

**Pioneer**

# **DMH-A4450BT**

RDS AV RECEIVER

English

Operation Manual

# Contents

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

## Important

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

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# Precaution

## Important safety information

### **WARNING**

- Do not attempt to install or service this product by yourself. Installation or servicing of this product by persons without training and experience in electronic equipment and automotive accessories may be dangerous and could expose you to the risk of electric shock, injury or other hazards.
- Do not allow this product to come into contact with liquids. Electrical shock could result. Also, damage to the product, smoke, and overheating could result from contact with liquids.
- If liquid or foreign matter should get inside this product, park your vehicle in a safe place, turn the ignition switch off (ACC OFF) immediately and consult your dealer or the nearest authorised Pioneer Service Station. Do not use this product in this condition because doing so may result in a fire, electric shock, or other failure.
- If you notice smoke, a strange noise or odour from this product, or any other abnormal signs on the LCD screen, turn off the power immediately and consult your dealer or the nearest authorised Pioneer Service Station. Using this product in this condition may result in permanent damage to the system.
- Do not disassemble or modify this product, as there are high-voltage components inside which may cause an electric shock. Be sure to consult your dealer or the nearest authorised Pioneer Service Station for internal inspection, adjustments or repairs.
- Do not ingest the battery, Chemical Burn Hazard.

(The remote control supplied or sold separately with) This product contains a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.

Keep new and used batteries away from children.

If the battery compartment does not close securely, stop using the product and keep it away from children.

If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

Before using this product, be sure to read and fully understand the following safety information:

- Do not operate this product, any applications, or the rear view camera option (if purchased) if doing so will divert your attention in any way from the safe operation of your vehicle. Always observe safe driving rules and follow all existing traffic regulations. If you experience difficulty in operating this product, pull over, park your vehicle in a safe location and apply the handbrake before making the necessary adjustments.
- Never set the volume of this product so high that you cannot hear outside traffic and emergency vehicles.
- To promote safety, certain functions are disabled unless the vehicle is stopped and the handbrake is applied.
- Keep this manual handy as a reference for operating procedures and safety information.

- Do not install this product where it may (i) obstruct the driver's vision, (ii) impair the performance of any of the vehicle's operating systems or safety features, including air bags or hazard lamp buttons or (iii) impair the driver's ability to safely operate the vehicle.
- Please remember to fasten your seat belt at all times while operating your vehicle. If you are ever in an accident, your injuries can be considerably more severe if your seat belt is not properly buckled.
- Never use headphones while driving.

## To ensure safe driving

### **WARNING**

- **LIGHT GREEN LEAD AT POWER CONNECTOR IS DESIGNED TO DETECT PARKED STATUS AND MUST BE CONNECTED TO THE POWER SUPPLY SIDE OF THE HANDBRAKE SWITCH. IMPROPER CONNECTION OR USE OF THIS LEAD MAY VIOLATE APPLICABLE LAW AND MAY RESULT IN SERIOUS INJURY OR DAMAGE.**
- **Do not take any steps to tamper with or disable the handbrake interlock system which is in place for your protection. Tampering with or disabling the handbrake interlock system could result in serious injury or death.**
- **To avoid the risk of damage and injury and the potential violation of applicable laws, this product is not for use with a video image that is visible to the driver.**
- In some countries the viewing of video image on a display inside a vehicle even by persons other than the driver may be illegal. Where such regulations apply, they must be obeyed.

If you attempt to watch video image while driving, the warning **"Viewing of front seat video source while driving is strictly prohibited."** will appear on the screen. To watch video image on this display, stop the vehicle in a safe place and apply the handbrake. Please keep the brake pedal pushed down before releasing the handbrake.

## When using a display connected to V OUT

The video output terminal (**V OUT**) is for connection of a display to enable passengers in the rear seats to watch video images.

### **WARNING**

NEVER install the rear display in a location that enables the driver to watch video images while driving.

## To avoid battery exhaustion

Be sure to run the vehicle engine while using this product. Using this product without running the engine can drain the battery.

### **WARNING**

Do not install this product in a vehicle that does not have an ACC wire or circuitry available.

## Rear view camera

With an optional rear view camera, you are able to use this product as an aid to keep an eye on trailers, or backing into a tight parking spot.

### **WARNING**

- SCREEN IMAGE MAY APPEAR REVERSED.
- USE INPUT ONLY FOR REVERSE OR MIRROR IMAGE REAR VIEW CAMERA. OTHER USE MAY RESULT IN INJURY OR DAMAGE.

### **CAUTION**

The rear view mode is to use this product as an aid to keep an eye on the trailers, or while backing up. Do not use this function for entertainment purposes.

## Handling the USB connector

### **CAUTION**

- To prevent data loss and damage to the storage device, never remove it from this product while data is being transferred.
- Pioneer cannot guarantee compatibility with all USB mass storage devices and assumes no responsibility for any loss of data on media players, iPhone, smartphone, or other devices while using this product.
- It may not be recognised properly by this product if a USB device that had been incorrectly disconnected from the computer is connected.

## In case of trouble

Should this product fail to operate properly, contact your dealer or nearest authorised Pioneer Service Station.

## Visit our website

Visit us at the following site:

In Mexico

<http://www.pioneer-mexico.com.mx/>

In Singapore

<https://sg.pioneercarentertainment.com/>

In Malaysia

<https://my.pioneercarentertainment.com/>

In Thailand

<https://th.pioneercarentertainment.com/>

In Indonesia

<https://id.pioneercarentertainment.com/>

In Australia

<https://www.pioneer.com.au/>

In Israel

<http://www.pioneerisrael.co.il/>

In Middle East/Africa

<http://pioneer-mea.com/en/>

In Latin

<https://pioneer-latin.com/>

In Hong Kong

<http://www.pioneerhongkong.com.hk/ct/company.php>

In Taiwan

<http://www.pioneer-twn.com.tw/>

In Russia

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

<https://www.pioneer-rus.ru/>

- We offer the latest information about PIONEER CORPORATION on our website.
- Pioneer regularly provides software updates to further improve its products. Please check the support section of the Pioneer website for all available software updates.

## Protecting the LCD panel and screen

- Do not expose the LCD screen to direct sunlight when this product is not used. This may result in LCD screen malfunction due to the resulting high temperatures.
- When using a mobile phone, keep the aerial of the mobile phone away from the LCD screen to prevent disruption of the video in the form of spots, coloured stripes, etc.
- To protect the LCD screen from damage, be sure to touch the touch panel keys only with your finger and do so gently.



## Notes on internal memory

- The information will be erased by disconnecting the yellow lead from the battery (or removing the battery itself).
- Some of the settings and recorded contents will not be reset.

## About this manual

- This manual uses diagrams of actual screens to describe operations. However, the screens on some units may not match those shown in this manual depending on the model used.
- When an iPhone is connected to the unit, the source name on the unit appears as [iPod]. Please note that this unit only supports iPhone regardless of the source name. For details of iPhone compatibility, refer to Compatible iPhone models (page 54).

