

**Pioneer** *sound.vision.soul*

**Hardware Manual**

***ENGLISH***

**DOUBLE-DIN DVD NAVIGATION SYSTEM**

**AVIC-D2**

**SUPER  TUNER III **



# Introduction

## Manual Overview

This manual mainly describes hardware-related information such as the part names of the navigation system or precautions for use. Please read this manual and all other enclosed manuals before using your navigation system. The following issues are described in each chapter:

## How to use this manual

### Introduction

This chapter describes precautions for the use of the navigation system.

### How to Use Navigation System and Names of the Parts

This chapter describes matters that are important to know before using the navigation system, such as the names of each part, and how to insert or eject discs.

### Appendix

This section describes how to handle the navigation system or discs and the specifications of the navigation system.

## Terminology

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 your navigation unit are described in **ALL CAPITAL, BOLD** lettering:  
e.g.) **MAP** button, **DEST** button.
- Items in the different menus or touch keys available on the screen are described in quotations (" ") and bold:  
e.g.) **"Destination"**, **"Settings"**.
- Extra information, alternative use and other notes are presented like this:  
e.g.)
  - ☐ When the source icon is not displayed, you can display it by touching the screen.
- The references are indicated like this:  
e.g.)
  - ↪ For suitable discs → Page 6

### Display Definition

From here on after, the screen that is attached to the body of the product will be referred to as the "Front Display". Any additional optional screen that is purchased for use in conjunction with this product will be referred to as the "Rear Display".

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## Chapter 1

### How to Use Navigation System and Names of the Parts

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## Important Safety Information

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Before using your navigation system, be sure to read and fully understand the following safety information:

- ❑ Read the entire manual before operating this navigation system.
- ❑ The navigation features of this product (and rear view camera option if purchased) is intended solely as an aid to you in the operation of your vehicle. It is not a substitute for your attentiveness, judgment, and care when driving.
- ❑ Do not operate this navigation system (or the rear view camera option if purchased) if doing so in any way will divert your attention from the safe operation of your vehicle. Always observe safe driving rules and follow all existing traffic regulations. If you experience difficulty in operating the system or reading the display, park your vehicle in a safe location and apply the parking brake before making the necessary adjustments.
- ❑ Never allow others to use the system unless they have read and understood the operating instructions.
- ❑ Never use this navigation system to route to hospitals, police stations, or similar facilities in an emergency. Please call 911.
- ❑ Route and guidance information displayed by this equipment is for reference purposes only. It may not accurately reflect the latest permissible routes, road conditions, one way streets, road closures, or traffic restrictions.
- ❑ Traffic restrictions and advisories currently in force should always take precedence over guidance given by the navigation system. Always obey current traffic restrictions, even if the navigation system provides contrary advice.
- ❑ Failure to input correct information about the local time may result in the navigation system providing improper routing and guidance instructions.
- ❑ Never set the volume of your navigation system so high that you cannot hear outside traffic and emergency vehicles.
- ❑ To promote safety, certain functions are disabled unless the vehicle is stopped and/or the parking brake is applied.
- ❑ The data encoded in the disc is the intellectual property of the provider, and the provider is responsible for such content.
- ❑ Keep this manual handy as a reference for operating procedures and safety information.
- ❑ Pay close attention to all warnings in this manual and follow the instructions carefully.
- ❑ Do not install the navigation system 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, hazard lamp buttons or (iii) impair the driver's ability to safely operate the vehicle.
- ❑ Please remember to wear 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.
- ❑ Using the most current DVD Map Discs will allow for most accurate destination mapping. Upgrade DVD Map Discs are available for purchase through your local Pioneer dealer.
- ❑ Never use headphones while driving.

### **WARNING**

- ❑ Do not attempt to install or service your navigation system by yourself. Installation or servicing of the navigation system 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 or other hazards.

# Notes Before Using the System and Additional Safety Information

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## Information to User

Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

## For Canadian model

This Class B digital apparatus complies with Canadian ICES-003.

## Important (Serial Number:)

The serial number of this device is located on the bottom of this product. For your own security and convenience, be sure to record this number on the enclosed warranty card.

## Precaution

CAUTION: USE OF CONTROL OR ADJUSTMENT OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

CAUTION: THE USE OF OPTICAL INSTRUMENTS WITH THIS PRODUCT WILL INCREASE EYE HAZARD.

## WARNING

- **THE LIGHT GREEN LEAD AT POWER CONNECTOR IS DESIGNED TO DETECT PARKED STATUS AND MUST BE CONNECTED TO THE POWER SUPPLY SIDE OF THE PARKING BRAKE SWITCH. IMPROPER CONNECTION OR USE OF THIS LEAD MAY VIOLATE APPLICABLE LAW AND MAY RESULT IN SERIOUS INJURY OR DAMAGE.**
- 

- Protect this product from moisture.
- If the battery is disconnected or discharged, the memory will be erased and must be reprogrammed.

## WARNING

- Handling the cord on this product or cords associated with accessories sold with the product may expose you to chemicals listed on proposition 65 known to the State of California and other governmental entities to cause cancer and birth defects or other reproductive harm. *Wash hands after handling.*
  - This product contains mercury. Disposal of this material may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or the Electronics Industries Alliance: [www.eiae.org](http://www.eiae.org).
- 

## CAUTION

- 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.
- 

## Parking brake interlock

Certain functions offered by this navigation system could be dangerous if used while driving. To prevent them being used while in motion, there is an interlock with your vehicle's parking brake. If you attempt to use these functions during driving, they may be inoperable. If so, stop in a safe place, apply the parking brake, then operate.

**See "Parking brake interlock" in the Operation Manual for more information.**

## To ensure safe driving

### **WARNING**

- **To avoid the risk of accident and the potential violation of applicable laws, this product should never be used while the vehicle is being driven except for navigation purposes. Also, Rear Displays should not be in a location where it is a visible distraction to the driver.**
- **In some countries or states the viewing of images on a display inside a vehicle even by persons other than the driver may be illegal. Where such regulations apply, they must be obeyed and this product's visual image features should not be used.**

- "Visual image" in this manual indicates the moving image from the equipments which are connected to this product with AV-BUS or RCA cable, such as DVD player and TV tuner.

