DVD RDS AV RECEIVER
AUTORADIO AV RDS LECTEUR DE DVD
RADIO AV RDS CON DVD

Pioneer

DOLBY DIGITAL

(((SiriusXM)))
R E A D Y

HD Radio®
This HD Radio receiver enables:

DIVX

Bluetooth®

PSD

HD2/HD3

Digital Sound

DVD VIDEO™

Made for
iPod iPhone

iTunes® Tagging

Artist Experience

AVH-X5500BHS

AVH-X4500BT

AVH-X3500BHS

AVH-X2500BT

AVH-X1500DVD

Owner's Manual
Mode d'emploi
Manual de instrucciones

Thank you for purchasing this **PIONEER product.**

To ensure proper use, please read through this manual before using this product. It is especially important that you read and observe **WARNING**s and **CAUTION**s in this manual. *Please keep the manual in a safe and accessible place for future reference.*

IMPORTANT SAFEGUARDS

Please read all of these instructions regarding your display and retain them for future reference.

1 **Do not install the display 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.**
2 **Do not operate this display 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 make necessary adjustments.**
3 **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.**
4 **Never use headphones while driving.**
5 **To promote safety, certain functions are disabled unless the parking brake is on, and the vehicle is not in motion.**
6 **Never set the volume of your display so high that you cannot hear outside traffic and emergency vehicles.**

⚠ WARNING

Do not attempt to install or service your display by yourself. Installation or servicing of the display 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.

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 PARKING BRAKE SWITCH. IMPROPER CONNECTION OR USE OF THIS LEAD MAY VIOLATE APPLICABLE LAW AND MAY RESULT IN SERIOUS INJURY OR DAMAGE.**
• To avoid the risk of damage and injury and the potential violation of applicable laws, this unit is not for use with a video screen that is visible to the driver.
• To avoid the risk of accident and the potential violation of applicable laws, no viewing of front seat video should ever occur while the vehicle is being driven.
• 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 unit's video features should not be used.

When you attempt to watch a video image while driving, the warning "**Viewing of front seat video source while driving is strictly prohibited.**" will appear on the front display.
To watch a video image on the front display, park your vehicle in a safe place and apply the parking brake.

Parking brake interlock

Certain functions (Video viewing and certain touch panel keys) offered by this unit could be dangerous and/or unlawful if used while driving. To prevent such functions from being used while the vehicle is in motion, there is an interlock system that senses when the parking brake is set. If you attempt to use the functions described above while driving, they will become disabled until you stop the vehicle in a safe place, and (1) apply the parking brake, (2) release the parking brake, and then (3) apply the parking brake again. Please keep the brake pedal pushed down before releasing the parking brake.

When using a display connected to rear monitor output

The rear monitor output on this unit (**V OUT**) is used to connect a rear display that allows passengers in the rear seats to watch videos.

⚠ WARNING

NEVER install the rear display in a location where the driver can watch videos while driving.

When using the rear view camera

With an optional rear view camera, this unit can be used as an aid to keep an eye on trailers, or when 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 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.

To avoid battery exhaustion

Keep the vehicle engine running when using this unit to avoid draining the battery power.

• When no power is supplied to this unit, such as when the vehicle battery is being replaced, the microcomputer of this unit returns to its initial condition. We recommend that you transcribe the audio adjustment data.

⚠ WARNING

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

Information to User

FCC ID: AJDK058
MODEL NO.: AVH-X5500BHS, AVH-X4500BT, AVH-X3500BHS, AVH-X2500BT
IC: 775E-K058
This device complies with Part 15 of FCC Rules and Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device.
This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.
The antenna for Bluetooth cannot be removed (or replaced) by user.
This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65 and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment has very low levels of RF energy that it deemed to comply without maximum permissive exposure evaluation (MPE). But it is desirable that it should be installed and operated keeping the radiator at least 20 cm or more away from person's body (excluding extremities: hands, wrists, feet and ankles).

MODEL NO.: AVH-X1500DVD
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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

Note
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The Safety of Your Ears is in Your Hands

Get the most out of your equipment by playing it at a safe level—a level that lets the sound come through clearly without annoying blaring or distortion and, most importantly, without affecting your sensitive hearing. Sound can be deceiving. Over time, your hearing "comfort level" adapts to higher volumes of sound, so what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

ESTABLISH A SAFE LEVEL:
• Set your volume control at a low setting.
• Slowly increase the sound until you can hear it comfortably and clearly, without distortion.
• Once you have established a comfortable sound level, set the dial and leave it there.

BE SURE TO OBSERVE THE FOLLOWING GUIDELINES:
• Do not turn up the volume so high that you can't hear what's around you.
• Use caution or temporarily discontinue use in potentially hazardous situations.
• Do not use headphones while operating a motorized vehicle; the use of headphones may create a traffic hazard and is illegal in many areas.

About this unit

The tuner frequencies on this unit are allocated for use in North America. Use in other areas may result in poor reception.

⚠ 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 defect or other reproductive harm. ***Wash hands after handling.***

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.

⚠ CAUTION
• Do not allow this unit to come into contact with liquids. Electrical shock could result. Also, damage to this unit, smoke, and overheating could result from contact with liquids.
• Keep this manual handy for future reference.
• Always keep the volume low enough to hear outside sounds.
• Avoid exposure to moisture.
• If the battery is disconnected or discharged, any preset memory will be erased.

⊖ Important (Serial number)
The serial number is located on the bottom of this unit. For your own security and convenience, be sure to record this number on the enclosed warranty card.

DVD video disc region numbers

Only DVD video discs with compatible region numbers can be played on this player. You can find the region number of the player on the bottom of this unit and in this manual (refer to *Specifications* on page 65).

About this manual

• This unit features a number of sophisticated functions to ensure superior reception and operation. All the functions have been designed for the easiest possible use, but many are not self-explanatory. This operation manual will help you benefit fully from this unit's potential and to maximize your listening enjoyment.
• 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.
• In the following instructions, USB memory sticks and USB audio players are collectively referred to as "USB storage device".
• In this manual, iPod and iPhone will be referred to as "iPod".

After-sales service for Pioneer products

Please contact the dealer or distributor from where you purchased this unit 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 unit to the companies at the addresses listed below for repair without 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
340 Ferrier Street
Unit 2
Markham, Ontario L3R 2Z5, Canada
1-877-283-5901
905-479-4411

For warranty information please see the Limited Warranty sheet included with this unit.

Visit our website

Visit us at the following site:
http://www.pioneerelectronics.com
in Canada
http://www.pioneerelectronics.ca
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 catalogues, research new products, and much more.
4 Your feedback is important in our continual effort to design and build the most advanced, consumer-focused product in the industry.

Use and care of the remote control

Installing the battery

Slide the tray on the back of the remote control out and insert the battery with the plus (+) and minus (–) poles aligned properly.
• When using for the first time, pull out the film protruding from the tray.

⚠ **WARNING**
• Keep the battery out of the reach of children. Should the battery be swallowed, consult a doctor immediately.
• Batteries (battery pack or batteries installed) must not be exposed to excessive heat such as sunshine, fire or the like.

⚠ **CAUTION**
• Use one **CR2025 (3 V)** lithium battery.
• 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 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, comply with governmental regulations or environmental public institutions' rules that apply in your country/area.

• "Perchlorate Material – special handling may apply.
See www.dtsc.ca.gov/hazardouswaste/perchlorate. (Applicable to California, U.S.A.)"

Using the remote control

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

Demo mode

The feature demo automatically starts when you select **Off** for the source and continues while the ignition switch is set to ACC or ON. To cancel the feature demo, press and hold **MUTE**. Press and hold **MUTE** again to restart. Operating the feature demo while the car engine is turned off it may drain the battery power.
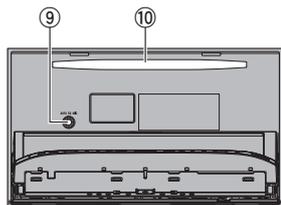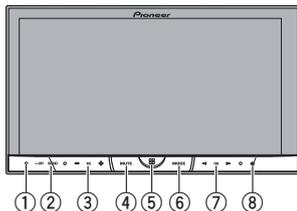
🔔 **Important**
The red lead (ACC) of this unit should be connected to the ignition on/off function. Failure to do so may result in battery drain.
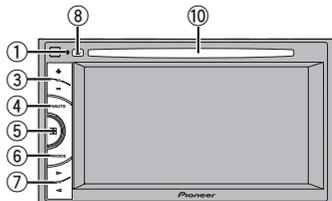
Head unit

AVH-X5500BHS and AVH-X4500BT

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

⑨ ⑩

AVH-X3500BHS, AVH-X2500BT and AVH-X1500DVD

⑧ ⑩

① ③ ④ ⑤ ⑥ ⑦

① **RESET**
For details refer to *Resetting the microprocessor* on page 44.

② **SRC/OFF**

③ **+/– (VOLUME/VOL)**

④ **MUTE**
Press to mute. Press again to unmute.

⑤ **Home button**
Displaying the home display.
The display returns to the Launcher screen while a 3rd-party application is being used in Advanced App Mode.
Double-clicking the icon on the Launcher screen returns the display to the home display.

⑥ **MODE**
Turning the information display off.

⑦ **◄/► (TRK)**

⑧ **⏏ (eject)**

⑨ **Auto EQ microphone input jack**
Use to connect an auto EQ microphone.

⑩ **Disc loading slot**

⚠ **CAUTION**
Do not use unauthorized products.

Notes
- When the navigation system is connected, press **MODE** to switch to the navigation display. Press **MODE** and hold to turn the display off.
Press **MODE** again to turn the display on.
- For details on how to operate a navigation system from this unit, refer to its operation manual.
- When an iPhone that is running an application that supports Advanced App Mode is connected, press **MODE** to switch to the application display. You can use the application by touching the display.
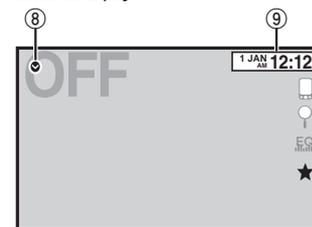
- For details on how to connect an iPod or USB storage device to this unit, refer to *When connecting with optional CD-IU201V cable* on page 48.

Home display

Home display

① ② ③ ④

⑦ ⑥ ⑤
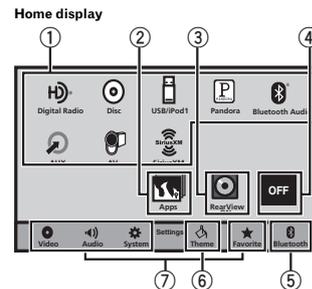
Source off display

⑧ ⑨

Source on display

①
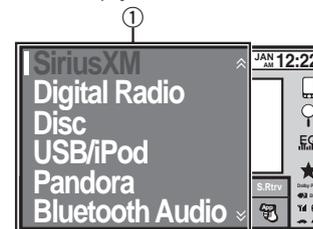
① **Source icon**
Selecting a favorite source.
When the source icon is not displayed, it can be displayed by pressing the home key or touching ◔.

② **Apps key**
Switching to Advanced App Mode.

③ **Rear view key**
Displaying the rear view image.
For details refer to *Using the rear view* on page 10.

④ **Source off key**
Turning the source off.

⑤ **Bluetooth key**
Displaying the Bluetooth connection menu.

⑥ **Theme key**
Displaying the **Theme** menu.

⑦ **Menu icon**
Displaying the menu.

⑧ **Source key**
Displaying the source menu.

⑨ **Clock key**
   Switching to clock adjustment display.

Turning the source ON/OFF

(Function of AVH-X5500BHS/AVH-X4500BT)

Turning the source on using the buttons
⒈ Press **SRC/OFF** to turn the source on.

Turning the source off using the buttons
⒈ Press **SRC/OFF** and hold until the source turns off.

Selecting a source

Available source modes
• **SiriusXM** – SiriusXM tuner (AVH-X5500BHS/AVH-X3500BHS)   • **Digital Radio** – Digital Radio tuner (AVH-X5500BHS/AVH-X3500BHS)   • **Radio** – Radio tuner (AVH-X4500BT/AVH-X2500BT/AVH-X1500DVD)   • **Disc** – Built-in DVD and CD player   • **USB/iPod** – USB/iPod   • **Pandora** – Pandora® internet radio   • **Bluetooth Audio** – Built-in Bluetooth audio (AVH-X5500BHS/AVH-X4500BT/AVH-X3500BHS/AVH-X2500BT)   • **AUX** – AUX   • **AV** – AV input

Selecting a source

• Using **SRC/OFF** (Function of AVH-X5500BHS/AVH-X4500BT)
   ⒈ Press **SRC/OFF**.
 • Using the touch panel keys on the home display
   ⒈ Touch the source icon and then touch the desired source name.
   • When the source icon is not displayed, it can be displayed by touching the screen.
   • While operating the menu, you cannot select a source by touching the source icon.

Note
The **USB/iPod** icon will change as follows:
• **USB** is displayed when a USB storage device is connected to USB input.
• **iPod** is displayed when an iPod is connected to USB input.
• **USB/iPod** is displayed when no device is connected.

Adjusting the volume

● **Press +/− (VOLUME/VOL) to adjust the volume.**

Remote control
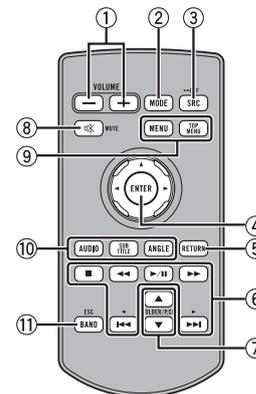
① **+/− (VOLUME/VOL)**

② **MODE**
   Turning the information display off.

③ **SRC/OFF**
   Refer to **Source off key** on the previous page.

④ **Thumb pad**
   Use to select a menu on the DVD menu.

⑤ **RETURN**
   Press to display the PBC (playback control) menu during PBC playback.

⑥ ▶/❚❚
   Press to pause or resume playback.
   ◀◀
   Press to perform fast reverse.
   Press to change the fast reverse speed.

►►
Press to perform fast forward.
Press to change the fast forward speed.