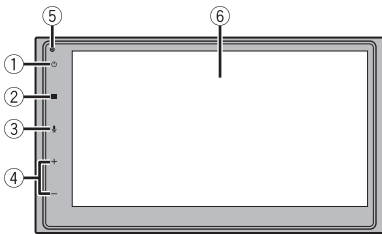
## Meanings of symbols used in this manual




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



# Parts and controls

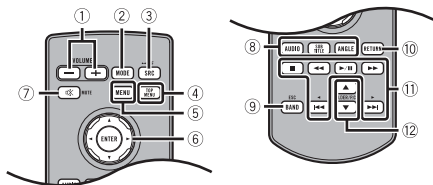
## Main unit



①		<p>Touch to turn off the display information. To turn on the display information, touch again. Touch and hold to power off. To power back on, touch again.</p> <p><b>TIP</b> If you power the unit off, you can turn off almost all functions. The unit turns on by operating the following functions:</p> <ul style="list-style-type: none"> <li>• An incoming call is received (only for hands-free phoning via Bluetooth).</li> <li>• A rear view camera image is input when the vehicle is in reverse.</li> <li>• A button on this unit is touched.</li> <li>• The ignition switch is turned off (ACC OFF), then turned on (ACC ON).</li> </ul>
②		<p>Touch to display the top menu screen. Touch and hold to mute or unmute.</p>
③	 *	<p>Touch to activate the voice recognition mode such as Siri when the iPhone is connected to the unit via USB.</p>
④	VOL (+/-)	
⑤	RESET	Press to reset the microprocessor (page 11).
⑥	LCD screen	

\* This function is available only when Apple CarPlay or Android Auto is activated.

## Remote control



①	Volume (+/-)	
②	MODE	Not used.
③	SRC	Press to cycle through all the available sources. Press and hold to turn the power off.
④	TOP MENU	Not used.
⑤	MENU	Not used.
⑥	Thumb pad	Not used.
⑦	MUTE	
⑧	AUDIO SUBTITLE ANGLE	Not used.
⑨	BAND/ESC	Press to select the tuner band when tuner is selected as a source.
⑩	RETURN	Not used.
⑪	▶/	Press to pause or resume playback or play from the beginning when resume is off.
	◀◀ or ▶▶	Press to return to the previous track (chapter) or go to the next track (chapter). Press and hold to perform fast reverse or fast forwards.
	◀◀◀ or ▶▶▶	Press to return to the previous track (chapter) or go to the next track (chapter). Press to answer or end a call.
	■	For USB audio: No action. For USB image: Press to stop playback. For USB video: Press to stop playback.
⑫	FOLDER/P.CH	Press to select the next or previous title or folder. Press to recall radio station frequencies assigned to preset channel keys.

# Basic operation

## Resetting the microprocessor

### ⚠ CAUTION

- Pressing the RESET button resets settings and recorded contents to the factory settings.
  - Do not perform this operation when a device is connected to this product.
  - Some of the settings and recorded contents will not be reset.
- The microprocessor must be reset under the following conditions:
  - Prior to using this product for the first time after installation.
  - If this product fails to operate properly.
  - If there appears to be problems with the operation of the system.

**1 Turn the ignition switch OFF.**

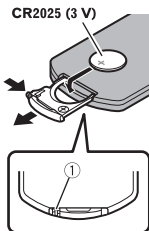
**2 Press RESET with a pen tip or other pointed tools.**  
Settings and recorded contents are reset to the factory settings.

## Preparing the remote control

Remove the insulation sheet before use.

### How to replace the battery

Check the type of remote control and replace the battery as shown below.



① Tab

Insert the CR2025 (3 V) battery with the plus (+) and minus (-) poles orientated properly.

**⚠ WARNING**

Batteries (battery pack or batteries installed) must not be exposed to excessive heat such as sunshine, fire or the like.

**⚠ CAUTION**

- Remove the battery if the remote control is not used for a month or longer.
- There is a danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type.
- Do not expose a battery to high or low extreme temperatures during use, storage or transportation.
- Do not dispose of a battery into fire or a hot oven, or crush mechanically or cut a battery, that can result in an explosion.
- Do not handle the battery with metallic tools.
- Do not store the battery with metallic objects.
- If the battery leaks, wipe the remote control completely clean and install a new battery.
- When disposing of used batteries, please comply with governmental regulations or environmental public institution's rules that apply in your country/area.

**Using the remote control**

Point the remote control in the direction of the front panel to operate.

**NOTE**

The remote control may not function properly in direct sunlight.

**🔄 Important**

- Do not store the remote control in high temperatures or direct sunlight.
- Do not let the remote control fall onto the floor, where it may become jammed under the brake or accelerator.



**Using the touch panel**

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

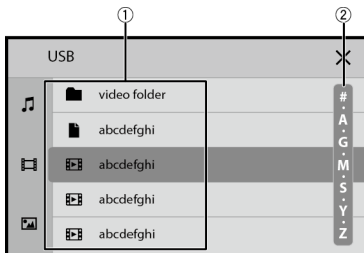
**NOTE**

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

**Common touch panel keys**

- : Returns to the previous screen.
- : Close the screen.

## Operating list screens



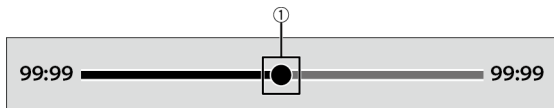
①

**Touching an item on the list allows you to narrow down the options and proceed to the next operation.**

②

**Appears when items cannot be displayed on a single page.**  
Drag the side bar, the initial search bar or the list to view any hidden items.

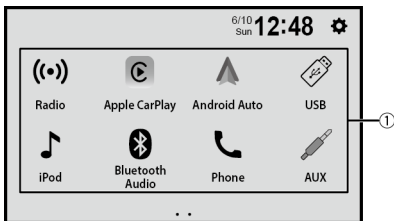
## Operating the time bar



①

**You can change the playback point by dragging the key.**  
The playback time corresponding to the position of the key is displayed while dragging the key.

## Top menu screen



①

### Source icons

#### TIP

You can display the hidden source icon(s) by swiping left on the screen.

12:48




### Setting the time and date (page 46)



### Settings (page 38)

# Bluetooth®

## Bluetooth connection

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

### NOTES

- If five devices have already been paired, the first paired device will be deleted, and the new device will be registered (page 16).
- If your device supports SSP (Secure Simple Pairing), a six-digit number appears on the display of this product. Touch [Yes] to pair the device.

## Bluetooth Settings


- 1 Touch .
- 2 Touch  then [Bluetooth Settings].



### CAUTION

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

Menu Item	Description
[Connection]	Activate to connect the last connected Bluetooth device automatically.
[Auto Answer]	(page 17)
[Search]	Search for available devices.

Menu Item	Description
[Bluetooth Memory Clear]	Touch [OK] to clear the Bluetooth memory.
[Bluetooth Paired Device List]	Display the paired device list. Touch  to delete registered device.
[Bluetooth Device Info]	Displaying the device name of this product.



## Hands-free phoning










To use this function you need to connect your mobile phone to this product via Bluetooth in advance (page 15).

