Profile (SPP) from this product.

4 Start up the Pandora application installed on the smartphone.
The Pandora source screen appears.
   ➤ Before starting up, sign-in to Pandora from your smartphone.

5 Use the touch panel keys on the screen to control Pandora.
   ➤ Pandora internet radio stops playing if you switch to Advanced App Mode while using Pandora internet radio.

Reading the screen

1 Current track information
   • : Station name indicator
     Shows the Pandora station name the tuner is currently tuned in to.
   • : Artist name
     Shows the artist name currently playing.
   • : Album title
     Shows the title of the album for the track.
   • : Track title
     Shows the title of the current track.
   “-------” is displayed if there is no corresponding information.

2 Album artwork
   Album artwork for the current track is displayed if it is available.

3 Play time
   Shows the elapsed time, remaining time and time bar of the current track.

4 Pause indicator
   Appears the pause indicator while pausing playback.

5 Current time
Using the touch panel keys

1. Gives a “Thumbs Up” to the track currently playing.
2. Gives a “Thumbs Down” to the track currently playing and skips to the next track.
3. Adds information for the track currently playing to bookmarks.
4. Skips to the start of the next track.
5. Switches between playback and pause.
6. Displays the list of your Pandora stations to select one of them to play.

➲ For details, refer to Selecting a Pandora station from the list on this page.

Using the function

Selecting a Pandora station from the list

1. Tap \( \text{ } \) .
The station list screen appears.

2. **Select the search mode.**
   - If you tap [A-Z], the station list can be sorted alphabetically.
   - If you tap [DATE], the station list can be sorted in order of dates the items were created.

3. Scroll the list by tapping \( \text{ } \) or \( \text{ } \) to display the item you want to select.

4. **Tap the item.**
   - Tapping [QuickMix] plays only one track based on particular musical characteristics at a time from several shuffled stations.
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 Advanced App 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 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. Three registration methods are available:

• Searching for nearby Bluetooth devices
• Pairing from your Bluetooth devices
• Searching for a specified Bluetooth device

❐ 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 24.

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 [Phone] on the Home screen.
➲ For details, refer to Home screen on page 10.
The phone menu screen appears.

3 Tap on the phone menu.

The “Bluetooth Connection Menu” screen appears.
Registering and connecting a Bluetooth device

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

![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.

![Registered Device List]

- 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.

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

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 27.

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”.
- 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.
Searching for a specified Bluetooth device

If you cannot connect your Bluetooth device using the nearby device search and if your Bluetooth device is found in the list, try the following method.

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 [Phone] on the Home screen.
   For details, refer to Home screen on page 10.
   The phone menu screen appears.

3 Tap on the phone menu.

The “Bluetooth Connection Menu” screen appears.

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

The “Special Device” screen appears.

If you cannot find the desired device name on the list, tap [Other phones] to search the devices available nearby.

5 Tap the Bluetooth device name you want to register.
   A message prompting registration from the device is displayed.

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

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 [Phone] on the Home screen.
   For details, refer to Home screen on page 10.
   The phone menu screen appears.

2 Tap on the phone menu.

The “Bluetooth Connection Menu” screen appears.
Registering and connecting a Bluetooth device

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

![Bluetooth Connection Menu]

The registered device list screen appears.

4 Tap for the registered device you want to delete.

![Registered device list]

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 [Phone] on the Home screen.

➲ For details, refer to Home screen on page 10.

The phone menu screen appears.

3 Tap on the phone menu.

![Phone menu]

The “Bluetooth Connection Menu” screen appears.

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

![Bluetooth Connection Menu]

The registered device list screen appears.
5 Tap the Bluetooth device name you want to connect.
The Bluetooth connection progress is displayed.
When a connection is successfully established,
the checkbox next to the device name is selected.

The available profile icons are displayed as follows:
- ☑️: Appears when the HFP (Hands-Free Profile) is available.
- ☑️: Appears when the SPP (Serial Port Profile) is available.
☐ If a device is already connected with the same profile, that device is disconnected and the new device will be connected.

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 meters apart. Initially, this function is set to “On”.

1 Tap [Phone] on the Home screen.

以人为例：参考 Home screen on page 10.
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 off.

If you Bluetooth device is ready for a Bluetooth wireless connection, a connection to this product will automatically be established.
- To turn automatic connection on, tap [Auto Connect] again.