I◄◄
Press to return to the previous track (chapter).

►►I
Press to go to the next track (chapter).

■
Press to stop playback.
If you resume playback, playback will start from the point where you stopped. Touch the key again to stop playback completely.

⑦ **FOLDER/P.CH**
Press to select the next or previous disc or folder.
Press to recall radio station frequencies assigned to preset tuning keys.

⑧ **MUTE**
Press to mute. Press again to unmute.

⑨ **MENU**
Press to display the DVD menu during DVD playback.
TOP MENU
Press to return to the top menu during DVD playback.

⑩ **AUDIO**
Press to change the audio language during DVD playback.
Press to switch audio output for DivX/MPEG-4.
SUBTITLE
Press to change the subtitle language during DVD/DivX/MPEG-4 playback.
ANGLE
Press to change the viewing angle during DVD playback.

⑪ **BAND/ESC**
Press to select the tuner band when tuner is selected as a source. Also used to cancel the control mode of functions.
Press to switch between modes when playing the following types of data:
• Disc
  Compressed audio and audio data (CD-DA) such as with CD-EXTRA and MIXED-MODE CDs
• USB storage device
  Audio data, video data, and photo data

Common operations for menu settings/lists

📱	(Function of AVH-X5500BHS/AVH-X4500BT/AVH-X3500BHS/AVH-X2500BT) Starting the Bluetooth telephone menu. For details refer to *Bluetooth telephone* on page 30.
♀	Displaying the list menu. Starting the search function.
EQ	Displaying the EQ (Audio function menu).
★	Displaying the Favorite menu.

Operating the scroll icon and the scrubber bar

① **Scroll icon**
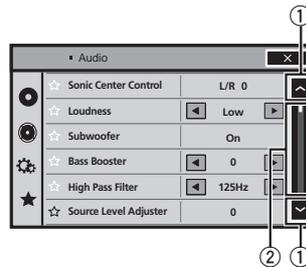Appears when selectable items are hidden.

② **Scrubber bar**
Appears when items cannot be displayed on a single page only.

Viewing the hidden items
1 Touch the scroll icon or drag the scrubber bar to view any hidden items.
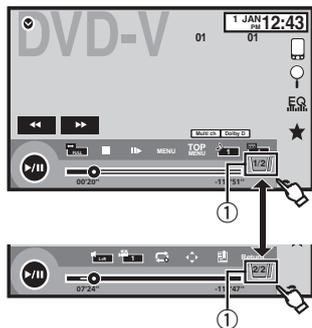• Also, you can drag the list to view any hidden items.

Specifying the playback point
1 Drag the scrubber bar on the screen.
(Not available when the scrubber bar is grayed out.)

Activating the touch panel keys

Touch panel keys

① **Tab key**
Switching the touch keys on the display.

Using the rear view

The below functions are available. Use of the rear view camera feature requires a rear view camera sold separately.

• Rear view camera
This unit can be setup to display the rear view image automatically when you move the shift lever to the **REVERSE (R)** position.

• Camera for rear view mode
The rear view can be turned on to display at all times.
The rear view camera needs to be set to a setting other than Off to turn on rear view mode.

For details about the settings, refer to *Setting the rear view camera (back up camera)* on page 40.

Using the rear view key to display the rear view

Displaying the rear view image by turning the rear view image on. When the rear view image is displayed, you can switch to the source display by touching the display. You can operate from the source display temporarily at this time. If you do not perform any operations within a few seconds, the display will return to the rear view image.
To turn off the rear view image, press the home button to return to the home display and then press this key again.

Using the rear monitor

Connecting a rear monitor, sold separately, to this unit allows images and videos to be viewed from the rear seats.

 Notes
• Touch keys and operation screens do not display on the rear monitor.
• Images and video will continue to be displayed whether the vehicle is in motion or stopped.

Using sound retriever

S.Rtrv Automatically enhances compressed audio and restores rich sound.

Off — ▬ — ▬▬
• ▬ ▬▬ is more effective than ▬.

 Notes
• This function is enabled for playback on the sources listed below.
  — CD-DA
  — MP3/WMA/AAC/WAV files on USB storage devices
  — MP3/WMA/AAC files on CD media
  — iPod
  — Pandora
• The sound retriever setting is turned Off when the MIXTRAX function is used in USB source mode.

Changing the wide-screen mode

⊡ Selecting the appropriate screen ratio for the playback video.

1 **Display the screen mode.**

2 **Touch the desired wide mode setting.**

FULL (full screen)
The 4:3 picture is enlarged in the horizontal direction only, granting viewers a 4:3 TV picture (normal picture) without any omissions.

ZOOM (zoom)
The 4:3 picture is enlarged in the same proportion both vertically and horizontally; ideal for a cinema sized picture (wide screen picture).

NORMAL (normal)
The 4:3 picture is displayed as is, granting viewers no sense of disparity as the proportions are the same as that of the normal picture.

 Notes
• You cannot operate this function while driving.
• Different settings can be stored for each video source.

• When a video is viewed in a wide screen mode that does not match its original aspect ratio, it may appear different.
• Remember that using the wide mode feature of this system for commercial or public viewing purposes may constitute an infringement on the author's rights protected by the Copyright Law.
• The video image will appear coarser when viewed in **ZOOM** mode.
• This function is enabled for playback on the sources listed below.
  — **Disc**: DVD-V, Video-CD, DivX, MPEG-1, MPEG-2, MPEG-4, JPEG
  — **USB**: DivX, MPEG-1, MPEG-2, MPEG-4, JPEG
  — **iPod**: Video
  — **AV Input**: A/V data
  — **AUX**: A/V data

Adjusting the angle of the LCD panel and ejecting media

⚠ CAUTION

Keep hands and fingers clear of the unit when opening, closing, or adjusting the LCD panel. Be especially cautious of children's hands and fingers.

Adjusting the LCD panel angle

(Function of AVH-X5500BHS/AVH-X4500BT)

1   Press ⏏(eject) to display the ejecting menu.

2   Adjust the LCD panel to an easily viewable angle.

Icon	Description
	Laying the panel down.
	Returning the panel to the upright position.

▪ As the set angle is saved, the LCD panel will automatically be adjusted to the same position the next time the LCD panel is opened.

Ejecting a disc

(Function of AVH-X5500BHS/AVH-X4500BT)

1   Press ⏏(eject) to display the ejecting menu.

2   Eject a disc.

Icon	Description
	Ejecting a disc.

Ejecting a disc

(Function of AVH-X3500BHS/AVH-X2500BT/AVH-X1500DVD)

●   **Press ⏏ to eject a disc.**

Setting the clock

1   Touch the Clock key.
The **Clock Adjustment** screen appears.
For details refer to **Home display** on page 7.

2   Select the item to set.
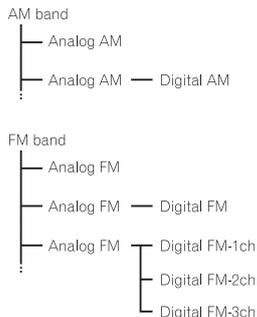
3   Touch ▲ or ▼ to set the correct date and time.

About HD Radio™ stations

(Function of AVH-X5500BHS/AVH-X3500BHS)
HD Radio™ stations offer high-quality audio and data services. HD Radio stations are brought to you by local FM/AM stations.
HD Radio stations feature the following:
• High quality audio
• FM multicasting
• Data services

AM band
└─ Analog AM
└─ Analog AM ─── Digital AM
⋮

FM band
└─ Analog FM
└─ Analog FM ─── Digital FM
└─ Analog FM ─── Digital FM-1ch
                 Digital FM-2ch
                 Digital FM-3ch
⋮

PSD)

Program Service Data: Contributes to the superior user experience of HD Radio Technology. Presents song name, artist, station IDs, HD2/HD3 Channel Guide, and other relevant data streams.

HD2/HD3)

Adjacent to traditional main stations are extra local FM channels. These HD2/HD3 Channels provide new, original music as well as deep cuts into traditional genre.

Digital Sound)

Digital, CD-quality sound. HD Radio Technology enables local radio stations to broadcast a clean digital signal. AM sounds like today's FM and FM sounds like a CD.

iTunes Tagging)

iTunes® Tagging provides you the opportunity to discover a wide range of content and the means to "tag" that content for later review and purchase from the iTunes® Store.

Artist Experience)

Visual information related to content being played on your HD Radio receiver, such as Album Art, historical photographs, still art from live broadcasts, among other related content.

HD Radio™ Technology

• HD Radio Technology manufactured under license from iBiquity Digital Corporation. U.S. and Foreign Patents. HD Radio™ and the HD, HD Radio, and "Arc" logos are proprietary trademarks of iBiquity Digital Corp.

HD Radio tuner operations

Touch panel keys
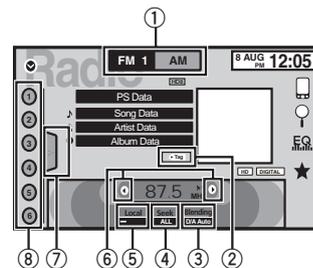
① **Band key**
Selecting a band (FM or AM) by touching the band key.
The touch panel key for the selected band is highlighted.

Switching between **FM1**, **FM2**, and **FM3** by touching the band key.
When **AM** is selected, you cannot switch to another **AM** band by touching the band key.

② **Tag key**
Saving song information (tag) from the broadcasting station to your iPod.

③ **Reception mode key**
Switching to the analog broadcast of the same frequency.

④ **Seek mode key**
Switching between Digital broadcasting station seek and normal seek.

⑤ **Local key**
Setting the local seek level.

⑥ **Tuning key**
Tuning up or down manually.
Touch and hold down for more than two seconds to skip stations. Seek tuning starts as soon as you release. Touch again to cancel seek tuning.
When an analog station is received, tuning down operation is conducted within the analog broadcasting. (⑥ → ②)
If a digital broadcast is not yet received, tuning-up operation tunes in the next analog station. (② → ⑥)
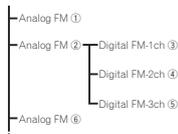
```
┌─Analog FM ①
├─Analog FM ②─┬─Digital FM-1ch ③
│             ├─Digital FM-2ch ④
│             └─Digital FM-3ch ⑤
└─Analog FM ⑥
```

⑦ **List key**
Displaying the preset channel list.

⑧ **Preset channel key**
Select a preset channel.

Basic operations

Switching preset channels using the buttons
① Press ◄ or ► (**TRK**).
Seek tuning using the buttons
① Press and hold ◄ or ► (**TRK**).

Note
Touch panel keys not listed under *HD Radio tuner operations* may appear on the display. Refer to *Indicator list* on page 57.

Storing and recalling stations

You can easily store up to six stations for each band as presets.
• Six stations for each band can be stored in memory.

1 Display the preset channel list screen.
Refer to *HD Radio tuner operations* on the previous page.
The preset channel list appears in the display.

2 Touch and hold down one of the preset tuning keys to store the selected frequency to the memory.
The selected radio station frequency has been stored in the memory.

3 Touch the appropriate preset tuning key to select the desired station.

Storing the strongest stations

BSM (best stations memory) automatically stores the six strongest stations in the order of their signal strength.
Storing broadcast frequencies with BSM may replace broadcast frequencies you have saved using the preset tuning keys.

1 Display the preset channel list screen.
Refer to *HD Radio tuner operations* on the previous page.
The preset channel list appears in the display.

2 Touch BSM to turn BSM on.
The six strongest broadcast frequencies will be stored under preset tuning keys in order of their signal strength.
▪ To cancel the storage process, touch **Cancel**.

Tuning in to strong signals

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

FM: Off — ▬ — ▬▬ — ▬ ▬▬ — — ▬▬▬▬
AM: Off — ▬ — ▬▬
The more ▬ there are on the screen, the fewer the stations that can be selected. Only stations with the strongest signals in your local area can be selected.
If there are fewer ▬, this unit will be able to receive broadcasts from weaker stations.

Using iTunes tagging
Note
For more details about iTunes tagging, refer to *About iTunes tagging* on page 60.

Storing the tag information to this unit

1 Tune in to the broadcast station.

2 Store the tag information to this unit.
Refer to *HD Radio tuner operations* on the previous page.
You can store the information if the **Tag** indicator is displayed while the desired song is being broadcast.

▪ While storing the tag data on this unit, **Tag** flashes.
▪ The tag information for up to 50 songs can be stored on this unit.
▪ Depending on the timing of when the tag information is stored, the tag information for the song played before or after the currently playing song may also be stored.

3 When completed, ◁·Tag indicator turns off and ♪ indicator is displayed.

Storing the tagged information to your iPod

1 Connect your iPod.
When your iPod is connected to this unit, your iPod starts storing the tagged information automatically.

2 When completed, ◎ indicator turns off and the tagged information is stored on your iPod.

Switching the seek mode

There are two seek tuning settings, one is **HD** (Digital broadcasting stations seek) and the other is **ALL** (normal seek).

ALL—**HD**

Switching the reception mode

If the reception for a digital broadcast becomes poor, this unit automatically switches to the analog broadcast of the same frequency. If this function is set to **D/A AUTO**, the tuner switches between digital broadcast and analog broadcast automatically. If this function is set to **ANALOG**, the tuner will only receive analog broadcasts.
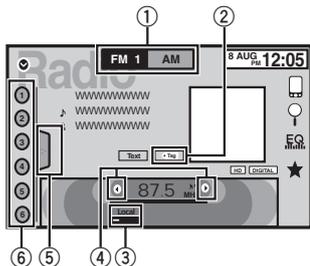
D/A AUTO—**ANALOG**

Tuner operations

(Function of AVH-X4500BT/AVH-X2500BT/AVH-X1500DVD)

Touch panel keys

① **Band key**
Selecting a band (**FM1**, **FM2** or **FM3**) by touching the left icon. Switching to the **AM** band by touching the right icon.
The icon for the selected band is highlighted.

② **Tag key**
Saving song information (tag) from the broadcasting station to your iPod.

③ **Local key**
Setting the local seek level.

④ **Tuning key**
Tuning up or down manually.
Touch and hold down for more than two seconds to skip stations. Seek tuning starts as soon as you release. Touch again to cancel seek tuning.