### CAUTION

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

### Making a phone call

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



	<p><b>The following items are displayed.</b></p> <ul style="list-style-type: none"> <li>• Reception status of the current mobile phone</li> <li>• Battery status of the current mobile phone</li> </ul>
	<p><b>Synchronises the contacts on this product's phone book with the contacts on your phone manually.</b></p>
	<p><b>Using phone book</b> Select a contact from the phone book. Touch the desired name on the list then select the phone number.</p> <p><b>TIPS</b></p> <ul style="list-style-type: none"> <li>• The contacts on your phone will be automatically transferred to this product.</li> <li>• Update the phone book manually.</li> </ul>
	<p><b>Using call history</b> Make a phone call from the received call , dialled call , or missed call .</p>
	<p><b>Direct phone number input</b> Touch the number keys to enter the phone number then touch  to make a call.</p>

### ► To end the call



- 1 Touch .



## Receiving a phone call

- 1 Touch  to answer the call.  
Touch  to end the call.

### TIPS

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

## Voice recognition function (for iPhone)

By connecting your iPhone to this product, you can use the voice recognition function on this product.

### TIP

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


## Phone settings

- 1 Touch .
- 2 Touch  then [Bluetooth Settings].

Menu Item	Description
[Auto Answer]	Activate to answer an incoming call automatically.

## Adjusting the other party's listening volume

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

- 1 Touch  to switch between the three volume levels.

## Notes for hands-free phoning

### ► General notes

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

### ► Registration and connection

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- Mobile phone operations vary depending on the type of mobile phone. Refer to the instruction manual that came with your mobile phone for detailed instructions.
- When phone book transfer does not work, disconnect your phone and then perform pairing again from your phone to this product.

### ► Making and receiving calls

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

### ► The received call and dialled number histories

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

### ► Phone book transfers

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- If there are more than 1 000 phone book entries on your mobile phone, not all entries may download completely.
- Depending on the phone, this product may not display the phone book correctly.
- If the phone book in the phone contains image data, the phone book may not be transferred correctly.
- Depending on the mobile phone, phone book transfer may not be available.

## Bluetooth audio

Before using the Bluetooth audio player, register and connect the device to this product (page 15).

### NOTES

- Depending on the Bluetooth audio player connected to this product, the available operations with this product may be limited to the following two levels:
  - A2DP (Advanced Audio Distribution Profile): Only playing back songs on your audio player is possible.
  - A2DP and AVRCP (Audio/Video Remote Control Profile): Playing back, pausing, selecting songs, etc., are possible.
- Depending on the Bluetooth device connected to this product, the available operations with this product may be limited or differ from the descriptions in this manual.

- While you are listening to songs on your Bluetooth device, refrain from operating the phone function as much as possible. If you try operating, the signal may cause noise for song playback.
- When you are talking on the Bluetooth device connected to this product via Bluetooth, it may pause playback.









**1** Touch .

**2** Touch [Bluetooth Audio].

The Bluetooth audio playback screen appears.

## Basic operation



	<p><b>Switches between playback and pause.</b></p>
	<p> <b>Skips files forwards or backwards.</b></p>
	<p> <b>Performs fast forwards or fast reverse.</b></p>
 	<p><b>Sets a repeat play range.</b></p>
	<p><b>Plays files in random order.</b></p>

# AV source

## Supported AV source

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

- Radio
- USB

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

- iPhone
- Bluetooth® audio
- Camera
- AUX

## Selecting a source

**1** Touch .

**2** Touch the source icon.

### TIP

You can display the hidden source icon(s) by swiping left on the screen.

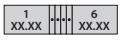









# Radio



## Starting procedure

- 1 Press .
- 2 Touch [Radio].  
The Radio screen appears.

## Basic operation



	 <b>Recalls the preset channel stored to a key from memory.</b>
	<b>Stores the current broadcast frequency to a key.</b>
	<b>Selects the FM1, FM2, FM3, AM1 or AM2 band.</b>
	 <b>Performs BSM (best stations memory) function (page 22).</b>
	 <b>Manual tuning</b>
	 <b>Seek tuning</b> Releasing the key in a few seconds skips to the nearest station from the current frequency.

	Activates/deactivates the local seek mode.
	Displays a preset channel for 10 seconds and switches to the next channel automatically.

## Storing the strongest broadcast frequencies (BSM)

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

### NOTES

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

### 1 Touch to begin search.

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

## Radio settings

### 1 Touch .

### 2 Touch then [System Settings].

The system setting screen appears.

### 3 Touch [Radio settings].

Menu Item	Description
[RDS]	Set on to enable the RDS function.
[AF]	Allow the unit to retune to a different frequency providing the same station.
[TA]*1	Receives the traffic announcement from the last selected frequency, interrupting the other sources.
[RDS CLOCK TIME]	Compensates for the system time by RDS time data, and the time display and built-in clock are automatically adjusted.
[AM Step]*2 [9kHz] [10kHz]	You can switch the seek/manual tuning step for the AM band.

\*1 This function is available only when you receive the FM band.

\*2 This setting is available only when the source is off.

# Compressed files

## Plugging/unplugging a USB storage device

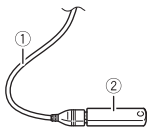
You can play compressed audio, compressed video, or still image files stored in an external storage device.

### Plugging a USB storage device

- 1 Pull out the plug from the USB port of the USB cable.
- 2 Plug a USB storage device into the USB cable.

#### NOTES

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



①	USB cable
②	USB storage device

### Unplugging a USB storage device

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

#### NOTES

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

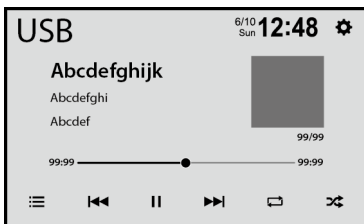
## Starting procedure

- 1 Touch .

- 2 Plug the USB storage device into the USB cable (page 23).
- 3 Touch [USB].  
Playback is performed in order of folder numbers. Folders are skipped if they contain no playable files.

## Basic operation

### Audio source



	<b>Switches between playback and pause.</b>
	<b>Skips files forwards or backwards.</b>
	<b>Performs fast forwards or fast reverse.</b>
	<b>Sets a repeat play range for all files/the current folder/the current file.</b>
	<b>Plays files or does not play in random order.</b>





### Selects a file from the list.

Touch a file on the list to playback.

### TIPS

- Touching a folder on the list shows its contents. You can play a file on the list by touching it.
- You can switch the following media file types.
  - : Compressed audio files
  - : Compressed video files
  - : Image files

## Video source

### CAUTION

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



Switches between playback and pause.



Skips files forwards or backwards.



Performs fast forwards or fast reverse.



Sets a repeat play range for all files/the current folder/the current file.



	<p><b>Selects a file from the list.</b> Touch a file on the list to playback.</p> <p><b>TIPS</b></p> <ul style="list-style-type: none"> <li>• Touching a folder on the list shows its contents. You can play a file on the list by touching it.</li> <li>• You can switch the following media file types.           <ul style="list-style-type: none"> <li>- : Compressed audio files</li> <li>- : Compressed video files</li> <li>- : Image files</li> </ul> </li> </ul>
	<p><b>You can adjust [Brightness]/[Contrast]/[Colour] by touching [+]/[-].</b></p>

## Still image source






	<p><b>Switches between playback and pause.</b></p>
	<p><b>Skips files forwards or backwards.</b></p>
	<p><b>Rotates the displayed picture 90° clockwise.</b></p>
	<p><b>Sets a repeat play range for all files/the current folder/the current file.</b></p>

**Selects a file from the list.**

Touch a file on the list to playback.