This product detects whether your vehicle's parking brake is engaged or not, and prevents you from watching visual images on the front display while driving. When you attempt to watch visual images, the warning **Viewing of front seat video source while driving is strictly prohibited**. will appear on the front display.

To watch visual images on the front display, park your vehicle in a safe place and apply the parking brake.

**See "Parking brake interlock" in the Operation Manual for more information.**

## When using a display connected to REAR MONITOR OUTPUT

This product's **REAR MONITOR OUTPUT** is for connection of a display to enable passengers in the rear seats to watch visual images.

- The map screen navigation images output to the rear display differs from standard NTSC format images. Therefore, the quality will be inferior to the images that appear on the front display.

### **WARNING**

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

## To avoid battery exhaustion

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

### **WARNING**

- **Do not use with vehicles that do not feature an ACC position.**

## About rear view camera

With an optional rear view camera (sold separately) you are able to use the navigation system as an aid to keep an eye on trailers, or while backing up.

### **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 camera function is to be used as an aid to keep an eye on trailers, or while backing up. Do not use for entertainment purposes.**
- **Please note that the edges of the rear view camera images may differ slightly according to whether full screen images are displayed when backing up, and whether the images are used for checking the rear when the vehicle is moving forward.**

## After-sales service for Pioneer products

Please contact the dealer or distributor from which you purchased the product for after-sales service (including warranty conditions) or any other information. In case the necessary information is not available, please contact the companies listed below.

Please do not ship your product to the companies at the addresses listed below for repair without making advance contact.

### U.S.A

Pioneer Electronics  
(USA) Inc.  
CUSTOMER  
SUPPORT DIVISION  
P.O. Box 1760  
Long Beach, CA  
90801-1760  
800-421-1404

### CANADA

Pioneer Electronics of  
Canada, Inc.  
CUSTOMER  
SATISFACTION  
DEPARTMENT  
300 Allstate Parkway  
Markham, Ontario  
L3R 0P2  
1-877-283-5901

For warranty information, please see the Limited Warranty sheet included with your product.

## Playable discs

### About CD

CD discs that display the logos shown below generally can be played back on this built-in CD drive.

### CD



- ❑ This CD drive may not be able to play all discs bearing the marks shown above.

### About DVD Map Disc

You can use discs intended for this navigation system. Use only discs approved by Pioneer.

- For details on other discs → Page 18

## Features (Characteristics of this hardware)

### Touch panel key operation

It is possible to operate the product by using touch panel keys.

### Built-in navigation system

You can use DVD Map Discs that are compatible with this system.

### CD playback

Music CD/CD-R/CD-RW playback is possible.

- "Handling and Care of the Disc" → Page 18
- "Playable discs" → Page 6

### MP3 file playback

It is possible to play back MP3 files recorded on CD-ROM/CD-R/CD-RW (ISO9660 Level 1/Level 2 standard recordings).

- Supply of this navigation system only conveys a license for private, non-commercial use and does not convey a license nor imply any right to use this product in any commercial (i.e. revenue-generating) real time broadcasting (terrestrial, satellite, cable and/or any other media), broadcasting/streaming via internet, intranets and/or other networks or in other

## Product registration

Visit us at the following site:

  
<http://www.pioneerelectronics.com>

1. Register your product. We will keep the details of your purchase on file to help you refer to this information in the event of an insurance claim such as loss or theft.
2. Receive updates on the latest products and technologies.
3. Download owner's manuals, order product catalogs, research new products, and much more.
4. Receive notices of software upgrades and software updates.

## Upgrade DVD Map Disc

Upgrade DVD Map Discs are available for purchase from your local Pioneer dealer. These include the most current map and point of interest information. Contact your local Pioneer dealer for details.

electronic content distribution systems, such as pay-audio or audio-on-demand applications. An independent license for such use is required. For details, please visit <http://www.mp3licensing.com>.

### WMA file playback

- You can play back WMA files recorded on CD-ROM/CD-R/CD-RW (ISO9660 Level 1/Level 2 standard recordings).

### WAV file playback

- You can play back WAV files recorded on CD-ROM/CD-R/CD-RW (Linear PCM (LPCM)/MS ADPCM recordings).

### NTSC compatibility

This product is NTSC system compatible. When connecting other components to the product, be sure components are compatible with the same video system or else images will not be correctly reproduced.

### Rear view camera ready

You can display what is behind the vehicle if connected to a rear view camera (sold separately).

☞ "About rear view camera" → Page 5

## About WMA

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The Windows Media™ logo printed on the box indicates that this unit can play back WMA data. WMA is short for Windows Media™ Audio and refers to an audio compression technology that is developed by Microsoft Corporation. WMA data can be encoded by using Windows Media Player version 7 or later.

Windows Media and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

### Notes:

- With some applications used to encode WMA files, this product may not operate correctly.
- Depending on the version of Windows Media Player used to encode WMA files, album names and other text information may not be correctly displayed.

## About the SAT RADIO READY Logo

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The SAT RADIO READY logo printed below the CD loading slot indicates that the Satellite Radio Tuner for Pioneer (i. e., XM tuner and Sirius satellite tuner which are sold separately) can be controlled by this navigation system. Please inquire with your dealer or nearest authorized Pioneer service station regarding the satellite radio tuner that can be connected to this navigation system. For satellite radio tuner operation, please refer to the Operation Manuals of the navigation system and satellite radio tuner.

### Note:

The system will use direct satellite-to-receiver broadcasting technology to provide listeners in their cars and at home with crystal-clear sound seamlessly from coast to coast. Satellite radio will create and package over 100 channels of digital-quality music, news, sports, talk and children's programming.