⑤ **List key**
Displaying the preset channel list.

⑥ **Preset channel key**
Selecting a preset channel.

Basic operations

Switching preset channels using the buttons
① Press ◄ or ► (**TRK**).

Seek tuning using the buttons
① Press and hold ◄ or ► (**TRK**).

Notes

- Listening AM radio while an iPod is charged from this unit may generate noise. In this case, disconnect the iPod from this unit.
- Touch panel keys not listed under *Tuner operations* may appear on the display. Refer to *Indicator list* on page 57.

Storing and recalling stations

You can easily store up to six stations for each band as presets.

1 Display the preset screen.
Refer to *Tuner operations* on this page.
The preset screen appears in the display.

2 Touch and hold down one of the preset tuning keys to store the selected frequency to the memory.
The selected radio station frequency has been stored in the memory.

3 Touch the appropriate preset tuning key to select the desired station.

Storing the strongest stations

BSM (best stations memory) automatically stores the six strongest stations in the order of their signal strength.

Storing broadcast frequencies with BSM may replace broadcast frequencies you have saved using the preset tuning keys.

1 Display the preset screen.
Refer to *Tuner operations* on this page.
The preset screen appears in the display.

2 Touch BSM to turn BSM on.
The six strongest broadcast frequencies will be stored under preset tuning keys in order of their signal strength.

- To cancel the storage process, touch **Cancel**.

Tuning in to strong signals

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

FM: Off — ▬ — ▬ ▬ — ▬ ▬ ▬ — ▬ ▬ ▬
AM: Off — ▬ ▬ — ▬ ▬
The more ▬ there are on the screen, the fewer the stations that can be selected. Only stations with the strongest signals in your local area can be selected.
If there are fewer ▬, this unit will be able to receive broadcasts from weaker stations.

Using iTunes tagging

Note

For more details about iTunes tagging, refer to *About iTunes tagging* on page 60.

Storing the tag information to this unit

1 Tune in to the broadcast station.

2 Store the tag information to this unit.
Refer to *Tuner operations* on this page.

You can store the information if the **Tag** indicator is displayed while the desired song is being broadcast.

- While storing the tag data on this unit, **Tag** flashes.
- The tag information for up to 50 songs can be stored on this unit.
- Depending on the timing of when the tag information is stored, the tag information for the song played before or after the currently playing song may also be stored.

3 When completed, [♫ Tag] indicator turns off and ♫ indicator is displayed.

Storing the tagged information to your iPod

1 Connect your iPod.
When your iPod is connected to this unit, your iPod starts storing the tagged information automatically.

2 When completed, ⊘ indicator turns off and the tagged information is stored on your iPod.

Introducing SiriusXM tuner operations

(Function of AVH-X5500BHS/AVH-X3500BHS)
You can use this unit to control SiriusXM Connect Vehicle Tuner, which is sold separately.
For more information on how to install SiriusXM Connect Vehicle Tuner, consult the installation guide included with the tuner.
Everything worth listening to is on SiriusXM, getting over 130 channels, including the most commercial-free music, plus the best sports, news, talk and entertainment. A SiriusXM Vehicle Tuner and Subscription are required. For more information, visit www.siriusxm.com.

To subscribe to the SiriusXM Satellite Radio service

1   Select SiriusXM as a source.
You should be able to tune in to Channel 1. If you cannot get Channel 1, make sure that your SiriusXM Connect Vehicle Tuner is installed correctly as described in the tuner installation guide.

**2   Switch to Channel 0 and check the Radio ID.**
The SiriusXM Radio ID can be found by tuning to Channel 0. In addition, the Radio ID is located on the bottom of the SiriusXM Connect Vehicle Tuner.
Please note that the SiriusXM Radio ID does not include the letters I, O, S or F.
You will need this number to activate your subscription.

▪ The SiriusXM satellites will send an activation message to your tuner. When the tuner has received the message, "**Subscription Updated**" is displayed. Once you have subscribed, SiriusXM will send an activation message to your tuner.
The activation process usually takes 10 to 15 minutes but may take up to an hour in some cases. Do not turn off the unit while the activation message is displayed.

Touch panel keys
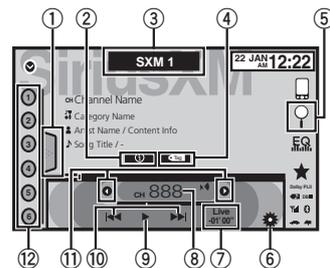
① **List key**
Displaying the preset channel list.

② **Information key**
Switching the SiriusXM information.
Category name—Content information
Touch and hold for more than two seconds to scroll the text.

③ **Band key**
Selecting a band from **SXM1**, **SXM2** or **SXM3**.

④ **iTunes® song tagging key**
Saving iTunes® song tagging from the broadcasting station to your iPod.

⑤ **Search key**
Selecting a channel from the list screen.

⑥ **Parental control key**
The **Parental Control** screen appears.

⑦ **Live key**
Use to return to the live broadcast while in Instant Replay mode.

⑧ **Direct key**
A numeric keypad appears, allowing you to enter SiriusXM channel numbers directly.

⑨ **Pause and play key**
Use while in Instant Replay mode.

⑩ **Forward/Backward key**
While in Instant Replay mode, use to skip up or down or press and hold to fast forward or fast rewind.

⑪ **Tuning key**
Tuning up or down manually.
Touch and hold down for more than two seconds to skip stations. Seek tuning starts as soon as you release. Touch again to cancel seek tuning.

⑫ **Preset channel key**
Recalling the preset channels by touching the key.
Storing the current station in the preset channel list by touching and holding the key.

Basic operations

Manual tuning (step by step) using the buttons
① Press ◄ or ► (**TRK**).

Seek tuning using the buttons
① Press and hold ◄ or ► (**TRK**).

Note
Touch panel keys not listed under *Introducing SiriusXM tuner operations* may appear on the display.

Storing and recalling channels

You can easily store up to six channels for each band as presets.
•   Six channels for each band can be stored in memory.

1   Display the preset channel list screen.
Refer to *Introducing SiriusXM tuner operations* on this page.
The preset channel list appears in the display.

2   Touch and hold down one of the preset tuning keys to store the selected channel to the memory.
The selected channel has been stored in the memory.

3   Touch the appropriate preset channel key to select the desired station.

Selecting a channel from the list screen

Selecting a channel from the all channel list

You can select a channel from any of the available channels.

1   Touch the search key to open the list screen.

2   Select the all channels.

3   Select the desired channel.

4 Touch the close key to close the list screen.

Display is closed.

Selecting a channel from the category list

You can select a channel from the available categories.
The types of categories available will depend on the types of channels available.

1 Touch the search key to open the list screen.

2 Select a category from the list.

3 Select the desired channel.

4 Touch the close key to close the list screen.

Display is closed.

Switching the list display

You can switch between list types while a list is showing.

● **Touch Info while a list is showing to switch between list types.**
The list displayed will switch between the below types in the order given.
Channel Name—Artist Name—Song Title—Content Info

Selecting a SiriusXM channel directly

You can select a SiriusXM channel directly by entering the desired channel number.

1 Touch the direct key to switch to direct input display.

2 Touch 0 to 9 to input the desired channel number.
▪ To cancel the input numbers, touch **C**.

3 Select the SiriusXM channel of the entered number.
The SiriusXM channel of the entered number is selected.

Selecting the SiriusXM channel of the entered number.

Replay™

You can pause, rewind or replay the channel you are currently listening to.
• Touch Pause/Play key to pause or play.
• Touch Forward or Backward keys to skip through content. Press and hold the Forward or Backwards keys to fast scan through the content.
• Touch Live key to exit Replay mode and go to the live point in the broadcast.

Using iTunes tagging
Note
For more details about iTunes tagging, refer to *About iTunes tagging* on page 60.

iTunes tagging of SiriusXM songs

1 Tune in to the broadcast station.

2 Touch the iTunes® song tagging key.
Store the tag information to this unit.
You can store the information if the **Tag** indicator is displayed while the desired song is being broadcast.
▪ While storing the tag data on this unit, **Tag** flashes.
▪ The tag information for up to 50 songs can be stored on this unit.
▪ Depending on the timing of when the tag information is stored, the tag information for the song played before or after the currently playing song may also be stored.

3 When completed, ⟨·Tag indicator turns off and ♪ indicator is displayed.

Storing the tagged information to your iPod

1 Connect your iPod.
When your iPod is connected to this unit, your iPod starts storing the tagged information automatically.

2 When completed, ◎ indicator turns off and the tagged information is stored on your iPod.

Setting Parental Control

The SiriusXM Parental Control feature allows you to control access to channels that you consider inappropriate for younger listener.
When enabled, the Parental Control feature requires you to enter a passcode to tune to the locked channels.

1 Touch the parental control key to open the passcode confirmation screen.

2 Use the numeric keypad to enter the four-digit passcode and then touch the Enter key.

Touch to confirm the passcode.

The default passcode is 0000.
If a valid passcode is entered, the channel list appears on the Parental Control screen together with a lock or unlock icon.

3 The below operations can be completed from the Parental Control screen.

Locking channels

Access to the current broadcast channel can be locked. You will need to input your passcode later on to listen to a locked channel.

● **To lock a specific channel, touch the name of the desired channel on the list.**
A locked lock icon will appear next to the name of a locked channel.
Touch the name of a locked channel a second time to unlock the channel.

Clear All (clearing the locks from all channels)

You can clear the locks from all locked channels at the same time.

● **Touch Clear All to unlock all locked channels at the same time.**

Edit Code (changing the passcode)

You can change your passcode.

1 Touch Edit Code to switch to the passcode edit screen.

2 Use the numeric keypad to enter a new four-digit passcode and then touch the Enter key.

| ⏎ | Touch to confirm the passcode. |

Once the new passcode is set, the Parental Control screen will open.

Note

If **Check Tuner** displays instead, refer to *SiriusXM Satellite Radio* on page 53.

Setting SiriusXM Tune Start™

SiriusXM Tune Start can be used to set the start position for playback of the audio content being broadcast when the channel is changed.

1 Press the home button to switch to the home display.

2 Touch the system key to open the system menu.

3 Touch SiriusXM Tune Start on the system menu to turn SiriusXM Tune Start on or off.
On: The current broadcast audio song is played back from the start of the song.
Off: The live broadcast is played for the current audio channel.

Scan options

Channels and songs can be played back on this unit by scan play.

Tune Scan™

Scan through short previews of songs you may have missed on your preset music channels.

1 Touch the list key to display the preset channel list.

2 Touch Tune Scan.

| Tune Scan | Each song in the current channel plays for eight seconds at a time. |

Refer to *Scan play operations* on this page for a list of functions that can be used during scan play.

Note

Tune Start and Tune Scan are compatible with SXV200 tuner but not available to SXV100.

Category scan

Scan through each channel in a category.

1 Touch the search key.

2 Touch the desired category.

3 Touch Scan.

| Scan | The live broadcast for each channel in the current category plays for five seconds at a time. |

Refer to *Scan play operations* on this page for a list of functions that can be used during scan play.

Scan play operations
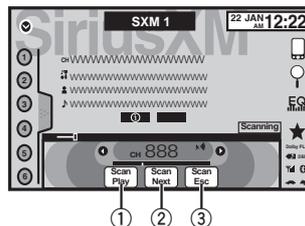
① **Scan play key**
Selecting the channel or song playing

② **Scan next key**
Switching to the next song during the Tune Scan
Switching to the next channel during the category scan

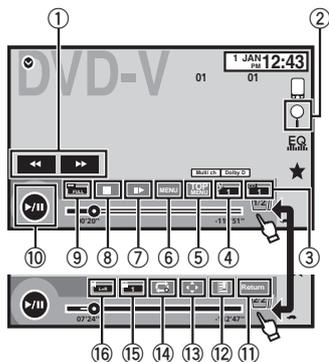③ **Scan escape key**
Quitting scan play

Introducing movie operations

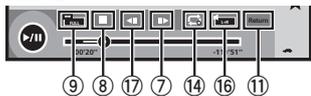You can use this unit to view DVD/DVD-R/DVD-RW/CD/CD-R/CD-RW movie files.

Touch panel keys

DVD video
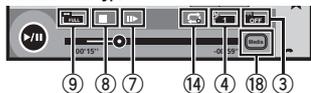

Video CD

When playing a disc containing a mixture of various media file types

① **Fast forward key/Reverse key**
Fast forwarding or reversing

Touch to change the fast forward and reverse speed.

② **Search key**
Starting the search function.

③ **Switch subtitle language key**
With DVDs/DivX files featuring multi-subtitle recordings, you can switch between subtitle languages during playback.

④ **Switch audio language key**
With DVDs/DivX files that provides audio playback in different languages and different audio systems (Dolby Digital, DTS, etc.), you can switch between languages/audio systems during playback.
Depending on the setting, the video may not be played back with the audio system used to record the DVD.

⑤ **TOP MENU key**
Returning to the top menu during DVD playback.

⑥ **MENU key**
Displaying the DVD menu during DVD playback.

⑦ **Slow-motion playback key**
Moving the selection ahead one frame at a time during playback.
Touch and hold down the key for more than two seconds to slow down playback speed. Touching the key increases the playback speed over four incremental settings during slow motion playback from DVD video/Video CD.

⑧ **Stop key**
Stopping playback.
If you resume playback, playback will start from the point where you stopped. Touch the key again to stop playback completely.

⑨ **Screen mode key**
Changing the screen mode.
Refer to *Changing the wide-screen mode* on page 10.

⑩ **Pause and play key**
Pausing playback.
Returning to normal playback during paused, slow motion, or frame-by-frame playback.

⑪ **Return key**
Returning to the specified scene to which the DVD currently being played has been pre-programmed to return.
This function cannot be used if a specified scene has not been preprogrammed on the DVD disc.

⑫ **Bookmark key**
During playback, touch the point at which you want to resume playback the next time the disc is loaded.
• You can set one bookmark per DVD video. You can set up to five bookmarks total.
• To clear the bookmark on a disc, touch and hold the key during playback.
• The oldest bookmark is replaced by the new one.