**TIPS**

- Touching a folder on the list shows its contents. You can play a file on the list by touching it.
- You can switch the following media file types.
  - : Compressed audio files
  - : Compressed video files
  - : Image files

# iPhone

## NOTE

iPhone may be referred to as iPod in this manual.

## Connecting your iPhone

When connecting an iPhone to this product, the settings are automatically configured according to the device to be connected. For details of the compatibility, refer to Compatible iPhone models (page 54).

### 1 Connect your iPhone.

- iPhone via USB

### 2 Touch .

### 3 Touch [iPod].

## NOTE




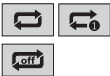


For USB connection, refer to the Quick start guide.

## Basic operation

### Audio source



Switches between playback and pause.

	 <p><b>Skips files forwards or backwards.</b></p>
	 <p><b>Performs fast forwards or fast reverse.</b></p>
	<p><b>Sets a repeat play range for all in the selected list/the current song.</b></p>
	<p><b>Plays songs within the selected list/album randomly.</b></p>
	<p><b>Selects a song from the list.</b> Touch the category then the title of the list to playback of the selected list.</p> <p><b>TIP</b> If you use English as the system language, the alphabet search function is available. Touch the initial search bar to use this function.*</p> <p><b>NOTES</b></p> <ul style="list-style-type: none"> <li>• Depending on the generation or version of the iPhone, some functions may not be available.</li> <li>• Only 2 000 songs in the iPhone are available in the list if the iPhone has more than 2 000 songs. Available songs depend on the iPhone.</li> </ul>

\* This function is available only on the songs list.

# USB Mirroring

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

## NOTES

- The supported finger gestures may vary depending on the USB Mirroring compatible application.
- To use USB Mirroring, you must first install the USB Mirroring compatible applications on the smartphone.
- Be sure to read Using app-based connected content (page 55) before you perform this operation.



## WARNING

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

## Using USB Mirroring



### Important

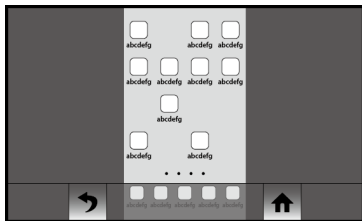
- Pioneer is not responsible for content or functions accessed via USB Mirroring, which are the responsibility of the application and content providers.
- Availability of non-Pioneer content and services, including apps and connectivity, may change or discontinue without notice.
- When using USB Mirroring with the Pioneer product, available content and functions will be limited while driving.

## Starting procedure

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

### TIPS

- Touch the desired application icon after the USB Mirroring app is launched.
- If you connect your device to this product while a USB Mirroring compatible application is already running, the application operation screen will appear on this product.
- The desired application is launched, and the application operation screen appears.



Displays the main menu of the USB Mirroring source screen.

### For smartphone (Android™) users

#### System requirement

Android 5.0 or higher

#### NOTES

- [Android Phone MSC] is deactivated to enable use of this function (page 45).
- The video playback capability depends on the connected Android device.

- 1 Touch .
- 2 Touch then [Phone Connectivity Settings].
- 3 Touch [Mirroring] in the [Priority of Connectivity] setting.
- 4 Unlock your smartphone and connect it to this product via USB.  
Refer to the Quick start guide.
- 5 Touch then swipe left on the screen.
- 6 Touch [Mirroring].  
The USB Mirroring app is launched.

# Apple CarPlay

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

## Compatible iPhone models

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

### NOTE

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

### WARNING

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

## Using Apple CarPlay

### Important

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

For details about Apple CarPlay, visit the following site:

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

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

## Setting the driving position

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

1 Touch .


2 Touch .

3 Touch [Phone Connectivity Settings].



- 4** Touch [Driving Position].  
[Left]  
Select for a left-hand drive vehicle.  
[Right]  
Select for a right-hand drive vehicle.

## Starting procedure

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

### TIP

You can use Siri function by touching  button once Apple CarPlay is activated.

### NOTES

- For details on USB connection, refer to the Quick start guide.
- If an Apple CarPlay compatible device has been connected and another screen is displayed, touch [Apple CarPlay] on the top menu screen to display the Application menu screen.
- Hands-free phoning via Bluetooth wireless technology is not available while Apple CarPlay is on. If Apple CarPlay is turned on during a call on a mobile phone other than an Apple CarPlay compatible device, the Bluetooth connection will be terminated after the call ends.

# Android Auto™

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

## Compatible Android devices

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

### NOTES

- [Android Phone MSC] is deactivated to enable use of this function (page 45).
- The compatible finger gestures vary depending on the application for the smartphone.

### WARNING

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

## Using Android Auto

### Important



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

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

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

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

## Starting procedure

- 1 Touch .
- 2 Touch  then [Phone Connectivity Settings].
- 3 Touch [Android Auto] in the [Priority of Connectivity] setting.
- 4 Connect an Android Auto™ compatible device to this product via USB.  
The application screen appears.

**TIP**

You can use voice recognition function by touching  button once Android Auto is activated.

**NOTES**

- For details on USB connection, refer to the Quick start guide.
- When the device for Android Auto is connected to this unit, the device is also connected via Bluetooth at the same time. If five devices are already paired, the message confirming whether to delete the registered device is displayed. If you want to delete the device, touch [Agree]. If you want to delete other device, touch [Bluetooth Settings] and delete the devices manually (page 16).
- If Android Auto is turned on during a call on a mobile phone other than the Android Auto compatible device, the Bluetooth connection will switch to the Android Auto compatible device after the call.

# AUX

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

## CAUTION

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

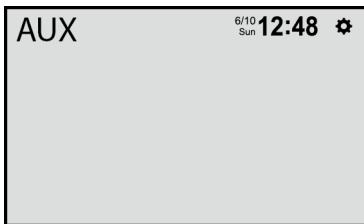
## NOTE

A Mini-jack AV cable (sold separately) is required for connection. For details, refer to the Quick start guide.

## Starting procedure

- 1 Touch .
- 2 Touch [AUX].  
The AUX screen appears.

## Basic operation




# Camera

You can display the video image output by the device connected to video or camera input. For details, refer to the Quick start guide.

## CAUTION

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



## Starting procedure

- 1 Touch  then swipe left on the screen.
- 2 Touch [Camera] for connected camera view.  
The video image is displayed on the screen.

# Settings



You can adjust various settings in the main menu.


## Displaying the setting screen


- 1 Touch .
- 2 Touch .
- 3 Touch one of the following categories, then select the options.
  - System Settings (page 38)
  - Display Settings (page 40)
  - Audio & EQ Settings (page 41)
  - Bluetooth Settings (page 15)
  - Camera settings (page 42)
  - Phone Connectivity Settings (page 45)

## System Settings

The menu items vary according to the source.