"SAT Radio", the SAT Radio logo and all related marks are trademarks of Sirius Satellite Radio inc., and XM Satellite Radio Inc.

## About the XM NAVTRAFFIC Logo

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Required \$12.95 basic monthly XM radio subscription and XM NavTraffic service subscriptions sold separately. XM NavTraffic only available in select markets. Other fees and taxes, including a one-time activation fee, may apply. Subscription fee is consumer only. All fees and programming subject to change. Subscriptions subject to Customer Agreement available at xmradio.com. XM radio service only available in the 48 contiguous United States.

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NAVTEQ Traffic- is a trademark of NAVTEQ North America, LLC.-2005. NAVTEQ North America, LLC.

## To Protect the LCD Screen

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- Do not allow direct sunlight to fall on the display 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 portable phone, keep the antenna of the portable phone away from the display to prevent disruption of the video by the appearance of spots, colored stripes, etc.
- Never touch the screen with anything besides your finger when operating the Touch Panel functions. The screen can scratch easily.

## For Viewing LCD Comfortably

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Due to its construction, the view angle of the LCD screen is limited. The viewing angle can be increased, however, by using **BRIGHTNESS** to adjust the black density of the video. When using for the first time, adjust the black density in accordance with the viewing angle to adjust for clear viewing. **DIMMER** can also be used to adjust the brightness of the LCD screen itself to suit your personal preference.

## Resetting the Microprocessor

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### CAUTION

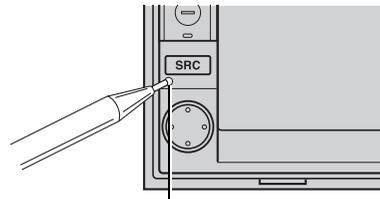
- **Pressing the RESET button deletes the contents of the navigation system's memory. For details, see section "About the Data being Deleted" of the Operation Manual.**

Pressing the **RESET** button lets you reset the microprocessor to its initial settings without changing the condition memory. The microprocessor must be reset under the following conditions:

- Prior to using this product for the first time after installation.
- If the product fails to operate properly.
- If there appear to be problems with the operation of the system.
- When changing the combination of the equipment.
- When adding/removing additional products that connect to the product.

### 1 Turn the ignition switch OFF.

### 2 Press the RESET button with a pen tip or other pointed instrument.



RESET button

- ❑ If you have connected other equipment (for example, a TV tuner) to this navigation system, be sure to reset that equipment too.
- ❑ After completing connections or when you want to erase all memorized settings or return this product to its initial (factory) settings except for some navigation items, switch your engine ON or set the ignition switch to ACC ON before pressing the **RESET** button.
- For details, refer to “About the Data being Deleted” in the the Operation Manual.

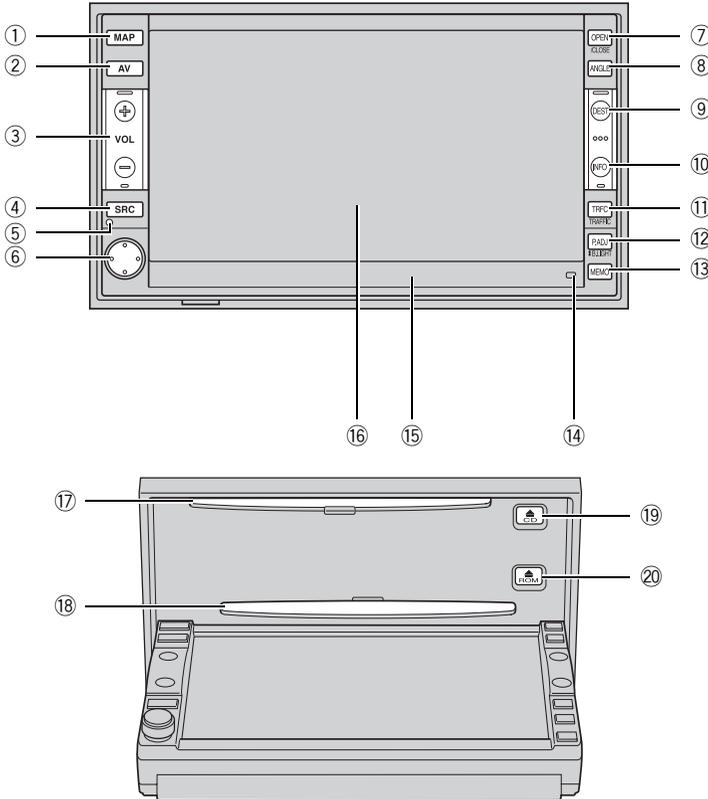


# How to Use Navigation System and Names of the Parts

## Navigation Unit

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

□ For more detail operation, functional limitations, please refer to the Operation Manual.



### ① MAP button

Press to view the map or return to guidance. Also, when the map is scrolling, pressing this button returns you to the display of the map of your surroundings. Use to switch the view mode of the navigation when the map of your surroundings is displayed. If you press this button while in the audio operation screen, the screen changes to the navigation map screen.

### ② AV button

Use to switch between the navigation map screen and the audio operation screen.

### ③ VOL (+/-) button

Pressing on the + side of the button to increase the volume while pressing on the - side of it to decrease the volume.

**④ SRC (SOURCE) button**

This unit is turned on by selecting a source. Press to cycle through all of the available sources. Press and hold to turn the source off.

**⑤ RESET button**

Press to return to the factory settings (initial settings). Some information items are not erased.

➤ Resetting the microprocessor → Page 8

**⑥ Joystick**

Move to do manual seek tuning, fast forward, reverse and track search controls, etc. Push to display the menu for the Audio operation.

**⑦ OPEN/CLOSE button**

Press to open or close the LCD panel and access the CD and DVD-ROM loading slot. Operation varies depending on the position of the LCD panel and the length of time of pressing this button.

➤ Opening and Closing the LCD Panel → Page 14

**⑧ ANGLE button**

Press to change the LCD panel angle.