⑬ **Arrow key**
Displaying arrow keys to operate the DVD menu.

⑭ **Repeat key**
Selecting the repeat range.

⑮ **Viewing angle key**
With DVDs featuring multi-angle (scenes shot from multiple angles) recordings, you can switch among viewing angles during playback.

⑯ **Audio output key**
Switching the audio output, when playing video discs recorded with LPCM audio.

⑰ **Slow key**
Speeding down the playback speed in four steps, during slow motion playback on DVD video/Video CD.
• There is no sound during slow motion playback.
• Images during slow motion playback may be unclear for some discs.
• Reverse slow motion playback is not available.

⑱ **Media key**
Switching between media file types to play on DVD/CD/USB.

Basic operations

Playing back videos
1 Insert the disc into the disc loading slot with the label side up.
Playback will automatically start.
• If you are playing a DVD or Video CD, a menu may appear. Refer to *Operating the DVD menu* on the next page and *PBC playback* on page 19.
• When the automatic playback function is on, the unit will skip the DVD menu and automatically start playback from the first chapter of the first title. Refer to *Automatic playback of DVDs* on page 37.
• When the source icon is not displayed, it can be displayed by touching the screen.
• If a message is displayed after loading a disc containing DivX VOD content, touch **Play**. Refer to *Playing DivX® VOD content* on page 20.

Ejecting a disc
• Refer to *Ejecting a disc* on page 11.

Selecting a chapter using the buttons
1 Press ◄ or ► (**TRK**).

Fast forwarding or reversing using the buttons
1 Press and hold ◄ or ► (**TRK**).
• Fast forward/fast reverse may not always be possible on some discs. In such cases, normal playback will automatically resume.
• The fast forward/fast reverse speed depends on the length of time you press and hold down ◄ or ► (**TRK**). This function is not available for Video CD.

Notes
• This DVD player can play back a DivX file recorded on CD-R/RW, DVD-R/RW, or MPEG-1/MPEG-2/MPEG-4. (Please see the following section for files that can be played back. Refer to *DivX video files* on page 59.)
• Do not insert anything other than a DVD-R/RW or CD-R/RW into the disc loading slot.
• Some operations may not be available while watching a media due to the programming of the disc. In such cases, the 🚫 icon appears on the screen.
• There may be touch panel keys not listed under *Introducing movie operations* on the previous page that appear on the screen. Refer to *Indicator list* on page 57.
• With some DVDs, switching between languages/audio systems may only be possible using a menu display.
• You can also switch between languages/audio systems using **Video Setup** menu. For details, refer to *Setting the audio language* on page 35.
• This unit will return to normal playback if you change the audio language during fast forward/fast reverse, pause or slow motion playback.
• With some DVDs, switching between subtitle languages may only be possible using a menu display.

• You can also switch between subtitle languages using **Video Setup** menu. For details, refer to *Setting the subtitle language* on page 35.
• This unit will return to normal playback if you change the subtitle language during fast forward/fast reverse, pause or slow motion playback.
• During playback of a scene shot from multiple angles, the angle icon is displayed. Use the **Video Setup** menu to turn the angle icon display on or off. For details, refer to *Setting the multi-angle DVD display* on page 36.
• You will return to normal playback if you change the viewing angle during fast forward/fast reverse, pause or slow motion playback.

Sound playback operations
You can use this unit to listen to DVD-R/DVD-RW/CD/CD-R/CD-RW sound files.

Touch panel keys
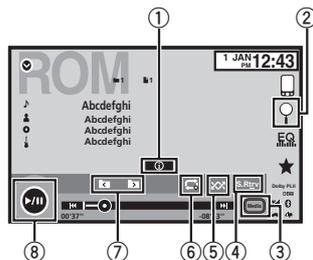
① **Information key**
Switching the text information to display on this unit when playing MP3/WMA/AAC files.

② **Search key**
Displaying a list of track titles/file names to select songs on a CD.
Displaying the file name list to select the files.

③ **Media key**
Switching between media file types on a DVD or CD.

④ **Sound retriever key**
Refer to *Using sound retriever* on page 10.

⑤ **Random key**
Playing songs in random order.

⑥ **Repeat key**
Selecting the repeat range.

⑦ **Previous folder key/Next folder key**
Selecting a folder.

⑧ **Pause and play key**
Pausing and starting playback.

Switching the media file type
When playing a digital media containing a mixture of various media file types, such as DivX, MPEG-1, MPEG-2, MPEG-4 and MP3, you can switch between media file types to play.

● **Touch Media to switch media file types.**
CD (audio data (CD-DA))—Music/ROM (compressed audio)—Video (DivX, MPEG-1, MPEG-2, MPEG-4 video files)

Note
Audio data (CD-DA) and JPEG picture files on DVD-R/RW/ROM cannot be played back on this unit.

Operating the DVD menu
(Function for DVD video)
Some DVDs allow you to make a selection from the disc contents using a menu.

Using the arrow keys

1 Display arrow keys to operate the DVD menu.

2 Select the desired menu item.

Key	Returning to the normal DVD video display.
◄✦►	Displaying arrow keys.
∧	
∨	Selecting the desired menu item.
‹	
›	
Enter	Starting playback from the selected menu item.
Touch	Operating the DVD menu by directly touching the menu item.
↩	Back to Previous display.

■ When operating the DVD menu by directly touching the menu item, touch the icon to operate.

■ Ways to display the menu will differ depending on the disc.
■ Depending on the contents of the DVD disc, this function may not work properly. In such cases, use the touch panel keys to operate the DVD menu.

Random play (shuffle)

● **Touch the random key.**
• **Songs** – Play back videos/songs in the selected list in random order.
• **Albums** – Play back videos/songs from a randomly selected album in order.
• **Folder** – Play back songs/tracks in the selected folder in random order.
• **Disc** – Play back songs/tracks in the selected disc in random order.
• **On** – Play back files in random order within the repeat range, **Folder** and **Disc**.
• **Off** – Cancel random play.

Repeating playback

● **Touch the repeat key.**
• **Disc** – Play through the current disc
• **Chapter** – Repeat the current chapter
• **Title** – Repeat the current title
• **Track** – Repeat the current track
• **File** – Repeat the current file
• **Folder** – Repeat the current folder
• **One** – Repeat just the current video/song

Notes
• This function cannot be operated during Video CD playback featuring PBC (playback control).
• If you perform chapter search, fast forward/reverse, frame-by-frame playback or slow motion playback, the repeat play will stop.
• When playing discs with compressed audio and audio data (CD-DA), playback is repeated within the type of data currently playing even if **Disc** is selected.

• If you select another folder during repeat play, the repeat play range changes to **Disc**.
• If you perform track search or fast forward/reverse during **File**, the repeat play range changes to **Folder**.
• If you perform title/chapter search or fast forward/reverse during **Chapter**, the repeat play is set to off automatically.
• If you perform track search or fast forward/reverse during **Track**, the repeat play range changes to **Disc**.
• When **Folder** is selected, it is not possible to play back a subfolder of that folder.

Searching for the part you want to play

You can use the search function to find the part you want to play.
For DVD videos, you can select **Title** (title), **Chapter** (chapter) or **10key** (numeric keypad). For video CDs, you can select **Track** (track) or **10key** (numeric keypad).
• Chapter search is not available when disc playback is stopped.
• This function cannot be operated during some DVD videos or Video CD playback featuring PBC (playback control).

1   Start the search function.
Refer to *Introducing movie operations* on page 17.

2   Touch the desired search option (e.g., Chapter).

3   Touch 0 to 9 to input the desired number.
■ To cancel the entered numbers, touch **C**.

4   Start playback from the selected part.

 Registering the numbers and starting playback.

Note
With discs featuring a menu, you can also use the DVD menu to make your selection.
Refer to *Introducing movie operations* on page 17.

Selecting audio output

When playing DVD video discs recorded with LPCM audio, you can switch the audio output. When playing video CDs, you can switch between stereo and monaural audio output.
• This function is not available when disc playback is stopped.

● **Touch the audio output key to switch audio output types.**
• **L+R** – Left and right
• **Left** – Left
• **Right** – Right
• **Mix** – Mixing left and right

Note
You may not be able to select or use this function depending on the disc and the playback location.

PBC playback

(Function for Video CDs)
During playback of Video CDs featuring PBC (playback control), **PBC On** is displayed.

1   Start the search function.
Refer to *Introducing movie operations* on page 17.

2   Touch 10key to display the numeric keypad.

3   Touch 0 to 9 corresponding to a menu number.

4   Start playback from the selected part.

 Registering the numbers and starting playback.

Notes
• You can display the menu by touching **Return** during PBC playback. For details, refer to the instructions provided with the disc.
• PBC playback of a Video CD cannot be canceled.
• During playback of Video CDs featuring PBC (playback control), you cannot select the repeat play range or use the search function.

Selecting tracks from the track title list

You can select tracks to playback using the track title list which is a list of the tracks recorded on a disc.

1   Display the track title list.
Refer to *Sound playback operations* on the previous page.

2   Touch your favorite track title.
Playback begins.

Selecting files from the file name list

(Function for compressed audio/DivX/MPEG-1/MPEG-2/MPEG-4)

Disc (CD/DVD)

iPod

File name list is a list of file names (or folder names) from which you can select a file (or folder) to play back.

1 Touch the search key to display the file (or folder) name list.

2 Touch your favorite file (or folder) name.
▪ When you have selected a folder, a list of the names of the files (or the folders) in it can be viewed. Repeat this operation to select the desired file name.
▪ If folder **1** (ROOT) contains no files, playback commences with folder **2**.

Note

If part of the recorded information does not display, a scroll key appears on the right side of list. Touch the scroll key to scroll.

Playing DivX® VOD content

Some DivX video on demand (VOD) content may only be playable a fixed number of times. When you load a disc containing this type of content, the number of times it has been played will be shown on-screen. You can then decide whether or not to play the disc.
• For DivX VOD content without this restriction, you can load the disc into your player and play the content as often as you like, with no message displayed.
• You can confirm the number of times that the content can be played by checking the message, **This DivX rental has used ☐☐ out of ◯◯ views.**.

✿ Important

• In order to play DivX VOD contents on this unit, you first need to register the unit with your DivX VOD contents provider. For details on your registration code, refer to *Displaying the DivX® VOD registration code* on page 37.

• DivX VOD content is protected by a DRM (Digital Rights Management) system. This restricts playback of content to specific, registered devices.

● **If a message is displayed after loading a disc containing DivX VOD content, touch Play.**
Playback of the DivX VOD content will start.
▪ To skip to the next file, touch **Next Play**.
▪ If you do not want to play the DivX VOD content, touch **Stop**.

Moving images operations

You can use the unit to view iPod movie files.
• Depending on your iPod, there may not be any output unless you use CD-IU201S/CD-IU201V (sold separately). Be sure to use CD-IU201S/CD-IU201V to connect your iPod.

Touch panel keys
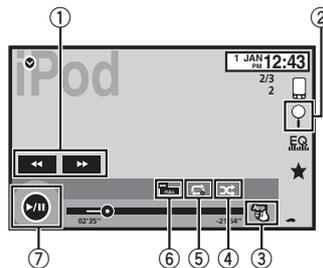
① **Fast forward key/Reverse key**
Fast forwarding or reversing
Touch to change the fast forward and reverse speed.

② **Search key**
Displaying iPod menus.

③ **iPod control mode key**
Conducting operation from your iPod and listening to it using your car's speakers.

④ **Shuffle key**
Playing the video on your iPod in a random order.

⑤ **Repeat key**
Selecting the repeat range.

⑥ **Screen mode key**
Changing the screen mode.
Refer to *Changing the wide-screen mode* on page 10.

⑦ **Pause and play key**
Pausing playback.
Returning to normal playback during paused, slow motion, or frame-by-frame playback.

Basic operations

Playing back videos
[1] Touch the search key to pull up the iPod menus.
[2] Select a movie to play.
Refer to *Playing videos from your iPod* on the next page.
  • When the source icon is not displayed, it can be displayed by touching the screen.
  • Disconnect headphones from the iPod before connecting it to this unit.
  • Depending on the iPod model and the amount of data stored in the iPod, it may take some time for playback to begin.
  • Use the touch panel keys to select the iPod after connecting it to this unit.
  • **No Device** is displayed when disconnecting the iPod.

Fast forwarding or reversing using the buttons
[1] Press and hold ◄ or ► (**TRK**).

Notes

• To ensure proper operation, connect the dock connector cable from the iPod directly to this unit.
• While the iPod is connected to this unit, the iPod cannot be turned on or off.
• Touch panel keys not listed under *Moving images operations* may appear on the display. Refer to *Indicator list* on page 57.

Sound playback operations

You can use the unit to listen iPod sound files.

Note
The play time may not display correctly.

Touch panel keys

iPod audio (Control Audio)

iPod audio (App Mode)

① **Song title**
Displaying the **Songs** list on the iPod.

② **Artist name**
Displaying the **Artists** list on the iPod.

③ **MIXTRAX EZ key**
Starting MIXTRAX EZ.
Refer to *MIXTRAX EZ operation* on page 27.

④ **Artwork**
Starting link search on your iPod when you touch the artwork display.

⑤ **Search key**
Displaying iPod menus.

⑥ **Sound retriever key**
Refer to *Using sound retriever* on page 10.

⑦ **iPod control mode key**
Conducting operation from your iPod and listening to it using your car's speakers.

⑧ **Shuffle key**
Playing songs on the iPod in random order.

⑨ **Repeat key**
Selecting the repeat range.

⑩ **Change speed key**
Changing the speed of audiobook playback on the iPod.

⑪ **Genre**
Displaying the **Genres** list on the iPod.

⑫ **Album title**
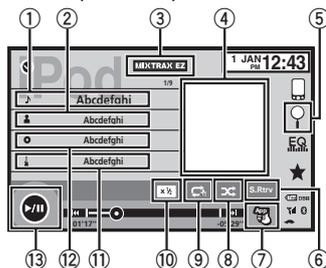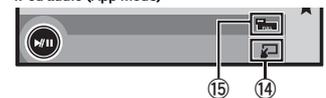Displaying the **Albums** list on the iPod.