Disconnecting a Bluetooth device

1 Tap [Phone] on the Home screen.

以人为例：参考 Home screen on page 10.
The phone menu screen appears.
Registering and connecting a Bluetooth device

2 Tap \( \text{ } \) 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, the checkbox next to the device name is deselected.
   ■ 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 [Phone] on the Home screen.
   ➤ For details, refer to Home screen on page 10.
   The phone menu screen appears.

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 [Phone] on the Home screen.
   ➤ For details, refer to Home screen on page 10.
   The phone menu screen appears.
Registering and connecting a Bluetooth device

2 Tap  

The “Bluetooth Connection Menu” screen appears.

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

The “PIN Code” screen appears.

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 [Phone] on the Home screen.
   ➡️ For details, refer to Home screen on page 10. 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.
CAUTION
For your safety, avoid talking on the phone as much as possible while driving.

You can control the Bluetooth connection of the smartphone, and make a call using the incoming or outgoing call histories, transferred phone book, or by dialing. To connect using the hands-free phoning function, you must first use the smartphone to pair this product with the smartphone.

For detailed procedures, refer to Registering your Bluetooth devices on page 22.

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 [Phone] on the Home screen.

The phone menu screen appears.

Reading the screen

1. Number of the Bluetooth connection device
2. Reception status of the smartphone
3. Battery status of the smartphone
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 dialing on the next page.
2. Switches to the call history list.
   - For details, refer to Dialing from the history on page 31.
3. Closes the phone menu screen and return the previous menu screen.
4. Switches to the phone book mode.
   - For details, refer to Calling a number in the phone book on the next page.
   - For details, refer to Selecting a number using alphabet search mode on page 31.
5. Displays the preset dial screen.
   - For details, refer to Using the preset dial lists on page 33.
6. Displays the “Bluetooth Connection Menu”.
   - For details, refer to Registering your Bluetooth devices on page 22.
7. Turns the ring tone for incoming calls on or off.
   - For details, refer to Switching the ring tone on page 32.
8. Turns automatic answering on or off.
   - For details, refer to Answering a call automatically on page 32.
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 dialing
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 ☑.
   Dialing 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 smartphone to this product.
NESS For details, refer to Phone book transfers on page 34.
□ Depending on the settings of the connected smartphone, the phone book may not be automatically transferred to this product. When the phone book is not transferred, transfer the phone book from the smartphone.
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 touching the list.
4 Tap ☑.
   Dialing 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 [Phone Book].
The “Phone Book” screen appears.

2 Tap [Alphabet search] 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 [Russian] on the alphabet search mode. To return to English, tap [English] again.
- The order of the first name and last name may be different from that of the smartphone.

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 touching the list.

6 Tap [Dial].
Dialing starts.
- To cancel the call, tap [Cancel].

7 Tap [End] to end the call.

Dialing from the history

The most recent calls made dialed, 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 smartphone. If the number of calls exceeds 80, the oldest entry will be deleted.

1 Tap [Call History].
The latest updated call history list appears.

2 Tap [Received calls], [Dialed calls] or [Missed calls].

3 Tap an entry on the list.
The dial confirm screen appears.

4 Tap [Dial].
Dialing starts.
- To cancel the call, tap [Cancel].

5 Tap [End] to end the call.
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 this page.
- 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 smartphone, 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
You can easily store up to 6 phone numbers as presets.

1 Tap \( \text{1} \).
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 \( \text{2} \).
Dialing starts.
   - To cancel the call, tap \( \text{3} \).

4 Tap \( \text{4} \) 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 \( \text{1} \) on the phone book or the call history list.

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 smartphone).

- Tap \( \text{1} \). Tapping \( \text{1} \) changes the setting as follows:
  - OFF (default):
    - Hands-free phoning
  - ON:
    - Talk directly on your smartphone

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 \( \text{1} \). Tapping \( \text{1} \) switches between the three levels:
  - — (default) —

- This function is not available when the private mode is set to “ON”.
- For details, refer to Setting the private mode on this page.
- This function can be performed even while talking on the phone.
- Settings can be stored for each device.
Notes for hands-free phoning