➤ Adjusting the LCD panel angle → Page 15

**⑨ DEST button**

Press to display the **Destination** menu.

**⑩ INFO button**

Press to display the **Info/Traffic** menu.

**⑪ TRFC button**

**When the XM tuner is connected\*:**

Preset button for XM Instant Traffic & Weather audio service. Select XM audio source, and find appropriate Instant Traffic & Weather channel. Hold down this button while on this channel to assign preset.

**When the XM tuner is not connected:**

Not used.

➤ XM tuner (GEX-P10XMT, GEX-P920XM) → Operation Manual

**⑫ P.ADJ/B.LIGHT button**

Press to enter the **PICTURE ADJUSTMENT** mode.

➤ Operating the Picture Adjustment → Operation Manual

Press and hold to turn off the back light of the LCD panel. To turn on the back light, press this button again.

**⑬ MEMO button**

**When the XM tuner is connected and the XM source is selected\*:**

Press and hold this button to memorize the track currently being played.

This button flashes when the memorized track is playing on a station other than the one which you are currently on. If you press this button while it is flashing, the station changes to the one playing your track.

**When the XM tuner is not connected:**

Not used.

➤ XM tuner (GEX-P10XMT, GEX-P920XM) → Operation Manual

**⑭ Ambient light sensor**

Senses ambient light. This system automatically adjusts the brightness of the display to compensate for ambient light.

➤ Adjusting the dimmer → Operation Manual

**⑮ LCD panel****⑯ LCD screen****⑰ CD loading slot**

Insert a CD to play.

**⑱ DVD-ROM loading slot**

Insert a DVD Map Disc.

**⑲ CD EJECT button**

Press to eject the disc from the CD loading slot.

**⑳ DVD-ROM EJECT button**

Press to eject the disc from the DVD-ROM loading slot.

\*: GEX-P10XMT or GEX-P920XM sold separately is required, in addition to an active subscription to XM Satellite Radio service.

## Turning the Navigation System On and Selecting a Source

### CAUTION

- If the program is not installed, see **Operation Manual** and install the program.

### 1 Turn the ignition switch (ACC) ON.

The navigation system's power supply comes on.



### 2 Press the SRC button to select a source.

Press the **SRC** button repeatedly to switch between the following sources:

“**XM**” (XM tuner) — “**SIRIUS**” (SIRIUS tuner) — “**RADIO**” (tuner) — “**TV**” (television) — “**AV**” (video input) — “**S-DVD**” (DVD player/multi-DVD player) — “**CD**” [CD, MP3/WMA/WAV] (built-in CD drive) — “**M-CD**” (multi-CD player) — “**EXT-1**” (external unit 1) — “**EXT-2**” (external unit 2) — “**AUX**” (Auxiliary equipment)

- Press and hold to turn the source off.

- In the following cases, the sound source cannot be used:
  - When a unit corresponding to each source is not connected to this product.
  - When no disc is set in the CD loading slot.
  - When no disc is set in the DVD-player (“**S-DVD**”).
  - When no magazine is set in the multi-CD player.
  - When no magazine is set in the multi-DVD player.
  - When the “**AUX**” (auxiliary input) is set to off (refer to Operation Manual).
  - When the “**AV INPUT**” (video input) is not set to “**VIDEO**” (refer to Operation Manual).

- External unit refers to a Pioneer product (such as one available in the future) that, although incompatible as a source, enables control of basic functions by this product. Two external units can be controlled by this product. When two external units are connected, the allocation of them to external unit 1 or external unit 2 is automatically set by the product.

- When this product's blue lead is connected to the vehicle's auto-antenna relay control terminal with the “**AUTO ANTENNA**” is set to “**SOURCE**”, the vehicle's antenna extends while this system's source is turned on. To retract the antenna, turn the source off.

- ▷ “**AUTO ANTENNA**” → Operation Manual

## Adjusting the Volume

- Use the **VOL (+/-)** button to adjust the audio sound level.

With this product, press the **VOL (+/-)** button to increase or decrease the volume.

- To adjust the navigation volume, go to the navigation menu.
- ▷ Navigation volume adjustment → Operation Manual

## Turning the Source Off

- Press the **SRC** button and hold until the source turns off.
  - This product can be switched off by turning the ACC (ignition) OFF.

## Inserting/Ejecting a Disc

### ⚠ WARNING

- Do not use with the LCD panel left open. If LCD panel is left open, it may result in injury in the event of an accident.

### ⚠ CAUTION

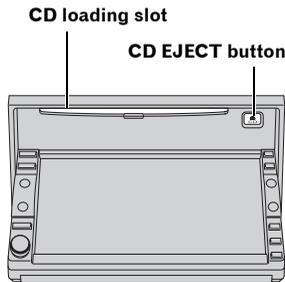
- Do not open and close the LCD panel with hands by force. This may cause malfunction.
- When opening, closing and adjusting the angle of the LCD panel, be careful not to get your finger caught.

The LCD panel will be closed automatically with the turning of the ignition switch.

## Inserting a CD

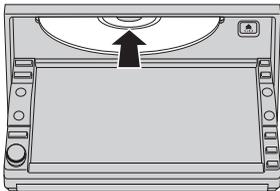
### 1 Press the OPEN/CLOSE button.

The LCD panel opens halfway, and the CD loading slot appears.



- To close the LCD panel, press the **OPEN/CLOSE** button again.

### 2 Insert a CD into the CD loading slot.



If you insert a CD, the LCD panel closes automatically, and then format reading will start.

- Make sure the CD loading slot is empty before inserting a CD into the slot.