⑬ **Pause and play key**
Pausing and starting playback.

⑭ **Unit operation key**
Performing operations from this unit and listening to the music on your iPod using your car's speakers.

⑮ **Screen mode key**
Changing the screen mode.

Using this unit's iPod function from your iPod

You can listen to sound from applications on your iPod using the car's speakers when **App Mode** is selected.

This function is not compatible with the following iPod models.
• iPod nano 1st generation
• iPod with video

Note
While this function is in use, the iPod will not turn off even if the ignition key is turned off. Operate the iPod to turn off the power.

1   Switch the control mode to App Mode.
Refer to *Moving images operations* on the previous page.
Refer to *Sound playback operations* on this page.

2   Operate the connected iPod to select a video/song and play.

Notes
• The following functions are still accessible from the unit even if the control mode is set to **App Mode**.
However, the operation will depend on your applications.
 — Playing/pausing
 — Fast forwarding/reversing
 — Tracking up/down
 — Moving to a chapter up/down
• **App Mode** is compatible with the following iPod models.
 — iPod touch 4th generation
 — iPod touch 3rd generation
 — iPod touch 2nd generation
 — iPod touch 1st generation
 — iPod classic 160GB
 — iPod classic 120GB
 — iPod classic
 — iPod nano 6th generation
 — iPod nano 5th generation
 — iPod nano 4th generation
 — iPod nano 3rd generation
 — iPod nano 2nd generation
 — iPhone 4S
 — iPhone 4

 — iPhone 3GS
 — iPhone 3G
 — iPhone

Shuffle play

● **Touch the shuffle key.**
• **Songs** – Play back videos/songs in the selected list in random order.
• **Albums** – Play back videos/songs from a randomly selected album in order.
• **Folder** – Play back songs/tracks in the selected folder in random order.
• **On** – Play back files in random order within the repeat range.
• **Off** – Turn off shuffle play.

Repeating playback

● **Touch the repeat key.**
• **One** – Repeat just the current video/song
• **All** – Repeat all videos/songs in the selected list on the iPod

Playing videos from your iPod

Videos can be played on this unit if an iPod with video capabilities is connected.
• This unit can play back "Movies", "Music videos", "Video Podcast" and "TV show" which are downloaded from the iTunes store.

1   Touch Search to display iPod menus.
Refer to *Moving images operations* on the previous page.

2 Switch to iPod video mode.
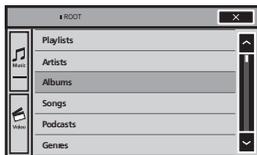
■ If you want to switch to iPod video mode, touch the icon.

Video	Switching to iPod video mode.

3 Play the video from the iPod.

■ If you want to switch to iPod music mode, touch the icon.

Music	Switching to iPod music mode.

Browsing for a video/music on the iPod

To make operating and searching easy, operations to control an iPod with this unit are designed to be as similar to the iPod as possible.

Searching for a video/music by category

1 Touch the search key to pull up the iPod menus.
Refer to *Sound playback operations* on the previous page.

2 Touch one of the categories in which you want to search for a video/music.
- **Video Playlists** (video playlists)
- **Movies** (movies)
- **Music Videos** (music videos)
- **Video Podcasts** (video podcasts)
- **TV Shows** (TV shows)
- **Rentals** (rentals)
- **Playlists** (playlists)
- **Artists** (artists)
- **Albums** (albums)
- **Songs** (songs)
- **Podcasts** (podcasts)
- **Genres** (genres)
- **Composers** (composers)
- **Audiobooks** (audiobooks)

3 Touch the title of the list that you want to play.
Repeat this operation until you find the desired video/music.

 Notes
- Depending on the generation or version of the iPod, some functions may not be available.
- You can play playlists created with the MusicSphere application. The application will be available on our website.
- Playlists that you created with the MusicSphere application are displayed in abbreviated form.

Searching the list by alphabet

1 Select a category.
Refer to *Searching for a video/music by category* on this page.

2 Switch to alphabet search mode.

ABC	Switching to alphabet search mode.

Alphabet search mode is displayed.

3 Touch the first letter of the title of the video/song you are looking for.
While searching, touch panel key operation is not available.
■ To refine the search with a different letter, touch **Cancel**.

4 Touch the title of the list that you want to play.
Repeat this operation until you find the desired song/video.

Changing audiobook speed

● **Touch the change speed key to change the speed.**

× **2**	Playback at a speed faster than normal
× **1**	Playback at normal speed
× **1/2**	Playback at a speed slower than normal

Displaying lists related to the song currently playing (link search)

Touch the artwork to open a list of the names of songs on the album currently playing. Touch the name of the song you want to play to start playing that song.

Note
If part of the recorded information does not display, a scroll key appears on the right side of list. Touch the scroll key to scroll.

Advanced App Mode operation

This system can switch to the Advanced App Mode, which you can display and operate the application for iPhone on the screen.
In Advanced App Mode, you can operate applications with finger gestures such as tapping, dragging, scrolling or flicking on the screen of the system.

⚠ WARNING

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

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

Advanced App Mode is compatible with the following iPod models.
• iPhone 4S
• iPhone 4
• iPod touch 4th generation
— Applications operable by switching this system to Advanced App Mode are only those available for Advanced App Mode.
— Please check iPhone applications supported Advanced App Mode at **http://www.pioneerelectronics.com/AppRadio**

🔹 Important

• Use the CD-IU201S (sold separately) when you use this function.
• The only port that supports Advanced App Mode is USB input.
• When listening to music and sounds from application simultaneously, see the following section. Refer to *Setting the App sound mixing* on this page.

⚠ CAUTION

• While driving, you cannot enter text on your iPod.
• Use the connected iPod to open an application.

Starting procedure

1 Install the AppRadio app on your iPhone.

2 Set the RGB Input to iPhone under System settings.
When you use this function, set the RGB input to iPhone. For details, refer to *Setting the RGB Input* on page 38.

3 Start an application available for Advanced App Mode from the iPhone.
An image of the application is displayed on the screen of this system.

• You can start an application available for Advanced App Mode also from a launcher application.

4 Press the home button to switch to the home display.

5 Touch the Apps key.

6 Operate the application.

Setting the Keyboard

⚠ CAUTION

For your safety, the keyboard functionality is only available when the vehicle is stopped and the parking brake is engaged.

Depending on the application, you can input text on the display. In order to input text correctly using keyboard which appears on this unit, you need to set the language setting in this function. When the Advanced App Mode is used, the language setting for the keyboard set for the function and the language setting for the iPhone keyboard need to be the same.
• Keyboard is available only in Advanced App Mode.
When you tap a text input area of an application for iPhone, a keyboard will be displayed on-screen. You can input the desired text directly from this system.
• The language preference for the keyboard of this system should be same as the setting on your iPhone.
If the settings for this product and the iPhone are different, you may not be able to enter characters properly.

1 Press the home button to switch to the home display.

2 Touch the system key to open the system menu.

3 Touch Keyboard on the System menu to select desired language.

4 Touch the desired language.
French (French)—**German** (German)—**Greek** (Greek)—**Russian** (Russian)—**English** (US English)—**English (UK)** (UK English)—**Dutch** (Dutch)—**Italian** (Italian)—**Norwegian** (Norwegian)—**Swedish** (Swedish)—**Finnish** (Finnish)—**Spanish** (Spanish)—**Portuguese** (Portuguese)

5 Tap the text input area on the application screen of the iPhone.
Touch ⬇ to hide the keyboard.

Setting the App sound mixing

You cannot turn on or off Mixing when this unit is playing a song of iPod.
The sound of application during Advanced App Mode can be adjusted.
Enable this setting when you want to mix the App sound with the sound from a built-in source (such as the radio). The volume of the App sound can be selected from 3 levels.

1 Press the home button to switch to the home display.
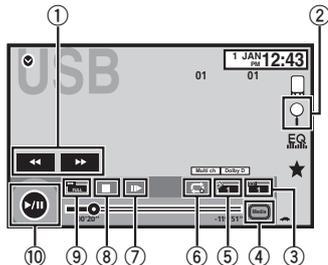
2 Touch the system key to open the system menu.

3 Touch App sound mixing on the System menu to select desired setting.
OFF (off)—**Low** (low)—**Mid** (mid)—**High** (high)

Moving images operations

You can use this unit to view USB storage device files.

Touch panel keys

① **Fast forward key/Reverse key**
Fast forwarding or reversing
Touch to change the fast forward and reverse speed.

② **Search key**
Displaying USB menus.

③ **Switch subtitle language key**
With DivX files featuring multi-subtitle recordings, you can switch between subtitle languages during playback.

④ **Media key**
Switching between media file types to play on Music/Video/Photo.

⑤ **Switch audio language key**
With DivX files that provides audio playback in different languages and different audio systems (Dolby Digital, DTS, etc.), you can switch between languages/audio systems during playback.

⑥ **Repeat key**
Selecting the repeat range.
Refer to *Repeating playback* on the next page.

⑦ **Slow-motion playback key**
(Function for DivX file/MPEG-1/MPEG-2/MPEG-4)
Moving the selection ahead one frame at a time during playback.
Touch and hold down the key for more than two seconds to slow down playback speed.

⑧ **Stop key**
Stopping playback.
If you resume playback, playback will start from the point where you stopped. Touch the key again to stop playback completely.

⑨ **Screen mode key**
Changing the screen mode.
Refer to *Changing the wide-screen mode* on page 10.

⑩ **Pause and play key**
Pausing playback.
Returning to normal playback during paused, slow motion, or frame-by-frame playback.

Basic operations

Playing back videos
1 Connect the USB device.
Playback will automatically start.
When the source icon is not displayed, it can be displayed by touching the screen.

Fast forwarding or reversing using the buttons
1 Press and hold ◄ or ► (**TRK**).

Notes

• Touch panel keys not listed under *Moving images operations* may appear on the display. Refer to *Indicator list* on page 57.

• You can also switch between languages/audio systems using **Video Setup** menu. For details, refer to *Setting the audio language* on page 35.
• This unit will return to normal playback if you change the audio language during fast forward/fast reverse, pause or slow motion playback.
• You can also switch between subtitle languages using **Video Setup** menu. For details, refer to *Setting the subtitle language* on page 35.
• This unit will return to normal playback if you change the subtitle language during fast forward/fast reverse, pause or slow motion playback.

Sound playback operations

You can use this unit to listen to USB audio files.

Notes

• The play time may not display correctly.
• When playing back files recorded as VBR (variable bit rate) files, the play time will not be correctly displayed if fast forward or reverse operations are used.
• To ensure proper operation, connect the dock connector cable from the iPod directly to this unit.
• While the iPod is connected to this unit, the iPod cannot be turned on or off.
• If the characters recorded on the disc are not compatible with this unit, those characters will not be displayed.
• Text information may not be correctly displayed depending on the recorded environment.
• Disconnect the USB portable audio player/USB memory when you are done using it.
• When you select **Speana** on *Selecting the background display* on page 43, the artwork is not displayed.

Touch panel keys

① **MIXTRAX EZ key**
Starting MIXTRAX EZ.

② **Information key**
Switching the text information to display on this unit when playing MP3/WMA/AAC/WAV files.

③ **Search key**
Displaying the file name list to select the files.

④ **Media key**
Switching between media file types to play on USB.

⑤ **Sound retriever key**
Refer to *Using sound retriever* on page 10.

⑥ **Random key**
Playing songs in random order.

⑦ **Repeat key**
Selecting the repeat range.

⑧ **DB key**
Creating a database that enables searches by artist name, genre, and other options.
Refer to *Music browse mode* on this page.

⑨ **Previous folder key/Next folder key**
Selecting a folder.

⑩ **Pause and play key**
Pausing and starting playback.

Basic operations

Playing back tracks
1 Connect the USB device.
  Playback will automatically start.
  When the source icon is not displayed, it can be displayed by touching the screen.
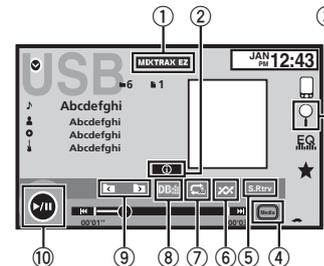
Fast forwarding or reversing using the buttons
1 Press and hold ◄ or ► (**TRK**).

Music browse mode

(Function for USB)
This unit creates an index in order to facilitate browsing for a song. You can search by the categories such as Albums and Artists.

⚠ CAUTION
• This function is not available when the USB storage device is locked.
• This function is not available when the free space of USB storage device is less than 5MB.
• While this unit creates an index, do not turn the unit off. It may cause loss of data on your USB storage device.
• If you switch to video or JPEG image display while a database is being created, or when a database could not be created, a message appears and database creation stops.

1 Touch DB to create a database in Music browse mode.
Refer to *Sound playback operations* on the previous page.

2 When "Save the Database to memory?" is displayed, touch "Yes".
Saving of the database is completed. If you do not save it, touch "**No**".
When the saving is completed, **"Database save to memory was completed."** appears.
Music browse mode will start.

3 Display a list and touch the tag key.

4 Select a file.

Still image playback operations

You can use this unit to view still images saved on a USB storage device.

Touch panel keys
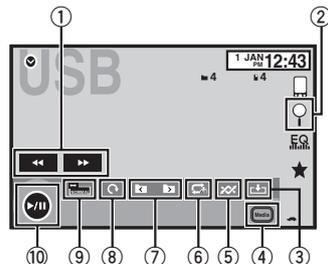
① **Fast forward key/Reverse key**
Selecting a picture.

② **Search key**
Displaying the file name list to select the files.

③ **Capture key**
Capturing an image in JPEG files.

④ **Media key**
Switching between media file types when there is more than one media file type saved to the USB device. This key does not appear if there is only one media file type saved to the USB device.

⑤ **Random key**
Playing files in a random order.

⑥ **Repeat key**
Selecting the repeat range.

⑦ **Previous folder key/Next folder key**
Selecting a folder.

⑧ **Rotate key**
Rotating the displayed picture 90° clockwise.

⑨ **Screen mode key**
Changing the screen mode.
Refer to *Changing the wide-screen mode* on page 10.