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

Registration and connection
- Smartphone operations vary depending on the type of smartphone. Refer to the instruction manual that came with your smartphone for detailed instructions.
- With some smartphones, phone book transfer may not work even though your smartphone is paired with this product. In that case, disconnect your smartphone, perform pairing again from your smartphone 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 smartphones, even if you press the accept button on the smartphone 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 dialed number history
- Calls made or editing performed only on your smartphone will not be applied to the dialed 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 smartphone, 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 smartphone, all entries may not be downloaded completely.
- With some smartphones, 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 smartphone.
- Depending on the smartphone, 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 smartphone contains image data, the phone book may not be transferred correctly. (Image data cannot be transferred from the smartphone.)
- Depending on the smartphone, phone book transfer may not be available.
Customizing 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 10.
3 Tap [Settings] on the Home screen. The menu top 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 Customizing the audio settings on this page.
2 Tap [Fader/Balance]. When “Subwoofer” is selected in “Rear Speaker”, “Balance” will be displayed instead of “Fader/Balance” and front/rear speaker balance cannot be adjusted.
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 equalizer
The equalizer lets you adjust equalization to match vehicle interior acoustic characteristics as desired.

Recalling equalizer curves
There are seven stored equalizer curves that you can easily recall at any time. Here is a list of the equalizer curves:
**Equalizer curve**

S.Bass (Super Bass) is a curve in which only low-pitched sound is boosted.

**Powerful** 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 equalizer curve that you create. A separate custom curve can be created for each source.

**Custom2** is an adjusted equalizer 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 equalizer curves by switching alternatively between “Flat” and a set equalizer curve.

1. Display the “Audio” screen.
   - For details, refer to Customizing the audio settings on the previous page.

2. Tap [Graphic EQ].

3. Tap the equalizer curve you want.

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

**Adjusting the 5-band graphic equalizer**

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

- A separate “Custom1” curve can be created for each source. If you make adjustments when a curve other than “Custom2” is selected, the equalizer 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 Customizing the audio settings on the previous page.

2. Tap [Graphic EQ].

3. Tap one of the keys to select a curve that you want to use as the basis of customizing.
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 Customizing the audio settings on page 35.

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 Customizing the audio settings on page 35.

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 Customizing the audio settings on page 35.

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 Customizing the audio settings on page 35.

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
Customizing preferences

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”, “Pandora” and “AM” band.

2 Display the “Audio” screen.
☞ For details, refer to Customizing the audio settings on page 35.

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.

Customizing 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 10.

3 Tap [Settings] on the Home screen.
The menu top 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 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 Customizing the system settings on this page.
Customizing preferences

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.
ሥ For details, refer to Using the subwoofer output on page 37.

Warning: If you change this setting, subwoofer output in the audio menu will return to the factory settings.

Selecting the system language

The system language can be selected from three languages.
ሥ If the embedded language and the selected language setting are not the same, text information may not display properly.
师事务所 Some characters may not be displayed properly. Text that cannot be displayed is displayed as “_” (underbar).

1 Display the “System” screen.
ሥ For details, refer to Customizing the system settings on the previous page.

2 Tap [System Language].
The “System Language” screen appears.

3 Tap the desired language.
English (default), Français, Español

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 rear full-range speaker connection (Full).

“Preout” can be set only when the source is set to “OFF”.

1 Display the “System” screen.
ሥ For details, refer to Customizing the system settings on the previous page.

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.
ሥ For details, refer to Using the subwoofer output on page 37.
**Setting the keyboard layout**

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

This setting is valid only when connecting an iPhone with **Advanced App Mode** installed.

- The keyboard layout depends on the system language settings.
  - For details, refer to *Selecting the system language* on the previous page.

- When you tap 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 depend 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 *Customizing the system settings* on page 38.

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 *Customizing the system settings* on page 38.

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**

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

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

1. **Display the “System” screen.**
   - For details, refer to *Customizing the system settings* on page 38.

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].
Customizing preferences

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.
- “Bluetooth Software Update” can be set only when the source is set to “OFF”.
- Never turn this product off while the Bluetooth memory is being cleared.
1 Display the “System” screen.
   ➡ For details, refer to Customizing the system settings on page 38.
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 Customizing the system settings on page 38.
2 Tap [Bluetooth Version Information] to display to the version of the Bluetooth module of this product.

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-BC5). (For details, consult your dealer.)