- When a disc is already loaded in the CD loading slot, select the CD source by pressing the **SRC** button.
- You can use the **AV** button to switch between navigation map displays and audio operation displays.
- The built-in CD drive plays one, standard, 12-cm or 8-cm (single) disc at a time. Do not use an adapter when playing 8-cm discs.
- Do not insert anything other than a disc into the CD loading slot.
- ↳ Playable discs → Page 6
- If you cannot insert a disc completely or if a inserted disc is not recognized, check that the label side of the disc is up. Press the **CD EJECT** button to eject the disc, and check the disc for damage before inserting the disc again.
- If the built-in CD drive does not operate properly, an error message such as ERROR-11 may be displayed.
- ↳ Error messages → Operation Manual

## Ejecting a CD

### 1 Press the OPEN/CLOSE button.

The LCD panel opens halfway.

### 2 Press the CD EJECT button.

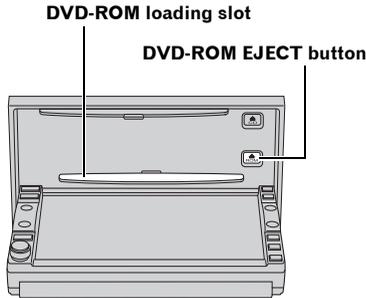
The CD is ejected.

### 3 Press the OPEN/CLOSE button.

The LCD panel closes.

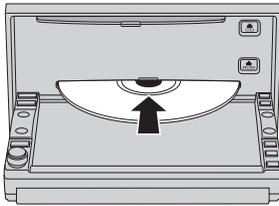
## Inserting the DVD Map Disc

- 1 Press and hold the **OPEN/CLOSE** button. The LCD panel fully opens, and the DVD-ROM loading slot appears.



- ❑ To close the LCD panel, press the **OPEN/CLOSE** button again.

- 2 Insert the DVD Map Disc into the DVD-ROM loading slot.



If you insert the DVD Map Disc, the LCD panel closes automatically, and then format reading will start.

- ❑ Make sure the DVD-ROM loading slot is empty before inserting a DVD Map Disc.
- ❑ Inserting the DVD Map Disc reboots DVD navigation mode.
- ❑ Do not insert anything other than a disc into the DVD-ROM loading slot.
- ❑ If you cannot insert a disc completely or if an inserted disc is not recognized, check that the label side of the disc is up. Press the **DVD-ROM EJECT** button to eject the disc, and check the disc for damage before inserting the disc again.

## Ejecting the DVD Map Disc

- 1 Press and hold the **OPEN/CLOSE** button. The LCD panel fully opens.
- 2 Press the **DVD-ROM EJECT** button. The DVD Map Disc is ejected.
- 3 Press the **OPEN/CLOSE** button. The LCD panel closes.

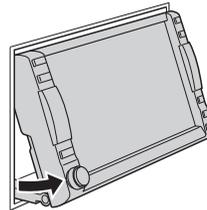
## Adjusting the LCD Panel Angle

### ⚠ CAUTION

- Do not open and close the LCD panel with hands by force. This may cause malfunction.
- When opening, closing and adjusting the angle of the LCD panel, be careful not to get your finger caught.

The LCD panel will be closed automatically with the turning of the ignition switch.

- Press the **ANGLE** button to adjust the LCD panel to an easily viewable angle. You can adjust the angle of the LCD panel every time you press the **ANGLE** button. The LCD panel angle continues changing as long as you press the **ANGLE** button and hold.



- ❑ When you press the **ANGLE** button with the maximum angle, the LCD panel closes all the way.
- ❑ The adjusted angle of the LCD panel will be memorized and the LCD panel will automatically return to this angle the next time the turning of the ignition switch (ACC) on.



# Appendix

## Troubleshooting

- ↳ About troubleshooting other than description below → Appendix of the Operation Manual

Symptom	Cause	Action (See)
No picture.	The parking brake cord is not connected.	Connect a parking brake cord, and apply the parking brake.
	The parking brake is not applied.	Connect a parking brake cord, and apply the parking brake.
Rear display picture disappears.	The source without a video is selected.	Switch the source with a video.
	There was a problem with the rear display or a faulty wiring connection, for example.	Check the rear display and its connection.
	<b>Rear View</b> is selected on the screen.	Select view mode other than <b>Rear View</b> .
Nothing is displayed and the touch panel keys cannot use.	When the shift lever is in [R], displays rear view camera images. (When " <b>NAVI</b> " is selected in <b>REAR DISP</b> menu.)	Select <b>SOURCE</b> in <b>REAR DISP</b> menu.(or when you move the shift lever other than [R] position, the screen will be returned to the previous display.)
	The setting for the rear view camera is incorrect. The shift lever was placed in [R] when the rear view camera was not connected.	Connect a rear view camera correctly. Press the <b>AV</b> button to return to the source display and then select the correct setting for <b>CAMERA</b> . ↳ About <b>CAMERA</b> setting → Operation Manual
The back light of the LCD panel is turned off.	The setting for the rear view camera is incorrect. The shift lever was placed in [R] when the rear view camera was not connected.	Connect a rear view camera correctly. Press the <b>AV</b> button to return to the source display and then select the correct setting for <b>CAMERA</b> . ↳ About <b>CAMERA</b> setting → Operation Manual
	The back light of the LCD panel is turned off.	Press the <b>P.ADJ/B.LIGHT</b> button to turn on the back light.
Adjusting the volume of navigation guidance and beep is not possible.	You cannot adjust them with the <b>VOL (+/-)</b> button.	Turn the volume up or down according to " <b>Volume</b> " in the Setting menu.
The navigation does not boot up or CD playback is not possible.	The disc is not inserted into the appropriate slot.	Eject the disc and insert the disc to appropriate slot.(→ About CD loading slot and DVD-ROM loading slot → Page 14)
	The disc is inserted upside down.	Insert the disc with the label upward.
	The disc is dirty.	Clean disc.
	The disc is cracked or otherwise damaged.	Insert a normal, round disc.
	The loaded disc is a type this system cannot play.	Check what type the disc is. (→ Page 18)
	A disc which is incompatible with this system is inserted.	Insert a suitable disc. (→ Page 18)
Power doesn't turn on. The system doesn't operate.	Leads and connectors are incorrectly connected.	Confirm once more that all connections are correct.
	The fuse is blown.	Rectify the reason for the fuse blowing, then replace the fuse. Be very sure to install the correct fuse with the same rate.
	Noise and other factors are causing the built-in microprocessor to operate incorrectly.	Press the <b>RESET</b> button. (→ Page 8)
No sounds are heard. The volume level will not rise.	The volume level is low.	Adjust the volume level.
	The attenuator or mute is on.	Turn the attenuator or mute off.
When the ignition switch is turned ON (or turned to ACC), the motor sounds.	This system confirms whether a disc is loaded or not.	This is a normal operation.