Menu Item	Description
[Choose Language]	Select the system language. <b>NOTES</b> <ul style="list-style-type: none"><li>• If the embedded language and the selected language setting are not the same, the text information may not display properly.</li><li>• Some characters may not be displayed properly.</li></ul>
[Date & Time]	Set the clock by touching  or  .
	You can operate the following items: Year, month, date, hour, minute. <b>TIPS</b> <ul style="list-style-type: none"><li>• You can change the time display format to [AM], [PM] or [24H].</li><li>• You can change the order of the month/date display format: [DD/MM/YY], [MM/DD/YY].</li></ul>
[Beep Tone]	Set off to disable the beep sound when the button is touched or the screen is touched.

Menu Item	Description
<b>[Steering Control Select]</b> [With Adapter], [Without Adapter]	Select [With Adapter] or [Without Adapter] according to your wired remote control.  <b>NOTES</b> <ul style="list-style-type: none"> <li>Depending on your vehicle, this function may not work properly. In this case, contact your dealer or an authorised PIONEER Service Station.</li> <li>Please use a PIONEER wiring harness for each car model when [With Adapter] mode is engaged, otherwise select [Without Adapter].</li> </ul>
<b>[Steering Wheel Control]</b>	Select and register the function to the key on the car's steering wheel. To clear the settings, touch [Clear].  <b>NOTES</b> <ul style="list-style-type: none"> <li>This setting is available only when you stop your vehicle in a safe place and apply the handbrake.</li> <li>This function is available when [Steering Control Select] is set to [Without Adapter].</li> </ul>
<b>[Radio settings]</b>	(page 22)
<b>[Factory Reset]</b>	Touch [OK] to restore the settings to the default settings.   <b>CAUTION</b> Do not turn off the engine while restoring the settings.  <b>NOTES</b> <ul style="list-style-type: none"> <li>This setting is available only when you stop your vehicle in a safe place and apply the handbrake.</li> <li>The source is turned off and the Bluetooth connection is disconnected before the process starts.</li> <li>Before starting the restore process, disconnect any device that is connected to the USB port. Otherwise, some settings may not be restored correctly.</li> </ul>





Menu Item	Description
[System Information]	<p>Displaying and updating the firmware version.</p> <p> <b>CAUTION</b></p> <ul style="list-style-type: none"> <li>• The USB storage device for updating must contain only the correct update file.</li> <li>• Never turn this product off, disconnect the USB storage device while the firmware is being updated.</li> <li>• You can only update the firmware when the vehicle is stopped and the handbrake is engaged.</li> </ul> <ol style="list-style-type: none"> <li><b>1 Download the firmware update files into your computer.</b></li> <li><b>2 Connect a blank (formatted) USB storage device to your computer then locate the correct update file and copy it onto the USB storage device.</b></li> <li><b>3 Connect the USB storage device to this product (page 23).</b></li> <li><b>4 Display the [System Settings] screen (page 38).</b></li> <li><b>5 Touch [System Information].</b></li> <li><b>6 Touch [Update].</b> New firmware version information is displayed.</li> <li><b>7 Touch [Update].</b> Follow the on-screen instructions to finish updating the firmware.</li> </ol> <p><b>NOTES</b></p> <ul style="list-style-type: none"> <li>• This product will reset automatically after the firmware update is completed if the update is successful.</li> <li>• If an error message appears on the screen, touch the display and perform the above steps again.</li> </ul>
[Licence]	Displaying the open source licence.

## Display Settings

The menu items vary according to the source.





Menu Item	Description
[Lighting Detect]	Activate to set the dimmer function on automatically when the head lamps of the vehicle are lit.
[Day Illumination]	Touch [+]/[-] to adjust the brightness of the display in the day time.
[Night Illumination]	Touch [+]/[-] to adjust the brightness of the display in the night time.
[Illumination]	Select an illumination colour from the preset list.





Menu Item	Description
<b>[Wallpaper]</b>	Touch the wall paper from the preset items in this product or original pictures via the external device and touch [Apply]. The wall paper can be set from selections for the top menu screen and AV operation screen.
Preset Display	Select the desired preset background display.
	Select the background display image of the connected USB storage device. <b>1 Connect the USB storage device to this product (page 23).</b> <b>2 Touch .</b> <b>3 Select the desired image.</b>
 (custom)	Displays the background display image imported from the USB storage device.
 (off)	Hides the background display.

## Audio & EQ Settings

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

Menu Item	Description
<b>[Fader/Balance]</b>	Touch  or  to adjust the front/rear speaker balance. Set [Front] and [Rear] to [0] when using a dual speaker system. Touch  or  to adjust the left/right speaker balance. <b>TIP</b> You can also set the value by dragging the point on the displayed table.
<b>[Subwoofer/Crossover]</b>	
[Subwoofer]	Select enable or disable rear subwoofer output from this product.
[Front HPF]	Adjust the speaker output level of the listening position by touching [+]/[-].
[Rear HPF]	
[Subwoofer LPF]	

Menu Item	Description
<b>[EQ]</b> [Super Bass] [Powerful] [Natural] [Vocal] [Flat] [Custom]	Select or customise the equaliser curve. Select a curve that you want to use as the basis of customising then touch the frequency that you want to adjust.  <b>TIPS</b> <ul style="list-style-type: none"> <li>• If you make adjustments when a curve [Super Bass], [Powerful], [Natural], [Vocal], or [Flat] is selected, the equaliser curve settings will be changed to [Custom] mandatorily.</li> <li>• [Custom] curves can be created common to all sources.</li> <li>• If you trail a finger across the bars of multiple equaliser bands, the equaliser curve settings will be set to the value of the touched point on each bar.</li> </ul>
<b>[Volume]</b> [Main Volume] [Ring Volume] [Talking Volume] [Navi Volume] [Voice Volume] [TA Volume]	Adjust the volume level by touching [+]/[-].
<b>[Speaker Level]</b> <b>Types of speaker</b> [Front Left] [Front Right] [Rear Left] [Rear Right] [Subwoofer]	Adjust the speaker output level of the listening position. <b>1 Touch  or  to adjust the selected speaker output level.</b>  <b>NOTE</b> [Subwoofer] is available when [Subwoofer] in the [Subwoofer/Crossover] setting is activated.
<b>[Loudness]</b> [Off] [Low] [Mid] [High]	Compensates for deficiencies in the low-frequency and high-frequency ranges at low volume.
<b>[Bass Boost]</b> [0] to [6]	Adjust the bass boost level.

## Camera settings

The menu items vary according to the source.

A separately sold rear view camera is required for utilising the rear view camera function. (For details, consult your dealer.)

### ► Rear view camera

This product features a function that automatically switches to the full-screen image of the rear view camera installed on your vehicle when the gearstick is in the REVERSE (R) position.

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

## ► Camera for Camera View mode

Camera View can be displayed at all times. Note that with this setting, the camera image is not resized to fit, and that a portion of what is seen by the camera is not viewable. To display the camera image, touch [Camera] on the top menu screen (page 14).

### NOTE

To set the rear view camera as the camera for Camera View mode, activate [Rear Viewing Camera Input] (page 43).