⑩ **Pause and play key**
Starting or pausing the slideshow.

Basic operations

Playing still images
1 Connect the USB device.
  Playback will automatically start.
• When the source icon is not displayed, it can be displayed by touching the screen.

Selecting a file using the buttons
1 Press ◄ or ► (**TRK**).

Fast file searching
1 Press and hold ◄ or ► (**TRK**).
• You can search 10 JPEG files at a time. If there are fewer than 10 files, the search will cover the first or last file.

Notes
• Files are played back in file number order and folders are skipped if they contain no files. (If folder **1** (ROOT) contains no files, playback commences with folder **2**.)
• Touch panel keys not listed under *Still image playback operations* may appear on the display.
  Refer to *Indicator list* on page 57.

Switching the media file type

● **Touch Media to switch between media file types.**

Random play (shuffle)

● **Touch the random key.**
• **On** – Play back files in random order within the repeat range, **Folder** and **Media**.
• **Off** – Cancel random play.

Repeating playback

● **Touch the repeat key.**
• **Folder** – Repeat the current folder

- **All** – Repeat all files
- When **Folder** is selected, it is not possible to play back a subfolder of that folder.
- If you select USB source, the repeat play range changes to **All**.

Selecting files from the file name list

(Function for compressed audio/DivX/MPEG-1/MPEG-2/MPEG-4)
Operation is the same as that for Disc.
Refer to *Selecting files from the file name list* on page 19.

Displaying lists related to the song currently playing (link search)

Touch the artwork to open a list of the names of songs on the album currently playing. Touch the name of the song you want to play to start playing that song.

Notes
- If part of the recorded information does not display, a scroll key appears on the right side of list. Touch the scroll key to scroll.
- This function is available for USB devices in Music browse mode.

Playing DivX® VOD content

Operation is the same as that for Disc.
Refer to *Playing DivX® VOD content* on page 20.

Capture an image in JPEG files

You can capture image data and use it as wallpaper. Images can be stored and recalled easily in this unit.

- Only one image can be stored on this unit. Old image is overwritten with the new one.

1   Touch ►/II to pause the slide show when the desired image is displayed.

2   Touch Capture to capture the desired image.

3   When "Do you save this image?" is displayed, touch Yes.
While storing the image to this unit, "**Saving the image. Don't switch off the battery.**" is displayed. When the process is finished, "**Image saved.**" is displayed.
- To cancel the storage process, touch **No**.

Sound playback operations

(Function of AVH-X5500BHS/AVH-X4500BT/AVH-X3500BHS/AVH-X2500BT)
You can use this unit to listen to Bluetooth audio files.

Notes
- Depending on the Bluetooth audio player connected to this unit, the available operations will be limited to the following two levels:
  — A2DP profile (Advanced Audio Distribution Profile): You can only playback songs on your audio player.
  — AVRCP profile (Audio/Video Remote Control Profile): You can perform playback, pause playback, select songs, etc.
- As there is a wide variety of Bluetooth audio players available on the market, operations available with specific models may vary extensively. When attempting to run a Bluetooth audio player using this unit, refer to the instruction manual that came with the player as well as to this manual for assistance.
- As the signal from your cellular phone may cause noise, avoid using it when you are listening to songs on your Bluetooth audio player.
- The sound from a Bluetooth audio player connected to this unit will be muted while a call is in progress on a cellular phone connected to this unit via Bluetooth wireless technology.
- The play time may not display correctly.
- Depending on the type of Bluetooth audio player you have connected to this unit, operation and information display may not be available for some functions.

Touch panel keys
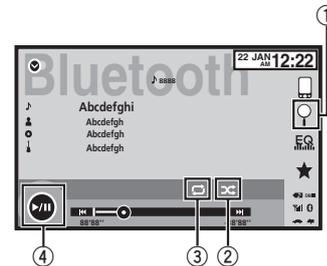
① **Search key**
Displaying the file name list to select the files.

② **Random key**
Playing songs in random order.

③ **Repeat key**
Selecting the repeat range.

④ **Pause and play key**
Pausing and starting playback.

Setting up for Bluetooth audio

Before you can use the Bluetooth audio function you must establish a Bluetooth wireless connection between the unit and your Bluetooth audio player.

1 Connection
First, you need to connect a Bluetooth audio to this unit.
For detailed instructions on connecting your Bluetooth audio to this unit via Bluetooth wireless technology, refer to *Bluetooth connection menu* on page 42.

Notes

• When playing back files recorded as VBR (variable bit rate) files, the play time will not be correctly displayed if fast forward or reverse operations are used.
• To ensure proper operation, connect the dock connector cable from the iPod directly to this unit.
• While the iPod is connected to this unit, the iPod cannot be turned on or off.
• If the characters recorded on the disc are not compatible with this unit, those characters will not be displayed.
• Text information may not be correctly displayed depending on the recorded environment.

Random play (shuffle)

● **Touch the random key.**
• **On** – Play back files in random order.
• **Off** – Cancel random play.

Repeating playback

● **Touch the repeat key.**
• **One** – Repeat the current song only
• **All** – Repeat all songs

MIXTRAX operation

MIXTRAX is original technology for creating non-stop mixes of selections from your audio library, complete with DJ effects that make them sound as if a DJ is right there with you playing the music.

MIXTRAX EZ operation

You can use this unit to play iPod/USB audio files.
MIXTRAX EZ is used to add a variety of sound effects between songs for arranging the pauses between songs. It allows you to enjoy listening to music non-stop.
• This function is only available when a file on a USB storage device or a song on an iPod is being played.
• This function is not available when the control mode is set to **App Mode**.
• Depending on the file/song, sound effects may not be available.
• Depending on the file/song, non-stop playback may not be available.

Starting MIXTRAX EZ operation

● **Touch MIXTRAX EZ.**

Setting MIXTRAX mode

Turn on this function to play back audio files using MIXTRAX.

1   Press the home button to switch to the home display.

2   Touch the system key to open the system menu.

3   Touch MIXTRAX Setup on the system menu.
MIXTRAX setting items are displayed.
• **Short Playback Mode** – When turned on, select an audio track playback length. When this mode is turned off, the audio track will play all the way to the end.
60s (60 sec.)—**90s** (90 sec.)—**120s** (120 sec.)—**150s** (150 sec.)—**180s** (180 sec.)—**Random** (random)—**Off** (off)
When **Random** is selected, the playback time varies between 60 s, 90 s, 120 s, 150 s, and 180 s selected at random when the playback song changes.
• **Display Effect** – When **Display Effect** is set to on, the artwork display can be moved according to the music type.
• **Cut-In Effect** – When **Cut-In Effect** is set to on, sound effects will play between tracks.
• **Effect Setting** – Use **Effect Setting** to set up the sound effect you want to insert between tracks.

Setting the effect

You can change the settings for fixed sounds and sound effects.
There are six different fixed sounds available that can be inserted for playback between tracks.
The sound effects are used as effects to signal the end of a song being played and the beginning of the next song in series.
The fixed sounds and sound effects are set as combinations as MIXTRAX sounds.

Fixed sounds

• **Phaser** – A fixed sound that sounds like surging waves.
• **Roll** – A fixed sound that repeats playback of a certain sound.
• **Turntable** – A fixed sound that mimics DJ scratching.

Using MIXTRAX

Using Pandora® internet radio

• **Flanger2** – A rushing sound that mimics that rising and falling sounds of a jet engine.
• **Reverb** – A fixed sound effect that creates a reverberation effect.
• **Echo2** – A fixed sound effect that creates an echoing effect.

Sound effects
• **Cross Fade** – A sound effect that creates a fade in and fade out effect between songs.
• **Flanger1** – A rushing sound that mimics that rising and falling sounds of a jet engine.
• **Echo1** – A sound effect that creates an echoing effect.
• **Loop** – A sound effect that repeats playback of one section of a song track.

Setting sounds and sound effects as presets using the preset key
The **Standard** and **Simple** sound effects are set already as default presets.

● **Touch Standard or Simple to check the settings.**
The registered preset sound effect for the key that was touched is set as a preset.

Registering sounds and sound effects as presets
Registers a desired combination of sounds and sound effects to **Custom**.
Touch **Custom** to easily set the desired sound or sound effect.

1 Touch Custom.

2 Add a check mark to the desired sound effect by touching the option.
The marked sound effect is registered as a preset in **Custom**.

Notes
• If a sound effect is touched in the selection screen for **Standard** or **Simple**, the **Custom** screen is automatically displayed and the sound effect is registered to **Custom**.
• You can listen to fixed sounds to hear examples by touching the speaker icon.

Pandora operations
To play Pandora on the Pioneer car audio/video products, connect an iPod, iPhone, Android™ device or BlackBerry device with the most recent Pandora application installed, and start the Pandora application.

Important
Requirements to access Pandora using the Pioneer car audio/video products:
Connect an iPod to USB input or an Android device or a BlackBerry device using Bluetooth to play Pandora on this unit.
• iPod and iPhone compatibility
  Apple iPhone (first generation), iPhone 3G, iPhone 3GS, iPhone 4, iPhone 4S, iPod touch 1G, iPod touch 2G, iPod touch 3G or iPod touch 4G (firmware version 3.0 or later)
  Certain firmware versions for the iPhone may not be compatible with the Pandora application. If this appears to be the case, please update the firmware to a version that is compatible with Pandora.
• Android compatibility
  Android OS Version 2.2 or later
• BlackBerry compatibility
  BlackBerry OS Version 4.3 or later
• Latest version of the Pandora application, downloaded to your device (Search Apple iTunes App Store or Android market for "Pandora").

• Data Plan
  Note: If the Data Plan for your iPhone or Android device does not provide for unlimited data usage, *additional charges from your carrier may apply* for accessing the Pandora service via 3G and/or EDGE networks.
• Connection to the Internet via 3G, EDGE or Wi-Fi network.

• Optional Pioneer adapter cable connecting your iPhone to the Pioneer car audio/video products.

Limitations:
• Access to the Pandora service will depend on the availability of a cellular and/or Wi-Fi network for purposes of allowing your device to connect to the Internet.
• Ability of the Pioneer car audio/video products to access the Pandora service is subject to change without notice and could be affected by any of the following: compatibility issues with future firmware versions of iPhones or Android devices; compatibility issues with future firmware versions of the Pandora application for them; changes to the Pandora music service by Pandora; discontinuation of the Pandora music service by Pandora.
• Certain functions of the Pandora service are not available when accessing the service through the Pioneer car audio/video products, including, but not limited to, creating new stations, deleting stations, emailing current stations, buying tracks from iTunes, viewing additional text information, logging in to Pandora, and adjusting Cell Network Audio Quality.

Setting the Pandora connect mode
Set the Pandora connection mode appropriately to notify the system whether you are streaming Pandora over an iPod via USB or over an Android device or a BlackBerry device via Bluetooth.

Notes
• The iPod must have iOS 3.0 or later installed in order to use Pandora.
• The Android device must have Android OS Version 2.2 or later installed to use Pandora.

- An Internet connection is required to use an iPod, an Android device, or a BlackBerry device.
- Only iPods can be connected to the AVH-X1500DVD.

1 Press the home button to switch to the home display.

2 Touch the system key to open the system menu.

3 Touch Pandora connect mode repeatedly until the desired setting appears on the screen.
Wired: An iPod is connected using an actual cable.
Bluetooth: An Android device or a BlackBerry device is connected using Bluetooth.

Touch panel keys
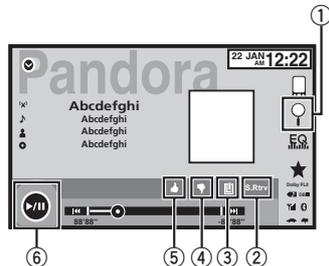
① **Search key**
Displays the shuffle/station list. Select the desired station or shuffle mode.

② **Sound retriever key**
(Only available on iPod)
Refer to *Using sound retriever* on page 10.

③ **Bookmark key**
Stores track information (Bookmark).
Bookmarks are viewable in your profile.

④ **Thumbs-down key**
Giving a "thumbs-down" tells Pandora you do not like the current track. Pandora will skip to the next track, and will not play that track on the station again.

⑤ **Thumbs-up key**
Giving a "thumbs-up" tells Pandora that you like the current track. Pandora will continue to play that track and tracks like it on the station.

⑥ **Pause and play key**
Pausing and starting playback.

Basic operations

Playing tracks
1 Connect an iPod to USB input with a USB cable using an iPod or iPhone Dock Connector, or an Android device or BlackBerry device using Bluetooth.
2 Switch the source to **Pandora**.

Skipping tracks
1 Press ► (**TRK**).

Notes
- Touch panel keys not listed under *Pandora operations* may appear on the display.
  Refer to *Indicator list* on page 57.
- Pandora limits the number of skips allowed on their service. If you attempt to skip tracks beyond the limit, "SKIP LIMIT REACHED" is displayed. If you have reached the skip limit and you give a "thumbs-down", the current track will continue to play, but your feedback will be registered.

Selecting and playing Pandora® stations/shuffle

Touch the list for your Pandora stations to select one of them to play.

1 Display the shuffle/station list.
Refer to *Pandora operations* on the previous page.

2 Change the sort order.

⬇A-Z	You can sort the items in the list alphabetically.
⬇ By Date	You can sort the items in the list in order of the dates on which the items were created.
····	You can scroll the titles in the list while you touch and hold down the scroll icon.

3 Select shuffle or the desired station.

⤬	Shuffle mode will play tracks from your selected stations. You an edit shuffle preferences on your mobile device.

Bluetooth telephone operations

(Function of AVH-X5500BHS/AVH-X4500BT/AVH-X3500BHS/AVH-X2500BT)
You can use Bluetooth telephone.

Important

- Leaving the unit on standby to connect to your phone via Bluetooth while the engine is not running can drain the battery.
- Advanced operations that require attention such as dialing numbers on the monitor, etc., are prohibited while driving. Park your vehicle in a safe place when using these advanced operations.
- Bluetooth connection menu cannot be selected while driving.
- Operations available may be limited depending on the cellular phone connected to this unit.
- Be sure to park your vehicle in a safe place and apply the parking brake when performing this operation.
- If you are unable to complete the connection using this unit, use the device to connect to the unit.
- If you connect more than one device at a time, connected device may not operate properly. Connecting one device at a time is recommended.