Symptom	Cause	Action (See)
The system will not switch on or will not operate.	Installation or connection has been carried out incorrectly.	Check with your dealer.
Audio skipping.	The navigation system is not firmly secured.	Secure the navigation system firmly.

## Handling and Care of the Disc

Some basic precautions are necessary when handling your discs.

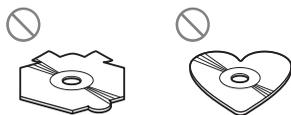
### DVD Map Discs

Do not use discs other than those intended for this product. Use only discs approved by Pioneer.

- For suitable discs → Page 6
- ☐ If you wish to use other DVD Map Discs, first check that they are compatible with this equipment and approved by Pioneer.

### DVD-ROM drive/CD drive and care

- Use only normal, round discs. If you insert irregular, non-round, shaped discs they may jam in the DVD-ROM drive/CD drive or not play properly.



- Check all discs for cracks, scratches or warping before playing. Discs that have cracks, scratches or are warped may not play properly. Do not use such discs.
- Avoid touching the recorded (non-printed) side surface when handling the disc.
- Store discs in their cases when not in use.
- Keep discs out of direct sunlight and do not expose the discs to high temperatures.
- Do not attach labels, write on or apply chemicals to the surface of the discs.
- To clean dirt from a disc, wipe the disc with a soft cloth outward from the center of the disc.



- If the heater is used in cold weather, condensation may form on components inside the DVD-ROM drive/CD drive. Condensation may cause the DVD-ROM drive/CD drive to not operate properly. If you think that condensation is a problem turn off the DVD-ROM drive/CD drive for an hour or so to allow the DVD-ROM drive/CD drive to dry out and wipe any damp discs with a soft cloth to remove the moisture.
- Road shocks may interrupt disc playback.

### CD-R/CD-RW discs

- When CD-R/CD-RW discs are used, playback is possible only for discs which have been finalized.
- It may not be possible to play back CD-R/CD-RW discs recorded on a music CD recorder or a personal computer because of disc characteristics, scratches or dirt on the disc, or dirt, condensation, etc., on the lens of this product.
- Playback of discs recorded on a personal computer may not be possible, depending on the application settings and the environment. Please record with the correct format. (For details, contact the manufacturer of the application.)
- Playback of CD-R/CD-RW discs may become impossible in case of direct exposure to sunlight, high temperatures, or the storage conditions in the vehicle.
- Titles and other text information recorded on a CD-R/CD-RW disc may not be displayed by this product (in the case of audio data (CD-DA)).
- This product conforms to the track skip function of the CD-R/CD-RW disc. The tracks containing the track skip information are skipped automatically (in case of audio data (CD-DA)).
- If you insert a CD-RW disc into this product, time to playback will be longer than when you insert a conventional CD or CD-R disc.
- Read the precautions with CD-R/CD-RW discs before using them.

## MP3, WMA and WAV files

### Important:

- When naming an MP3/WMA/WAV file, add the corresponding filename extension (.mp3, .wma or .wav).
- This product plays back files with the filename extension (.mp3, .wma or .wav) as an MP3/WMA/WAV file. To prevent noise and malfunctions, do not use these extensions for files other than MP3/WMA/WAV files.
- MP3 is short for MPEG Audio Layer 3 and refers to an audio compression technology standard.
- WMA is short for Windows Media™ Audio and refers to an audio compression technology that is developed by Microsoft Corporation. WMA data can be encoded by using Windows Media Player version 7 or later.
- WAV is short for waveform. It is a standard audio file format for Windows®.
- With some applications used to encode WMA files, this product may not operate correctly.
- Depending on the version of Windows Media Player used to encode WMA files, album names and other text information may not be correctly displayed.
- There may be a slight delay when starting playback of WMA files encoded with image data.
- This product allows playback of MP3/WMA/WAV files on CD-ROM, CD-R and CD-RW discs. Disc recordings compatible with level 1 and level 2 of ISO9660 and with the Romeo and Joliet file system can be played back.
- It is possible to play back multi-session compatible recorded discs.
- MP3/WMA/WAV files are not compatible with packet write data transfer.
- When playing discs with MP3/WMA/WAV files and audio data (CD-DA) such as CD-EXTRA and MIXED-MODE CDs, both types can be played only by switching mode between MP3/WMA/WAV and CD-DA.
- The folder selection sequence for playback and other operations becomes the writing sequence used by the writing software. For this reason, the expected sequence at the time of playback may not coincide with the actual playback sequence. However, there also is some writing software which permits setting of the playback order.
- Some audio CDs contain tracks that merge into one another without a pause. When these discs are converted to MP3/WMA/WAV files and burned to a CD-R/CD-RW/CD-ROM, the files will be played back on this player with a short pause between each one, regardless of the length of the pause between tracks on the original audio CD.

## MP3 additional information

- Files are compatible with the ID3 Tag Ver. 1.0, 1.1, 2.2, 2.3 and 2.4 formats for display of album (disc title), track (track title), artist (track artist) and comments. Ver. 2.x of ID3 Tag is given priority when both Ver. 1.x and Ver. 2.x exist.
- The emphasis function is valid only when MP3 files of 32, 44.1 and 48 kHz frequencies are played back. (16, 22.05, 24, 32, 44.1, 48 kHz sampling frequencies can be played back.)
- There is no m3u playlist compatibility.
- There is no compatibility with the MP3i (MP3 interactive) or MP3 PRO formats.
- The sound quality of MP3 files generally becomes better with an increased bit rate. This product can play recordings with bit rates from 8 kbps to 320 kbps, but in order to be able to enjoy sound of a certain quality, we recommend using only discs recorded with a bit rate of at least 128 kbps.