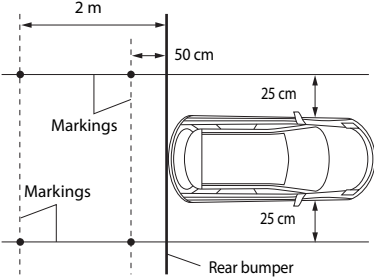


### CAUTION

Pioneer recommends the use of a camera which outputs mirror reversed images, otherwise the screen image may appear reversed.

- Immediately verify whether the display changes to the rear view camera image when the gearstick is moved to REVERSE (R) from another position.

Menu Item	Description
[Rear Viewing Camera Input]	Setting rear view camera activation.
[Camera View] [Normal] [Reverse]	Select the way the screen image of a camera appears.
[Parking Assist Guide]	You can set whether to display the parking assist guidelines on the rear view camera images when backing up your vehicle.

Menu Item	Description
<b>[Parking Assist Guide Adjust]</b>	<p><b>1 Adjusting the guidelines by dragging or touching ▲/▼/◀/▶ on the screen.</b></p> <p><b>2 Touch [OK] to finish the settings.</b> Touch [reset] to reset the settings.</p> <p><b>⚠ CAUTION</b></p> <ul style="list-style-type: none"> <li>When adjusting the guidelines, be sure to park the vehicle in a safe place and apply the handbrake.</li> <li>Before getting out of the car to place the markings, be sure to turn the ignition switch off (ACC OFF).</li> <li>The range projected by the rear view camera is limited. Also, the vehicle width and distance guidelines displayed on the rear view camera image may differ from the actual vehicle width and distance. (The guidelines are straight lines.)</li> <li>The image quality may deteriorate depending on the usage environment, such as at night or in dark surroundings.</li> </ul> <p><b>NOTES</b></p> <ul style="list-style-type: none"> <li>This setting is available only when you stop your vehicle in a safe place and apply the handbrake.</li> <li>Using packing tape or similar tape place markings as shown below before setting up the guidelines so that the guidelines can be overlaid to the markings.</li> </ul>  <p>The diagram illustrates the correct placement of markings for the parking assist system. It shows a top-down view of a car with a vertical line representing the rear bumper. Two horizontal lines represent the markings. The distance between the markings is 2 m. The distance from the rear bumper to the markings is 50 cm. The distance from the rear bumper to the top and bottom markings is 25 cm.</p>
<b>[Rear View Camera Adjustment]</b>	Adjust following menu, touch [+] / [-] to adjust.
[Brightness] [-10] to [+10]	Adjust the black intensity.
[Contrast] [-10] to [+10]	Adjust the contrast.

Menu Item	Description
[Colour] [-10] to [+10]	Adjust the colour saturation.



## Phone Connectivity Settings

The settings are not available when the USB storage device is connected.

Menu Item	Description
<b>[Priority of Connectivity]</b> [Android Auto] [Mirroring]	Select the function that is prioritised when your smartphone (Android) is connected to the unit.
<b>[Android Phone MSC]</b>	Set the USB connection mode for your smartphone (Android) to MSC (Mass Storage Class).
<b>[Driving Position]</b> [Right] [Left]	Setting the driving position. <ul style="list-style-type: none"> <li>• Apple CarPlay (page 32)</li> </ul>

# Other functions

## Setting the time and date

- 1 Touch the current time on the screen.
- 2 Touch  or  to set the correct time and date.  
You can operate the following items: Year, month, date, hour, minute.

### TIPS

- You can change the time display format to [AM], [PM] or [24H].
- You can change the order of the month/date display format: [DD/MM/YY], [MM/DD/YY].

## Restoring this product to the default settings

You can restore settings or recorded content to the default settings from [Factory Reset] in the [System Settings] menu (page 39).

# Appendix

## Troubleshooting

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

### Common problems

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

- Power off mode is on.
  - Touch any button on this product to release the mode.

### Problems with the AV screen

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

- The handbrake lead is not connected or the handbrake is not applied.
  - Connect the handbrake lead correctly, and apply the handbrake.
- The handbrake interlock is activated.
  - Park your vehicle in a safe place and apply the handbrake.

**The audio or video skips.**

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

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

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

**iPhone cannot be operated.**

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

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

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


### Problems with the phone screen

**Dialling is impossible because the touch panel keys for dialling are inactive.**

- Your phone is out of range for service.
  - Retry after re-entering the range for service.
- The connection between the mobile phone and this product cannot be established.
  - Perform the connection process.

## Problems with Application screen

### A black screen is displayed.

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

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

- An error has occurred.
  - Park your vehicle in a safe place, and then turn off the ignition switch (ACC OFF). Subsequently, turn the ignition switch to on (ACC ON) again.

### The smartphone was not charged.

- Charging stopped because the temperature of the smartphone rose due to prolonged use of the smartphone during charging.
  - Disconnect the smartphone from the cable, and wait until the smartphone cools down.
- More battery power was consumed than was gained from charging.
  - This problem may be resolved by stopping any unnecessary services on the smartphone.

## Error messages

When problems occur with this product, an error message appears on the display. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists, record the error message and contact your

dealer or your nearest Pioneer service centre.

## USB storage device

### Unsupport usb hub device

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

### This content cannot be played.

- There is no playable file in the USB storage device.
  - Check that the files in the USB storage device are compatible with this product.
- Security for the connected USB storage device is enabled.
  - Follow the USB storage device instructions to disable security.
- This product cannot recognise the connected USB storage device.
  - Disconnect the device and replace it with another USB storage device.

### Audio Format not supported

- This type of file is not supported on this product.
  - Select a file that can be played.

### No Data

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



## USB Mirroring

**Autolink can't connect right now. When it's safe to do so, check your Android phone.**

- The connection is not successfully established.
  - Stop your vehicle in a safe place and apply the handbrake. Perform the operations according to the following situations.
  - When the pop-up message appears on your mobile device, follow the message.
  - When the pop-up message does not appear on your mobile device, forcibly cancel download of the application, and then perform the connection with the unit again.

**Mobile phone is standby, any touch wake up!**

- The screen of the mobile device connected to the unit is turned off.
  - Unlock your mobile device.

## Android Auto

**To use Android Auto, please stop your car and follow the instructions on your phone**

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

**No devices available Connect an Android phone with USB cable**

- The screen of the mobile device connected to the unit is turned off.
  - Unlock your mobile device.

## Camera & AUX

**No Video Signal**

- There is no video signal input.
  - Confirm whether the connection with the unit is established and there is an output from the external device.

## Bluetooth

**Handsfree device is not connected**

- The phone's Bluetooth HFP is not connected and cannot make calls.
  - Make a Bluetooth connection (page 15).

**Phone book access is not authorized**

- The Bluetooth PBAPC of the mobile phone is not connected and the phone book cannot be downloaded.
  - Make a PBAPC connection. You need to operate your phone and allow the unit to access the contact information on your phone. When the related information pops up on your phone, follow the pop-up message.

## Others

**Caution! USB Overcurrent**

- Overcurrent is detected.
  - Check the USB connection. Perform one of the following operations to fix the situation.
  - Turn off the ignition switch (ACC OFF) and then turn the ignition switch to on (ACC ON) again.

- Power the unit off and then power it on again.
- Disconnect the (+) battery cable and then connect it again.