Rear view camera
This product features a function that automatically switches to the full-screen image of the rear view camera installed on your vehicle. When the shift lever is in the REVERSE (R) position, 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.
To switch to the rear view mode, tap 🗽 on the Home screen.
- In the rear view mode, 🗽 on the screen switches to 🗽.
- To cancel the rear view mode, tap 🗽 on the screen.
- 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 7 seconds while displaying the following screens, the screen switches to the rear view screen automatically.
  - Radio, iPod and Pandora source screens
  - Advanced App 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 shift lever is moved to REVERSE (R) from another position.

When the screen changes to full-screen rear view camera image during normal driving, switch to the opposite setting in “Camera Polarity”.

1 Display the “System” screen.
   > For details, refer to Customizing the system settings on page 38.

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 shift lever is in the REVERSE (R) position.
   - Ground: When the polarity of the connected lead is negative while the shift lever is in the REVERSE (R) position.

Setting the video signal
You can select the suitable video signal setting for your country.
- 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 and the reception is weak. Normally, select the appropriate TV signal.
- Regarding your country TV signal, consult with your nearest Pioneer dealer.
- You can operate this function only for the video signal input into the AV input.

1 Display the “System” screen.
   > For details, refer to Customizing the system settings on page 38.

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, color, 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 Customizing the system settings on page 38.

3 Tap [Picture Adjustment].
   The picture adjustment screen appears.

4 If you are adjusting the picture adjustment, select the unit.
   - 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 color saturation.
   - Hue: Adjusts the tone of color (red or green is emphasized).
Customizing preferences

- **Dimmer**: Adjusts the brightness of the display.
- **Temperature**: Adjusts the color temperature, resulting in a better white balance.

You cannot adjust the picture adjustment for rear view camera when “Camera Polarity” is set to “Off”.

- For details, refer to Setting the rear view camera on page 41.
- You can adjust “Hue” only when the color system is set to “NTSC”.
- With some rear view cameras, picture adjustment may not be possible.

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, Pandora) other than the video source.
- The “Dimmer” setting is set to a common setting in all sources.

### Adjusting the mix sound level

You can adjust the mixed sound volume in three levels. When the audio sources are mixed, the second sound channel plays at this setting level.

1. Display the “System” screen.
   - For details, refer to Customizing the system settings on page 38.

2. Tap [Mixed Sound Level].
   - Tapping [Mixed Sound Level] switches between the three levels:
     - **Low** — **Mid** (default) — **High**
   - Sound level “High” is the largest and “Low” is the smallest.

### Setting the clock mode

You can change the time format.

1. Display the “System” screen.
   - For details, refer to Customizing the system settings on page 38.

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 Customizing the system settings on page 38.

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 Customizing the system settings on page 38.

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 Customizing the system settings on page 38.

2 Tap [Connection Status].
   The “Connection Status” screen appears.

<table>
<thead>
<tr>
<th>Color</th>
<th>Signal communication</th>
<th>Used in positioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Yellow</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

- When the GPS antenna is connected to this product, “OK” is displayed.
- When the GPS antenna is not connected to this product, “Not OK” is displayed.
- If reception is poor, please change the installation position of the GPS antenna.

GPS Antenna
Indicates the connection status of the GPS antenna, the reception sensitivity, and from how many satellites the signal is received.

1 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.

2 Back Signal
When the shift lever is shifted to “R”, the signal switches to “High” or “Low”. (One of these is displayed depending on the vehicle.)
Customizing the favorites menu

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

- Up to 12 menu items can be registered on the favorites 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 10.
   The menu top 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 10.
   The menu top 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 10.
   The screen is turned off.
   - Tap anywhere on the screen to turn it back on.
## Troubleshooting

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

### Problems with this product

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action (Reference)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The power doesn’t turn on. This product doesn’t operate.</td>
<td>Leads and connectors are incorrectly connected.</td>
<td>Confirm once more that all connections are correct.</td>
</tr>
<tr>
<td>The fuse is blown.</td>
<td></td>
<td>Rectify the reason for the fuse blowing, then replace the fuse. Be very sure to install a correct fuse with the same rating.</td>
</tr>
<tr>
<td>Noise and other factors are causing the built-in microprocessor to operate incorrectly.</td>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>