## WMA additional information

- This product plays back WMA files encoded by Windows Media Player version 7, 7.1, 8 and 9.
- You can only play back WMA files in the frequencies 32, 44.1 and 48 kHz.
- The sound quality of WMA files generally becomes better with an increased bit rate. This product can play recordings with bit rates from 48 kbps to 320 kbps (CBR) or from 48 kbps to 384 kbps (VBR), but in order to be able to enjoy sound of a certain quality, we recommend using discs recorded with a higher bit rate.
- This product doesn't support the following formats.
  - Windows Media Audio 9 Professional (5.1ch)
  - Windows Media Audio 9 Lossless
  - Windows Media Audio 9 Voice

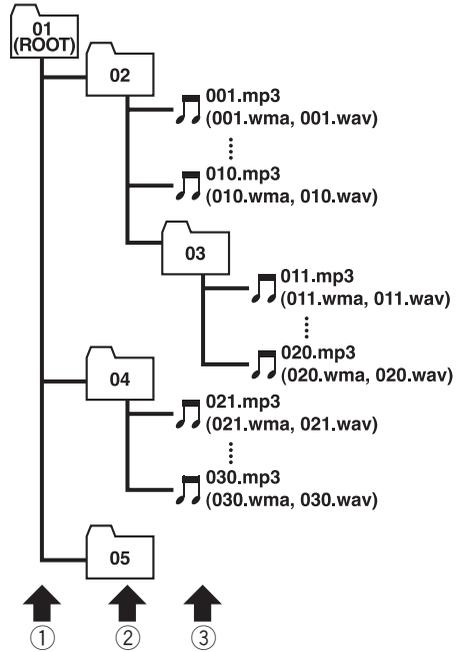
## WAV additional information

- This product plays back WAV files encoded in Linear PCM (LPCM) format or MS ADPCM format.
- You can only play back WAV files in the frequencies 16, 22.05, 24, 32, 44.1 and 48 kHz (LPCM), or 22.05 and 44.1 kHz (MS ADPCM).
- The sound quality of WAV files generally becomes better with a larger number of quantization bits. This product can play recordings with 8 and 16 (LPCM) or 4 (MS ADPCM) quantization bits, but in order to be able to enjoy sound of a certain quality, we recommend using discs recorded with the larger number of quantization bits.

## About folders and MP3/WMA/WAV files

An outline of a CD-ROM with MP3/WMA/WAV files on it is shown below. Subfolders are shown as folders in the folder currently selected.

- The following figure is an example of the tier structure in the CD. The numbers in the figure indicate the order in which folder numbers are assigned and the order to be played back.
- Indicates the order in which folder numbers are assigned.
- ♪ Indicates each file. The number is assigned in the order of the track to be played back.



- ① **First tier**
- ② **Second tier**
- ③ **Third tier**

### Notes:

- This product assigns folder numbers. The user can not assign folder numbers.
- MP3/WMA/WAV files in up to 8 tiers of folders can be played back. However, there is a delay in the start of playback on discs with numerous tiers. For this reason we recommend creating discs with no more than 2 tiers.
- It is possible to play back up to 99 folders on one disc.

## Ambient conditions for playing disc

- At extremely high temperatures, a temperature cutout protects this product by switching it off automatically.
- Despite our careful design of the product, as a result of mechanical wear, ambient conditions for use, or handling of the disc, small scratches that do not affect actual operation may appear on the disc surface. This is not a sign of the malfunction of this product. Consider it to be normal wear and tear.

## Using the navigation system Correctly

### WARNING

- **If liquid or foreign matter should get inside this navigation system, turn off the power immediately and consult your dealer or the nearest authorized PIONEER Service Station. Do not use the navigation system in this condition because doing so may result in a fire, electric shock, or other failure.**
- **If you notice smoke, a strange noise or smell from the navigation system, or any other abnormal signs on the LCD screen, turn off the power immediately and consult your dealer or the nearest authorized PIONEER Service Station. Using this navigation system in this condition may result in permanent damage to the system.**
- **Do not disassemble or modify this navigation system, as there are high-voltage components inside which may cause an electric shock. Be sure to consult your dealer or the nearest authorized PIONEER Service Station for internal inspection, adjustments or repairs.**

## Handling the LCD panel

- When the LCD panel 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 navigation system, avoid exposing it to direct sunlight as much as possible.

- The LCD panel should be used within the temperature ranges shown below.
  - Operating temperature range: +14 °F to +122 °F
  - Storage temperature range: -4 °F to +176 °F
- Do not use the LCD panel at temperatures higher or lower than the operating temperature range because the LCD panel may not operate normally and the LCD panel can 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 place anything on the LCD panel when it is deployed. Also, do not attempt to carry out angle adjustment, or open/close the LCD panel by hand. Applying strong force to the LCD panel may damage it.
- Do not push the LCD screen with much 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.
- Be careful not to place anything between the LCD panel and the main body when the LCD panel is closing. If an object gets between the LCD panel and main body, the LCD panel may stop working.

### CAUTION

- **Be careful of fingers, long hair, and loose articles of clothing which could possibly get caught between the LCD panel and the main body and cause serious injury.**

## Liquid crystal display (LCD) screen

- If the LCD panel is near the vent of an air conditioner when it is opened, 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 the this product resulting in possible damage. Also, if the LCD panel is cooled down by the cooler, the LCD screen may become dark, or the life span of the small fluorescent tube used inside the LCD panel may be shortened.