Touch panel keys

Telephone standby display
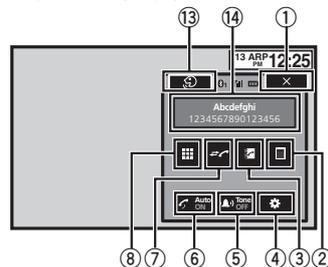
When switching to the entering phone number mode
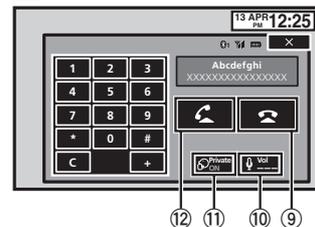
① **Close key**
Display is closed.

② **Preset dial key**
Displaying the preset dial screen.

③ **Phone book key**
Switching to the phone book mode.

④ **Setting key**
Displaying the Bluetooth connection menu.

⑤ **Tone key**
Turning the ring tone for incoming calls on or off.

⑥ **Auto-answer key**
Turning automatic answering on or off.

⑦ **History key**
Switching to the missed, received and dialed call lists.

⑧ **Key pad key**
Switching the mode to enter the phone number directly.

⑨ **On-hook key**
Ending a call.
Rejecting an incoming call.
Canceling call waiting.

⑩ **Volume key**
Adjusting the other party's listening volume.

⑪ **Private mode key**
Turning private mode on or off.

⑫ **Off-hook key**
Accepting an incoming call.
Making a phone call, when selecting a phone number.
Switching between callers on hold.

⑬ **Voice control key**

Notes

- Private mode can only be operated while you are talking on the phone.
- To end the call, both you and the other caller must hang up your phones.
- Touch panel keys not listed under *Bluetooth telephone operations* may appear on the display.
Refer to *Indicator list* on page 57.

Text information

⑭ **Incoming call notice**
Indicates that an incoming call has been received and has not been checked yet.
- Not displayed for calls made when your cellular phone is disconnected from this unit.

Setting up for hands-free phoning

Before you can use the hands-free phoning function you must set up the unit for use with your cellular phone. This entails establishing a Bluetooth wireless connection between this unit and your phone, registering your phone with this unit, and adjusting the volume level.

1 Connection
First, you need to connect a Bluetooth telephone to this unit.
For detailed instructions on connecting your phone to this unit via Bluetooth wireless technology, refer to *Pairing from this unit* on page 42.

2 Volume adjustment
Adjust the earpiece volume of your cellular phone to your preference. The unit will record the adjusted volume level as the default setting.

Notes

- The volume of the caller's voice and ring tone may vary depending on the type of cellular phone.
- If there is a large volume difference between the ring tone and caller's voice, the overall volume level may become unstable.

• Make sure to adjust the volume to a proper level before disconnecting the cellular phone from the unit. If the volume is muted (zero level) on your cellular phone, the volume level of your cellular phone remains muted even after the cellular phone is disconnected.

Calling a number in the phone book

The contacts on your phone will normally be transferred automatically when the phone is connected. If it is not, use your phone menu to transfer the contacts. The visibility of this unit should be on when you use the phone menu. Refer to *Switching visible unit* on page 43. After finding the number you want to call in the phone book, you can select the entry and make the call.

1   Touch the phone book key to switch to the phone book mode.

2   Select the phone number list.
The detailed phone number list of the selected entry is displayed.

3   Select the phone number.
▪   If you want to store the phone number, touch and hold the list.

4   Touch the off-hook key to make the call.

5   Touch the on-hook key to end the call.

Note
The contacts on your phone will normally be transferred automatically when the phone is connected. If it is not, use your phone menu to transfer the contacts. The visibility of this unit should be on when you use the phone menu. Refer to *Switching visible unit* on page 43.

Selecting a number by alphabet search mode

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

1   Touch the phone book key to switch to the phone book mode.

2   Touch ABC to switch to alphabet search mode.

3   Touch the first letter of the entry you are looking for.
The Phone Book entries starting with that letter (e.g. "Ben", "Brian" and "Burt" when "B" is selected) will be displayed.
▪   If you want to change the character to Russian, touch the icon. To return to English, touch the icon again.

АБВ	Changing the character to Russian.

▪   The order of the first name and last name may be different from that of the cellular phone.

4   Touch the list to display the phone number list of the selected entry.
▪   If several phone numbers are included in an entry, select one by touching the list.
▪   If you want to switch to the call history list, touch the icon.

⇄☎	Switching to the call history list.

5   Touch the off-hook key to make the call.

6   Touch the on-hook key to end the call.

Inverting names in phone book

When your cellular phone is connected to this unit, the first and last names of your contacts may be registered to the phone book in reverse order. You can use this function to change the order back.
(Inverting the names in the phone book)

1   Touch the phone book key to switch to the phone book mode.

2   Invert names in phone books.

⟳	Inverting names in phone books.

3   "Would you like to invert all names?" appears. Touch Yes to continue.
While the names are inverted, ⚙ is displayed.
▪   If the inversion fails, "**Invert Name Error**" appears. In such cases, try again from the beginning.

Note
Inverting the names of your contacts from this unit does not affect the data on your Bluetooth device.

Using the missed, received and dialed call lists

The 80 most recent calls dialed, received, and missed are stored in the memory. You can browse them and call numbers from these lists.

1   Touch the history key to display the call history list.

2   Select Missed Calls, Dialed Calls or Received Calls.

☎↙	Displaying the received call list.
↩☎	Displaying the dialed call list.
☎↗×	Displaying the missed call list.

3   Touch the list number to select a phone number.
Name and phone number are displayed in the detailed list.
▪   If you want to store the phone number, touch and hold the list.

4   Touch the off-hook key to make the call.

5   Touch the on-hook key to end the call.

Setting automatic answering

If this function is on, this unit automatically answers all incoming calls.

●   **Touch the auto-answer key to turn automatic answering on or off.**

Adjusting the other party's listening volume

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

● Touch the volume key to select
Far-End VOL.
1—2—3
▪ This function can be performed even while talking on the phone.
▪ Settings can be stored for each device.

Switching the ring tone

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

1 Connect your cellular phone to this unit.

2 Touch the tone key to turn the ring tone on or off.

Using the preset dial lists

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

1 Touch the preset dial key to display the preset screen.

2 Touch one of the phone numbers to select.
▪ If you want to delete a preset phone number, touch and hold the phone number you wish to delete.

3 Touch the off-hook key to make the call.

4 Touch the on-hook key to end the call.

Making a call by entering phone number

⊖ Important
Be sure to park your vehicle in a safe place and apply the parking brake when performing this operation.

1 Touch the key pad key to start entering the phone number.

2 Touch the number icons to input the numbers.
▪ Up to 24 digits can be entered.

3 Touch the off-hook key to make the call.

4 Touch the on-hook key to end the call.

Note
Entering phone number mode cannot be operated unless a Bluetooth telephone is connected to this unit.

Setting the private mode

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

● **Touch the private mode key to turn private mode on or off.**

Voice control

If your cellular phone is equipped with the voice control feature, you can use voice commands to make calls, for example.
• Operation varies depending on the type of cellular phone. Refer to the instruction manual that came with your cellular phone for detailed instructions.
• For details on cellular phone models that are compatible with this feature, refer to the information on our website.

1 Touch the voice control key.
The display switches to the voice control screen. You can also switch to the voice control screen by pressing and holding down the home button while the source is on.

2 Start voice control.

	Indicates that continuous calls can be made uninterrupted.
	Indicates that the display is closed.

Notes
• In order for your voice commands to be recognized and interpreted correctly, ensure that conditions are suitable for recognition.

• Please note that wind blowing through the vehicle windows and noise coming from outside the vehicle can interfere with voice command operation.
• For optimum pick-up, the microphone should be placed directly in front of the driver at a suitable distance.
• Speaking too soon after the start of the command may cause voice recognition to fail.
• Speak slowly, deliberately, and clearly.

Menu operations

Touch panel keys
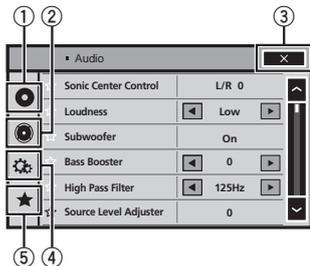
① **Video setup key**
Refer to *Setting up the video player* on page 35.

② **Audio function key**
Refer to *Audio adjustments* on this page.

③ **Close key**
Returning to the current source display.

④ **System key**
Refer to *System settings* on page 38.

⑤ **Favorite key**
You can choose menus within each menu (Audio function menu, etc.) and register them to this favorite menu.
Refer to *Favorite menu* on page 42.

Notes
- You can display the **Video Setup** menu when a **Disc** or **USB** source is selected.
- If you start the **Video Setup** menu, playback is stopped.

- You cannot display the Audio function menu when the mute function is on or a JPEG file is playing.

1 Press the home button to switch to the home display.

2 Touch any of the following touch panel keys to select the menu to be adjusted.

Using fader/balance adjustment

Fader/Balance displays when Rear Speaker is set to **Full** on the System Menu.
You can change the fader/balance setting to provide an ideal listening environment for all of the occupied seats.

1 Press the home button to switch to the home display.

2 Touch the audio function key to open the audio menu.

3 Touch Fader/Balance on the audio function menu.

4 Touch ∧ or ∨ to adjust the front/rear speaker balance.
Range: **Front 15** to **Rear 15**
▪ Select **F/R 0 L/R 0** when only using two speakers.

5 Touch ‹ or › to adjust the left/right speaker balance.
Range: **Left 15** to **Right 15**

Note
You can also set the fader/balance by dragging the dot on the displayed table.

Using balance adjustment

Balance displays when Rear Speaker is set to **Subwoofer** on the System Menu. This setting will allow you to adjust the balance between right/left sound output.

1 Press the home button to switch to the home display.

2 Touch the audio function key to open the audio menu.

3 Touch Balance on the audio function menu.

4 Touch ‹ or › to adjust the left/right speaker balance.
Range: **Left 15** to **Right 15**

Note
You can also set the balance by dragging the dot on the displayed table.

Using the equalizer

You can adjust the equalization to match the car's interior acoustic characteristics as desired.

Recalling equalizer curves

There are seven stored equalizer curves which you can easily recall at any time. Here is a list of the equalizer curves.

Display	Equalizer curve
S.Bass	Super bass
Powerful	Powerful
Natural	Natural
Vocal	Vocal
Flat	Flat
Custom1	Custom 1
Custom2	Custom 2

- The equalizer curves for **Custom1** and **Custom2** can be adjusted.
- You cannot select **Custom1** and **Custom2** when using the auto-equalizer.
- When **Flat**, no changes are made to the sound. You can check the effects of the equalizer curves by switching alternatively between **Flat** and another equalizer curve.

1 Press the home button to switch to the home display.

2 Touch the audio function key to open the audio menu.

3 Touch Graphic EQ on the audio function menu.

▪ You cannot select or adjust the equalizer curves of **Custom1** and **Custom2** when using the auto-equalizer.

4 Touch the desired setting.
S.Bass—**Powerful**—**Natural**—**Vocal**—**Flat**—**Custom1**—**Custom2**

Adjusting the 8-band graphic equalizer

You can adjust the level of each band for the equalizer curves.
• A separate **Custom1** curve can be created for each source. If you make adjustments when a curve other than **Custom2** is selected, the equalizer curve settings will be stored in **Custom1**.
• A **Custom2** curve that is common for all sources can be created. If you make adjustments when the **Custom2** curve is selected, the **Custom2** curve will be updated.

1 Press the home button to switch to the home display.

2 Touch the audio function key to open the audio menu.

3 Touch Graphic EQ on the audio function menu.

4 Touch the desired setting.
S.Bass—**Powerful**—**Natural**—**Vocal**—**Flat**—**Custom1**—**Custom2**

5 Touch the table to adjust the level of the equalizer band.
Range: **+12dB** to **–12dB**

Using the auto-equalizer

The auto-equalizer is an equalizer curve created by auto EQ (refer to *Auto EQ (auto-equalizing)* on page 40).
You can turn the auto-equalizer on or off.
If you connect an optional microphone to this unit, you can use this function.

1 Press the home button to switch to the home display.

2 Touch the audio function key to open the audio menu.

3 Touch Auto EQ to turn the auto-equalizer on or off.

▪ You cannot use this function if auto EQ has not been carried out.

Using sonic center control

Sound that is suited for the listening position can easily be created with this function.

1 Press the home button to switch to the home display.

2 Touch the audio function key to open the audio menu.

3 Touch Sonic Center Control on the audio function menu.

4 Touch < or > to select a listening position.
Range: **Left 7** to **Right 7**

Adjusting loudness

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

1 Press the home button to switch to the home display.

2 Touch the audio function key to open the audio menu.

3 Touch ◄ or ► to select a desired level for loudness.
Off (off)—**Low** (low)—**Mid** (mid)—**High** (high)

Using subwoofer output

This unit is equipped with a subwoofer output which can be turned on or off.
• The cut-off frequency and output level can be adjusted when the subwoofer output is on.

1 Press the home button to switch to the home display.

2 Touch the audio function key to open the audio menu.

3 Touch Subwoofer on the audio function menu.

4 Touch On or Off next to Subwoofer to turn the subwoofer output on or off.

5 Touch Normal or Reverse next to Phase to select the phase of subwoofer output.

6 Touch ◄ or ► next to Level to adjust the output level of the subwoofer.
Range: **+6** to **–24**

7 Touch ◄ or ► next to Frequency to select the cut-off frequency.
50Hz—**63Hz**—**80Hz**—**100Hz**—**125Hz**
Only frequencies lower than those in the selected range are outputted from the subwoofer.

Boosting the bass

You can boost the bass level.