### GPS signal can not be obtained.

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action (Reference)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The GPS antenna is in an unsuitable location.</td>
<td></td>
<td>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 antenna if necessary.</td>
</tr>
<tr>
<td>Obstacles are blocking signals from the satellites.</td>
<td></td>
<td>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 antenna if necessary, or continue driving until reception improves. Keep the antenna clean.</td>
</tr>
<tr>
<td>The position of satellites relative to your vehicle is inadequate.</td>
<td></td>
<td>The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Continue driving until reception improves.</td>
</tr>
<tr>
<td>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.)</td>
<td></td>
<td>The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Wait until reception improves.</td>
</tr>
<tr>
<td>If a vehicle phone or cellular phone is used near the GPS antenna, GPS reception may be lost temporarily.</td>
<td></td>
<td>The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. When using a cellular phone, keep the antenna of the cellular phone away from the GPS antenna.</td>
</tr>
<tr>
<td>Something is covering the GPS antenna.</td>
<td></td>
<td>Do not cover the GPS antenna with spray paint or vehicle wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals.</td>
</tr>
</tbody>
</table>

| The screen is too bright. | Picture quality adjustment of the display is not correct. | Adjust the picture quality. (Page 42) |
### Problems in the audio screen

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action (Reference)</th>
</tr>
</thead>
<tbody>
<tr>
<td>iPod cannot be operated.</td>
<td>The iPod is frozen.</td>
<td>Reconnect the iPod with the suitable cable.</td>
</tr>
<tr>
<td></td>
<td>An error has occurred.</td>
<td>Reconnect the iPod with the suitable cable.</td>
</tr>
<tr>
<td>No sounds are produced. The volume level will not rise.</td>
<td>Cables are not connected correctly.</td>
<td>Connect the cables correctly.</td>
</tr>
<tr>
<td>Music in an iPod cannot be played.</td>
<td>An error has occurred.</td>
<td>Select music using the search function.</td>
</tr>
</tbody>
</table>

### Problems with the phone screen

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action (Reference)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dialing is not possible because the touch panel keys for dialing are inactive.</td>
<td>Your smartphone is out of range for service.</td>
<td>Retry after re-entering the range for service.</td>
</tr>
<tr>
<td></td>
<td>The connection between the smartphone and this product cannot be established now.</td>
<td>Perform the connection process.</td>
</tr>
<tr>
<td>No sounds are produced. The volume level will not rise.</td>
<td>Cables are not connected correctly.</td>
<td>Connect the cables correctly.</td>
</tr>
<tr>
<td>Must in an iPod cannot be played.</td>
<td>An error has occurred.</td>
<td>Select music using the search function.</td>
</tr>
</tbody>
</table>
## Problems with Advanced App Mode screen

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action (Reference)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A black screen is displayed.</td>
<td>Tap [Ignore] in an application startup message.</td>
<td>Launch the AppRadio app according to the message.</td>
</tr>
<tr>
<td>While operating an application, the application was ended on the smartphone side.</td>
<td></td>
<td>Press the Home button and display the Home screen.</td>
</tr>
<tr>
<td>The smartphone OS may be waiting for screen operation.</td>
<td></td>
<td>Stop the vehicle in a safe place and check the screen on the smartphone.</td>
</tr>
<tr>
<td>A message prompting reconnection is displayed.</td>
<td>A smartphone with a security function was connected to this product.</td>
<td>Unlock and reconnect the smartphone.</td>
</tr>
<tr>
<td>The OS version installed is old.</td>
<td></td>
<td>Upgrade the OS version.</td>
</tr>
<tr>
<td>An incompatible smartphone was connected to this product.</td>
<td></td>
<td>Connect a compatible smartphone to this product.</td>
</tr>
<tr>
<td>The screen is displayed, but operation does not work at all.</td>
<td>An error has occurred.</td>
<td>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.</td>
</tr>
<tr>
<td>The radio audio is not output.</td>
<td>The radio audio mixing is turned off.</td>
<td>Turn on the radio audio mixing.</td>
</tr>
</tbody>
</table>