- 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 problem with the navigation system.
- At low temperatures, the LCD screen may be dark for a while after the power is turned on.
- The LCD screen will be difficult to see if it is exposed to direct sunlight.
- When using a portable phone, keep the antenna of the portable phone away from the navigation system to prevent disruption of the video by the appearance of spots, colored stripes, etc.

## Keeping the LCD screen in good condition

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

## Small fluorescent tube

- A small fluorescent tube is used inside the display to illuminate the LCD screen.
  - The fluorescent tube should last for approximately 10 000 hours, depending on operating conditions. (Using the navigation system at low temperatures reduces the service life of the fluorescent tube.)
  - When the fluorescent tube reaches the end of its useful life, the LCD screen will be dark and the image will no longer be projected. If this happens, consult your dealer or the nearest authorized PIONEER Service Station.

## Glossary

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➤ Glossary → Appendix of the Operation Manual

# Specifications

## General

Rated power source .....	14.4 V DC (10.8 V to 15.1 V allowable)
Grounding system .....	Negative type
Max. current consumption .....	10.0 A
Navigation unit:	
Dimensions (W × H × D):	
DIN	
Chassis .....	178 × 100 × 160 mm (7 × 3-7/8 × 6-1/4 in.)
Nose .....	191 × 114 × 5 mm (7-1/2 × 4-1/2 × 1/4 in.)
D	
Chassis .....	178 × 100 × 165 mm (7 × 3-7/8 × 6-1/2 in.)
Nose .....	171 × 93 × 24 mm (6-3/4 × 3-5/8 × 1 in.)
Weight .....	2.9 kg (6.4 lbs)

## Navigation

GPS Receiver:	
System .....	L1, C/Acode GPS
SPS (Standard Positioning Service)	
Reception system .....	8-channel multi-channel reception system
Reception frequency ...	1 575.42 MHz
Sensitivity .....	-130 dBm
Position update frequency .....	Approx. once per second

GPS antenna:	
Antenna .....	Micro strip flat antenna/ right-handed helical polarization
Antenna cable .....	5.0 m (16 ft. 5 in.)
Dimensions (W × H × D)	
.....	33 × 13 × 36 mm (1-1/4 × 1/2 × 1-3/8 in.)
Weight .....	105 g (0.23 lbs)

## Display

Screen size/aspect ratio .....	6.5 inch wide/16:9 (effective display area: 144 × 76 mm)
Pixels .....	336 960 (1 440 × 234)
Type .....	TFT active matrix, transmissive type
Color system .....	NTSC
Operating temperature range .....	+14 °F to +122 °F
Storage temperature range .....	-4 °F to +176 °F
Angle adjustment .....	0° to 21° (initial settings: 0°)

## Audio

Continuous power output is 22 W per channel minimum into 4 ohms, both channels driven 50 Hz to 15 000 Hz with no more than 5% THD.

Maximum power output .....	50 W × 4 50 W × 2 ch/4 Ω + 70 W × 1 ch/2 Ω (for subwoofer)
Load impedance .....	4 Ω (4 Ω to 8 Ω [2 Ω for 1 ch] allowable)
Preout max output level/output impedance .....	2.0 V/100 ohm

## Equalizer (3-Band Parametric Equalizer):

Low	
Frequency .....	40/80/100/160 Hz
Q Factor .....	0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain .....	±12dB
Mid	
Frequency .....	200/500/1k/2k Hz
Q Factor .....	0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain .....	±12dB
High	
Frequency .....	3.15k/8k/10k/12.5k Hz
Q Factor .....	0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain .....	±12dB

## Loudness contour:

Low .....	+3.5 dB (100 Hz), +3 dB (10 kHz)
Mid .....	+10 dB (100 Hz), +6.5 dB (10 kHz)
High .....	+11 dB (100 Hz), +11 dB (10 kHz) (volume: -30 dB)

## HPF:

Frequency .....	50/80/125 Hz
Slope .....	-12 dB/oct

## Subwoofer:

Frequency .....	50/80/125 Hz
Slope .....	-18 dB/oct
Gain .....	±12dB
Phase .....	Normal/Reverse

## CD Drive

System .....	Compact disc audio system
Usable discs .....	Compact disc
Signal format:	
Sampling frequency .....	44.1 kHz
Number of quantization bits .....	16; linear
Frequency characteristics ..	5 Hz to 20 000 Hz (±1 dB)
Signal-to-noise ratio .....	94 dB (1 kHz) (IHF-A network)
Dynamic range .....	92 dB (1 kHz)
Number of channels .....	2 (stereo)
MP3 decoding format .....	MPEG-1 & 2 Audio Layer 3
WMA decoding format .....	Ver 7, 7.1, 8, 9 (2ch audio)
Wave signal format .....	Linear-PCM, MS ADPCM

## FM tuner

Frequency range .....	87.9 MHz to 107.9 MHz
-----------------------	-----------------------

Usable sensitivity.....	8 dBf (0.7 $\mu$ V/75 $\Omega$ , mono, S/N: 30 dB)
50 dB quieting sensitivity ....	10 dBf (0.9 $\mu$ V/75 $\Omega$ , mono)
Signal-to-noise ratio .....	75 dB (IHF-A network)
Distortion.....	0.3 % (at 65 dBf, 1 kHz, stereo)
	0.1 % (at 65 dBf, 1 kHz, mono)
Frequency response .....	30 Hz to 15 000 Hz ( $\pm$ 3 dB)
Stereo separation .....	45 dB (at 65 dBf, 1 kHz)
Selectivity .....	80 dB ( $\pm$ 200 kHz)
Three-signal intermodulation (desired signal level)	
.....	30 dBf (two undesired signal level: 100 dBf)

### AM tuner

Frequency range.....	530 kHz to 1 710 kHz (10 kHz)
Usable sensitivity.....	18 $\mu$ V (S/N: 20 dB)
Signal-to-noise ratio .....	65 dB (IHF-A network)

### Note:

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

*Register your product at*

***<http://www.pioneerelectronics.com>***

*See "Product registration" page*

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