### Overload Caution on AMP.

- An amplifier overload is detected.
- Check the amp connection. Perform one of the following operations to fix the situation.
  - Turn off the ignition switch (ACC OFF). After 9 seconds or more, turn the ignition switch to on (ACC ON) again.
  - Disconnect the (+) battery cable and then connect it again.

## Detailed information for playable media

### Compatibility

#### Common notes about the USB storage device

- Do not leave the USB storage device in any location with high temperatures.
- Depending on the kind of the USB storage device you use, this product may not recognise the storage device or files may not be played back properly.
- The text information of some audio and video files may not be correctly displayed.
- File extensions must be used properly.
- There may be a slight delay when starting playback of files on an USB storage device with complex folder hierarchies.
- Operations may vary depending on the kind of an USB storage device.
- It may not be possible to play some music files from USB because of file characteristics, file format, recorded application, playback environment, storage conditions, and so on.

### USB storage device compatibility

- For details about USB storage device compatibility with this product, refer to Specifications (page 57).
- Protocol: bulk
- You cannot connect a USB storage device to this product via a USB hub.
- Partitioned USB storage device is not compatible with this product.
- Firmly secure the USB storage device when driving. Do not let the USB storage device fall onto the floor, where it may become jammed under the brake or accelerator.
- There may be a slight delay when starting playback of audio files encoded with image data.
- Some USB storage devices connected to this product may generate noise on the radio.
- Do not connect anything other than the USB storage device.

The sequence of audio files on USB storage device.

For USB storage device, the sequence is different from that of USB storage device.

#### Handling guidelines and supplemental information

- Copyright protected files cannot be played back.

### Media compatibility chart

#### General

- Maximum playback time of audio file stored on an USB storage device: 7.5 h (450 minutes)

#### USB storage device

CODEC FORMAT	MP3, WMA, WAV, AAC, FLAC, AVI, MPEG-PS, MP4, 3GP, MKV, MOV, ASF, FLV, M4V, MPEG-TS
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### MP3 compatibility

- Ver. 2.x of ID3 tag is prioritised when both Ver. 1.x and Ver. 2.x exist.
- This product is not compatible with the following: MP3i (MP3 interactive), mp3 PRO, m3u playlist

SAMPLING FREQUENCY	8 kHz to 48 kHz
TRANSMISSION RATE	CBR (8 kbps to 320 kbps)/VBR
ID3 TAG	ver.1.0/1.1/2.2/ 2.3/2.4

### WMA compatibility

- This product is not compatible with the following: Windows Media™ Audio 9.2 Professional, Lossless, Voice

SAMPLING FREQUENCY	32 kHz to 48 kHz
TRANSMISSION RATE	CBR (8 kbps to 320 kbps)/VBR

### WAV compatibility

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

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

### AAC compatibility

- This product plays back AAC files encoded by iTunes.

SAMPLING FREQUENCY	8 kHz to 48 kHz
TRANSMISSION RATE	CBR (16 kbps to 320 kbps)

### FLAC compatibility

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

### USB storage device

EXTENSION	.avi
MAX RESOLUTION	720 × 576

### Video files compatibility

- Files may not be played back properly depending on the environment in which the file was created or on the contents of the file.
- This product is not compatible with packet write data transfer.
- This product can recognise up to 32 characters, beginning with the first character, including extension for the file and folder name. Depending on the display area, this product may try to display them with a reduced font size. However, the maximum number of the characters that you can display varies according to the width of each character, and of the display area.
- Folder selection sequence or other operations may be altered, depending on the encoding or writing software.
- Regardless of the length of blank section between the songs of original recording, compressed audio files play with a short pause between songs.
- Files may not be able to be played back depending on the bit rate.
- The maximum resolution depends on the compatible video codec.

#### .avi

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

#### .mpg/.mpeg

Compatible video codec	MPEG2
Maximum resolution	720 × 576
Maximum frame rate	30 fps

#### .mp4

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

**.3gp**

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

**.mkv**

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

**.mov**

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

**.flv**

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

**.wmv/.asf**

Compatible video codec	VC-1
Maximum resolution	1 920 × 1 080
Maximum frame rate	30 fps

**.m4v**

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

**.ts**

Compatible video codec	MPEG4, H.264, MPEG2
Maximum resolution	1 920 × 1 080
Maximum frame rate	30 fps

**.m2ts**

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

**.mts**

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

**Example of a hierarchy****NOTE**

This product assigns folder numbers. The user cannot assign folder numbers.

**Bluetooth**

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**WMA**

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**FLAC**

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## AAC

AAC is short for Advanced Audio Coding and refers to an audio compression

technology standard used with MPEG-2 and MPEG-4. Several applications can be used to encode AAC files, but file formats and extensions differ depending on the application which is used to encode. This unit plays back AAC files encoded by iTunes.

## Google, Android, Google Play

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

## Android Auto

# androidauto

Android Auto is a trademark of Google LLC.

## Detailed information regarding connected iPhone devices

- Pioneer accepts no responsibility for data lost from an iPhone, even if that data is lost while using this product. Please back up your iPhone data regularly.
- Do not leave the iPhone in direct sunlight for extended amounts of time. Extended exposure to direct sunlight can result in iPhone malfunction due to the resulting high temperature.
- Do not leave the iPhone in any location with high temperatures.
- Firmly secure the iPhone when driving. Do not let the iPhone fall onto the floor, where it may become jammed under the brake or accelerator.

- For details, refer to the iPhone manuals.

## iPhone and Lightning



Use of the Made for Apple badge means that an accessory has been designed to connect specifically to the Apple product(s) identified in the badge and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

Please note that the use of this accessory with an Apple product may affect wireless performance. iPhone and Lightning are trademarks of Apple Inc., registered in the U.S. and other countries.

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## iOS

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## iTunes

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

## Apple Music

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

## Apple CarPlay



Apple CarPlay is a trademark of Apple Inc.

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

## Siri

Works with Siri through the microphone.

## Compatible iPhone models

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

- iPhone 6s Plus
- iPhone 6
- iPhone 6 Plus
- iPhone 5s

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

## Using app-based connected content

### Important

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

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

### Limitations:

- Access to app-based connected content will depend on the availability of cellular and/or Wi-Fi network coverage for the purpose of allowing your smartphone to connect to the Internet.
- Service availability may be geographically limited to the region.

Consult the connected content service provider for additional information.

- Ability of this product to access connected content is subject to change without notice and could be affected by any of the following: compatibility issues with future firmware versions of smartphone; compatibility issues with future versions of the connected content application(s) for the smartphone; changes to or discontinuation of the connected Content application(s) or service by its provider.
- Pioneer is not liable for any issues that may arise from incorrect or flawed app-based content.
- The content and functionality of the supported applications are the responsibility of the App providers.
- In USB Mirroring, Apple CarPlay and Android Auto, functionality through the product is limited while driving, with available functions determined by the App providers.
- Availability of USB Mirroring, Apple CarPlay and Android Auto functionalities is determined by the App provider, and not determined by Pioneer.
- USB Mirroring, Apple CarPlay and Android Auto allow access to applications other than those listed (subject to limitations while driving), but the extent to which content can be used is determined by the App providers.