## Problems with the Bluetooth connection

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action (Reference)</th>
</tr>
</thead>
<tbody>
<tr>
<td>An HFP connection can be established, but an SPP connection cannot be established.</td>
<td>An error may have occurred in the AppRadio app.</td>
<td>Turn the Bluetooth function of the smartphone off and then turn it on again. Force-quit the AppRadio app on the smartphone and start it again. Turn the smartphone off and then turn it on again.</td>
</tr>
<tr>
<td>An HFP connection cannot be established.</td>
<td>An error may have occurred in this product or the smartphone.</td>
<td>Cancel the device registration from this product and perform the pairing again. If the problem persists, turn the ignition switch off and then turn it on again.</td>
</tr>
<tr>
<td>Pandora internet radio cannot be connected.</td>
<td>An error may have occurred in the Pandora application.</td>
<td>Display the setting of the Pandora application on the smartphone, and turn the setting for the Bluetooth connection off and then turn it on again.</td>
</tr>
</tbody>
</table>
Positioning technology

Positioning by GPS
The Global Positioning System (GPS) uses a network of satellites orbiting the Earth. Each of the satellites, which orbit at a height of 68,900,000 feet (21,000 km), continually broadcasts radio signals giving time and position information. This ensures that signals from at least three can be picked up from any open area on the ground’s surface. The accuracy of the GPS information depends on how good the reception is. When the signals are strong and reception is good, GPS can determine latitude, longitude and altitude for accurate positioning in three dimensions. But if signal quality is poor, only two dimensions, latitude and longitude, can be obtained and positioning errors are somewhat greater.

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.

• If a car phone or cellular phone is used near the GPS antenna, GPS reception may be lost temporarily.

• Do not cover the GPS antenna with spray paint or car wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals, so keep the antenna clear.

• If a GPS signal has not been received for a long time, your vehicle’s actual position and the current position mark on the map may diverge considerably or may not be updated. In such 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 traveling on and the reception status of the GPS signal, the actual position of your vehicle may differ from the position displayed on the map screen.
• If you make a slight turn.

• If there is a parallel road.

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

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

• If you drive in zigzags.

• If the road has a series of hairpin bends.

• If there is a loop or similar road configuration.

• If you take a ferry.

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

• If you are on a steep mountain road with many height changes.
• If you enter or exit a multi-storey parking lot or similar structure using a spiral ramp.

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

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

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

• When you drive around a traffic circle.

• When starting driving immediately after starting the engine.

• If you join the road after driving around a large parking lot.
Setting list
The customizable settings of this product are listed below. For details about changing each setting, refer to the page for that item.

Audio settings

<table>
<thead>
<tr>
<th>Setting</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fader/Balance</td>
<td>35</td>
</tr>
<tr>
<td>Graphic EQ</td>
<td>35</td>
</tr>
<tr>
<td>Loudness</td>
<td>37</td>
</tr>
<tr>
<td>Subwoofer</td>
<td>37</td>
</tr>
<tr>
<td>Bass Booster</td>
<td>37</td>
</tr>
<tr>
<td>High Pass Filter</td>
<td>37</td>
</tr>
<tr>
<td>Source Level Adjuster</td>
<td>38</td>
</tr>
</tbody>
</table>

System settings

<table>
<thead>
<tr>
<th>Setting</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rear Speaker</td>
<td>38</td>
</tr>
<tr>
<td>Preout</td>
<td>39</td>
</tr>
<tr>
<td>System Language</td>
<td>39</td>
</tr>
<tr>
<td>Keyboard</td>
<td>40</td>
</tr>
<tr>
<td>Ever Scroll</td>
<td>40</td>
</tr>
<tr>
<td>Bluetooth Memory Clear</td>
<td>40</td>
</tr>
<tr>
<td>Bluetooth Software Update</td>
<td>41</td>
</tr>
<tr>
<td>Bluetooth Version Information</td>
<td>41</td>
</tr>
<tr>
<td>Camera Polarity</td>
<td>41</td>
</tr>
<tr>
<td>Video Signal Setting</td>
<td>42</td>
</tr>
<tr>
<td>Picture Adjustment</td>
<td>42</td>
</tr>
<tr>
<td>Mixed Sound Level</td>
<td>43</td>
</tr>
<tr>
<td>Clock Mode</td>
<td>43</td>
</tr>
<tr>
<td>Background</td>
<td>43</td>
</tr>
<tr>
<td>System Reset</td>
<td>44</td>
</tr>
<tr>
<td>Connection Status</td>
<td>44</td>
</tr>
</tbody>
</table>

Other settings

<table>
<thead>
<tr>
<th>Setting</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Favorites</td>
<td>45</td>
</tr>
<tr>
<td>Display OFF</td>
<td>45</td>
</tr>
</tbody>
</table>