## Notice regarding video viewing

Remember that use of this system for commercial or public viewing purposes may constitute an infringement on the author's rights as protected by the Copyright Law.

## Using the LCD screen correctly

### Handling the LCD screen

- When the LCD screen is subjected to direct sunlight for a long period of time, it will become very hot, resulting in possible damage to the LCD screen. When not using this product, avoid exposing it to direct sunlight as much as possible.
- The LCD screen should be used within the temperature ranges shown in Specifications on page 57.
- Do not use the LCD screen at temperatures higher or lower than the operating temperature range, because the LCD screen may not operate normally and could be damaged.
- The LCD screen is exposed in order to increase its visibility within the vehicle. Please do not press strongly on it as this may damage it.
- Do not push the LCD screen with excessive force as this may scratch it.
- Never touch the LCD screen with anything besides your finger when operating the touch panel functions. The LCD screen can scratch easily.

### Liquid crystal display (LCD) screen

- If the LCD screen is near the vent of an air conditioner, make sure that air from the air conditioner is not blowing on it. Heat from the heater may break the LCD screen, and cool air from the cooler may cause moisture to form inside this product, resulting in possible damage.
- Small black dots or white dots (bright dots) may appear on the LCD screen.

These are due to the characteristics of the LCD screen and do not indicate a malfunction.

- The LCD screen will be difficult to see if it is exposed to direct sunlight.
- When using a mobile phone, keep the aerial of the mobile phone away from the LCD screen to prevent disruption of the video in the form of disturbances such as spots or coloured stripes.

### Maintaining the LCD screen

- When removing dust from or cleaning the LCD screen, first turn this product off and then wipe the screen with a soft dry cloth.
- When wiping the LCD screen, take care not to scratch the surface. Do not use harsh or abrasive chemical cleaners.

### LED (light-emitting diode) backlight

- A light emitting diode is used inside the display to illuminate the LCD screen.
- At low temperatures, using the LED backlight may increase image lag and degrade the image quality because of the characteristics of the LCD screen. Image quality will improve with an increase in temperature.
  - The product lifetime of the LED backlight is more than 10 000 hours. However, it may decrease if used in high temperatures.
  - If the LED backlight reaches the end of its product lifetime, the screen will become dimmer and the image will no longer be visible. In that case, please consult your dealer or the nearest authorised Pioneer Service Station.



# Specifications

## General

- Rated power source:  
14.4 V DC (10.8 V to 15.1 V allowable)
- Earthing system:  
Negative type
- Maximum current consumption:  
10.0 A
- Dimensions (W × H × D):  
Chassis (D):  
178 mm × 100 mm × 125 mm  
Nose:  
171 mm × 97 mm × 2 mm
- Weight:  
1.1 kg

## Display

- Screen size/aspect ratio:  
6.75 inch wide/16:9 (effective display area: 151.8 mm × 79.68 mm)
- Pixels:  
800 (Width) × 480 (Height) × 3 (RGB)
- Display method:  
TFT Active matrix driving
- Colour system:  
PAL/NTSC/PAL-M/PAL-N/SECAM compatible
- Temperature range:  
-10 °C to +60 °C

## Audio

- Maximum power output:  
• 50 W × 4
- Continuous power output:  
22 W × 4 (50 Hz to 15 kHz, 5 %THD, 4 Ω LOAD, Both Channels Driven)
- Load impedance:  
4 Ω (4 Ω to 8 Ω allowable)
- Preout output level (max): 2.0 V
- Equaliser (13-Band Graphic Equaliser):  
Frequency:  
50 Hz/80 Hz/125 Hz/200 Hz/315 Hz/  
500 Hz/800 Hz/1.25 kHz/2 kHz/3.15 kHz/5 kHz/8 kHz/12.5 kHz  
Gain: ±12 dB (2 dB/step)

## HPF:

- Frequency:  
25 Hz/32 Hz/40 Hz/50 Hz/63 Hz/80 Hz/  
100 Hz/125 Hz/160 Hz/200 Hz/250 Hz

## Subwoofer/LPF:

- Frequency:  
25 Hz/32 Hz/40 Hz/50 Hz/63 Hz/80 Hz/  
100 Hz/125 Hz/160 Hz/200 Hz/250 Hz

## Bass boost:

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

## Speaker level:

- +10 dB to -24 dB (1 dB/step)

## USB

### USB standard spec:

- USB 1.1, USB 2.0 full speed, USB 2.0 high speed

### Max current supply: 1.5 A

### USB Class:

- MSC (Mass Storage Class)

### File system: FAT16, FAT32, NTFS

### <USB audio>

### MP3 decoding format:

- MPEG-1 & 2 & 2.5 Audio Layer 3

### WMA decoding format:

- Ver. 7, 8, 9, 9.1, 9.2 (2 ch audio)

### AAC decoding format:

- MPEG-4 AAC (iTunes encoded only) (Ver. 12.5 and earlier)

### FLAC decoding format:

- Ver. 1.3.0 (Free Lossless Audio Codec)

### WAV signal format:

- Linear PCM

### Sampling frequency:

- Linear PCM:  
16 kHz/22.05 kHz/24 kHz/32 kHz/44.1 kHz/48 kHz

### <USB image>

### JPEG decoding format:

- .jpeg, .jpg  
Pixel Sampling: 4:2:2, 4:2:0

### Decode Size:

- MAX: 5 000 (H) × 5 000 (W)  
MIN: 32 (H) × 32 (W)  
(Maximum file size: 6 MB)

PNG decoding format:

.png

Decode Size:

MAX: 576 (H) × 720 (W)

MIN: 32 (H) × 32 (W)

BMP decoding format:

.bmp

Decode Size:

MAX: 936 (H) × 1 920 (W)

MIN: 32 (H) × 32 (W)

<USB video>

H.264 video decoding format:

Base Line Profile, Main Profile, High Profile

H.263 video decoding format:

Base Line Profile 0/3

VC-1 video decoding format:

Simple Profile, Main Profile, Advanced Profile

AVI video decoding format

MPEG4 video decoding format:

Simple Profile, Advanced Simple Profile

MPEG1, 2 video decoding format:

Main Profile

Quick Time video decoding format

Matroska video decoding format

TS Stream video decoding format

## Bluetooth

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Version:

Bluetooth 5.0 certified

Output power:

+4 dBm Max. (Power class 2)

Frequency band(s):

2 402.0 MHz to 2 480.0 MHz

## FM tuner

---

Frequency range:

87.5 MHz to 108 MHz

Usable sensitivity:

13 dBf (1.1  $\mu$ V/75  $\Omega$ , mono, S/N: 30 dB)

Signal-to-noise ratio:

50 dB (IHF-A network)

## AM tuner

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Frequency range:

530 kHz to 1 640 kHz (10 kHz), 531 kHz to 1 602 kHz (9 kHz)

Usable sensitivity:

28  $\mu$ V (S/N: 20 dB)

Signal-to-noise ratio:

45 dB (IEC-A network)

### NOTE

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

Visit us on the World Wide Web at

<https://global.pioneer/en/info/globalnetwork/>

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<http://pioneer-mea.com/en/>

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