1 Press the home button to switch to the home display.

2 Touch the audio function key to open the audio menu.

3 Touch ◄ or ► to select a desired level.
Range: **0** to **+6**

Using the high pass filter

When you do not want low sounds from the subwoofer output frequency range to play from the front or rear speakers, turn on the HPF (high pass filter). Only frequencies higher than those in the selected range are output from the front or rear speakers.

1 Press the home button to switch to the home display.

2 Touch the audio function key to open the audio menu.

3 Touch ◄ or ► next to the frequency to select cut-off frequency.
Off (off)—**50Hz**—**63Hz**—**80Hz**—**100Hz**—**125Hz**
Only frequencies higher than those in the selected range are output from the front or rear speakers.

Audio adjustments

Setting up the video player

Adjusting source levels

With SLA (source level adjustment), the volume levels of each source can be adjusted to prevent significant differences between sources.
• Settings are based on the FM volume level, which remains unchanged.

1   Press the home button to switch to the home display.

2   Touch the audio function key to open the audio menu.

3   Compare the FM volume level with the level of the source you wish to adjust.

4   Touch Source Level Adjuster on the audio function menu.

5   Touch ∧ or ∨ to adjust the source volume.
Range: **+4** to **–4**

Notes
• **Source Level Adjuster** is not available when FM is selected as the source.
• The AM volume level can also be adjusted with this function.
• Video CD, CD, compressed audio, DivX, MPEG-1, MPEG-2 and MPEG-4 are automatically set to the same source level adjustment volume.

Setting the subtitle language

You can set a desired subtitle language. When available, the subtitles will be displayed in the selected language.

1   Press the home button to switch to the home display.

2   Touch the video setup key to open the video setup menu.

3   Touch Subtitle Language on the Video Setup menu.
A subtitle language menu is displayed.

4   Touch the desired language.
The subtitle language is set.
▪ If you have selected **Others**, refer to *When you select* **Others** on this page.

Notes
• If the selected language is not available, the language specified on the disc is displayed.
• You can also switch the subtitle language by touching the switch subtitle languages key during playback.
• The setting made here will not be affected even if the subtitle language is switched during playback using the switch subtitle languages key.

When you select Others

A language code input display is shown when **Others** is selected. Refer to *Language code chart for DVD* on page 64.

● **Touch 0 to 9 to input the language code.**
▪ To cancel the entered numbers, touch **C**.
▪ To register the code, touch the following touch panel key.

| ↵ | Registering the code. |

Setting the audio language

You can set the preferred audio language.

1   Press the home button to switch to the home display.

2   Touch the video setup key to open the video setup menu.

3   Touch Audio Language on the Video Setup menu.
An audio language menu is displayed.

4   Touch the desired language.
The audio language is set.
▪ If you have selected **Others**, refer to *When you select* **Others** on this page.

Notes
• If the selected language is not available, the language specified on the disc is used.
• You can also switch the audio language by touching the switch audio languages key during playback.
• The setting made here will not be affected even if the audio language is switched during playback using the switch audio languages key.

Setting the menu language

You can set the preferred language in which the menus recorded on a disc are displayed.

1   Press the home button to switch to the home display.

2   Touch the video setup key to open the video setup menu.

3   Touch Menu Language on the Video Setup menu.
A menu language menu is displayed.

4   Touch the desired language.
The menu language is set.
■ If you have selected **Others**, refer to *When you select* **Others** on the previous page.

Note
If the selected language is not available, the language specified on the disc is displayed.

Setting the multi-angle DVD display

The angle icon can be set so it appears on scenes where the angle can be switched.

1   Press the home button to switch to the home display.

2   Touch the video setup key to open the video setup menu.

3   Touch Multi Angle on the Video Setup menu to turn angle icon display on or off.

Setting the aspect ratio

There are two kinds of display: a wide screen display that has a width-to-height ratio (TV aspect ratio) of 16:9, and regular display that has a TV aspect of 4:3. Be sure to select the correct TV aspect for the display connected to **V OUT**.
• When using regular display, select either **Letter Box** or **Pan Scan**. Selecting **16:9** may result in an unnatural picture.
• If you select the TV aspect ratio, the unit's display will change to the same setting.

1   Press the home button to switch to the home display.

2   Touch the video setup key to open the video setup menu.

3   Touch TV Aspect on the Video Setup menu to select the TV aspect ratio.
Touch **TV Aspect** repeatedly until the desired aspect ratio appears.
• **16:9** – Wide screen picture (16:9) is displayed as is (initial setting)
• **Letter Box** – The picture is the shape of a letterbox with black bands on the top and bottom of the screen
• **Pan Scan** – The picture is cut short on the right and left sides of the screen

Notes
• When playing discs that do not specify **Pan Scan**, the disc is played back in **Letter Box** display even if you select the **Pan Scan** setting. Confirm whether the disc package bears the 16:9 LB mark.
• The TV aspect ratio cannot be changed for some discs. For details, refer to the disc's instructions.

Setting the slideshow interval

JPEG files can be viewed as a slideshow on this unit. In this setting, the interval between each image can be set.

1   Press the home button to switch to the home display.

2   Touch the video setup key to open the video setup menu.

3   Touch Time Per Photo Slide on the Video Setup menu to select the slideshow interval.
Touch **Time Per Photo Slide** repeatedly until the desired setting appears.
• **5sec** – JPEG images switch at intervals of 5 seconds
• **10sec** – JPEG images switch at intervals of 10 seconds
• **15sec** – JPEG images switch at intervals of 15 seconds
• **Manual** – JPEG images can be switched manually

Setting parental lock

Some DVD video discs let you use parental lock to restrict children from viewing violent and adult-oriented scenes. You can set parental lock to the desired level.
• When you have a parental lock level set and play a disc featuring parental lock, code number input indications may be displayed. In such cases, playback will begin when the correct code number is entered.

Setting the code number and level

A code number must be registered in order to play back discs with parental lock.

1   Press the home button to switch to the home display.

2   Touch the video setup key to open the video setup menu.

3   Touch Parental on the Video Setup menu.

4   Touch 0 to 9 to input a four digit code number.
■ To cancel the entered numbers, touch **C**.
■ To register the code, touch the following touch panel key.

   Registering the code.

The code number is set, and the level can now be set.

5   Touch 1 to 8 to select the desired level.

6   Touch Enter.
The parental lock level is set.
• **8** – Playback of the entire disc is possible (initial setting)
• **7** to **2** – Playback of discs for children and non-adult-oriented discs is possible
• **1** – Playback of discs for children only is possible

Notes
• We recommend to keep a record of your code number in case you forget it.
• The parental lock level is stored on the disc. Look for the level indication written on the disc package, included literature or on the disc itself. Parental lock of this unit is not possible if a parental lock level is not stored on the disc.
• With some discs, the parental lock may be active only for certain levels of scenes. The playback of those scenes will be skipped. For details, refer to the instruction manual that came with the disc.

Changing the level

You can change the set parental lock level.

1   Press the home button to switch to the home display.

2   Touch the video setup key to open the video setup menu.

3   Touch Parental on the Video Setup menu.

4   Touch 0 to 9 to input the registered code number.

5   Registering the code.

| ⏎ | Registering the code. |

This sets the code number, and the level can now be changed.

■ If you enter an incorrect code number, the ⊘ icon is displayed. Touch **C** and enter the correct code number.

■ If you forget your code number, refer to *If you forget your code number* on this page.

6   Touch 1 to 8 to select the desired level.

7   Touch Enter.
The new parental lock level is set.

If you forget your code number

● **Press RESET.**

Setting the DivX subtitle file

You can select whether or not to display DivX external subtitles.

● The DivX subtitles will be displayed even when **Custom** is selected if no DivX external subtitle files exist.

1   Press the home button to switch to the home display.

2   Touch the video setup key to open the video setup menu.

3   Touch DivX® Subtitle on the Video Setup menu to select the desired subtitle setting.
   ● **Original** – Display the DivX subtitles
   ● **Custom** – Display the DivX external subtitles

Notes
● Up to 42 characters can be displayed on one line. If more than 42 characters are set, the line breaks and the characters are displayed on the next line.
● Up to 126 characters can be displayed on one screen. If more than 126 characters are set, the excess characters will not be displayed.

Displaying the DivX® VOD registration code

In order to play DivX VOD (video on demand) contents on this unit, the unit must first be registered with a DivX VOD contents provider. For registration, generate a DivX VOD registration code and submit it to your provider.
● Keep a record of the code as you will need it when you register your unit to the DivX VOD provider.

1   Press the home button to switch to the home display.

2   Touch the video setup key to open the video setup menu.

3   Touch DivX® VOD on the Video Setup menu.
Registration Code and **Deregistration Code** appear.

4   Touch Registration Code.
Your registration code is displayed.

Displaying the deregistration code

If your device is already registered, deregister it by entering the deregistration code.

1   Press the home button to switch to the home display.

2   Touch the video setup key to open the video setup menu.

3   Touch DivX® VOD on the Video Setup menu.

4   Touch Deregistration Code.
■ To cancel deregistration, touch **Cancel**.

5   Touch OK.
The deregistration is complete.

Automatic playback of DVDs

When a DVD disc with a DVD menu is inserted, this unit will cancel the menu automatically and start playback from the first chapter of the first title.
● Some DVDs may not operate properly. If this function is not fully operated, turn this function off and start playback.

1   Press the home button to switch to the home display.

2   Touch the video setup key to open the video setup menu.

3   Touch DVD Auto Play to turn automatic playback on.
■ To turn automatic playback off, touch **DVD Auto Play** again.

Switching the auxiliary setting

Activate this setting when using an auxiliary device connected to this unit.

1   Press the home button to switch to the home display.

2   Touch the system key to open the system menu.

3   Touch AUX Input on the system menu to turn AUX Input on or off.

Setting AV input

Activate this setting when using an external video component connected to this unit.

1   Press the home button to switch to the home display.

2   Touch the system key to open the system menu.

3   Touch AV Input on the system menu to turn AV Input on or off.

Setting the RGB Input

You can switch the setting of RGB input.

1   Press the home button to switch to the home display.

2   Touch the system key to open the system menu.

3   Touch RGB Input on the system menu to turn iPhone or NAVI.

Note
If you use Advanced App Mode, set to **iPhone**.

Setting the App sound mixing

Refer to *Setting the App sound mixing* on page 23.

Setting MIXTRAX mode

Refer to *Setting MIXTRAX mode* on page 27.

Changing the picture adjustment

You can adjust the **Brightness** (brightness), **Contrast** (contrast), **Color** (color) , **Hue** (hue), **Dimmer** (dimmer), and **Temperature** (temperature) for each source and rear view camera.
• You cannot adjust **Color**, **Hue** and **Contrast** for the audio source.

1   Press the home button to switch to the home display.

2   Touch the system key to open the system menu.

3   If you are adjusting the Picture Adjustment, select the unit.

NAVI **Apps**	Completing **Picture Adjustment** for the Navigation system when the RGB input setting is set to **NAVI**. Completing **Picture Adjustment** for the Advanced App Mode when the RGB input setting is set to **iPhone**.
Rear View	Adjusting the **Picture Adjustment** for the rear view camera.
Source	Adjusting the **Picture Adjustment** for the source.

4   Touch any of the following touch panel keys to select the function to be adjusted.
Picture Adjustment items are displayed.
• **Brightness** – Adjusts the black intensity
• **Contrast** – Adjusts the contrast
• **Color** – Adjusts the color saturation
• **Hue** – Adjusts the tone of color (red or green is emphasized)
• **Dimmer** – Adjusts the brightness of the display
• **Temperature** – Adjusts the color temperature, resulting in a better white balance
▪ You can adjust **Hue** only when the color system is set to NTSC.
▪ With some rear view cameras, picture adjustment may not be possible.

5   Touch ◄ or ► to adjust the selected item.
Each time you touch ◄ or ►, the level of the selected item increases or decreases.
▪ **Dimmer** can be adjusted from **+1** to **+48**.
▪ **Temperature** can be adjusted from **+3** to **–3**.

Notes
• You cannot operate this function while driving.
• Different **Brightness**/**Contrast**/**Dimmer** settings can be set for when the illumination switch is on and when it is off.

Selecting the system language

The system language can be selected.
If text information such as the title name, artist name or a comment is embedded in a European language, they can also be displayed on this unit.
• The language can be changed for the following:
— Audio menu
— System menu
— Video Setup menu
— Bluetooth menu
— On-screen display

(English and Russian only)
— Multi language setting for DivX (English and Russian only)
— Language for cautions
Some operations on this unit are prohibited from use while driving or require careful attention when operated. In such cases, a caution will appear on the display. You can change the language for caution messages with this setting.
• If the embedded language and the selected language setting are not the same, text information may not display properly.
• Some characters may not be displayed properly.

1   Press the home button to switch to the home display.

2   Touch the system key to open the system menu.

3   Touch System Language on the system menu to select the desired language.

4   Touch the desired language.
English (English)—**Français** (French)—**Español** (Spanish)—**Portuguese** (Portuguese)—中文 (Simplified Chinese)

Setting SiriusXM Tune Start™

Refer to *Setting* **SiriusXM Tune Start**™ on page 16.

Setting Demo Mode

Once Demo Mode is turned on, the Demo screen appears.
Refer to *Demo mode* on page 6.

1   Press the home button to switch to the home display.

2   Touch the system key to open the system menu.

3   Touch Demo mode on the system menu to turn Demo mode on or off.
- **On** – The Demo screen appears.
- **Off** – The Demo screen does not appear.

Switching sound muting/attenuation

Sound from this system is automatically muted or attenuated when a signal from equipment with a mute function is received.
- Sound from this system returns to normal when the muting or attenuation is canceled.

1   Press the home button to switch to the home display.

2   Touch the system key to open the system menu.

3   Touch Mute/ATT until the desired setting appears.
Touch **Mute/ATT** until the desired setting appears in the display.
- **Mute** – Muting
- **ATT –20dB** – Attenuation (**ATT –20dB** has a stronger effect than **ATT –10dB**)
- **ATT –10dB** – Attenuation
- **Off** – Turns the sound muting/attenuation off

Notes
- When **Mute** is displayed, the sound is turned off and no audio adjustments can be made.
- When **ATT** is displayed, the sound is attenuated and only the volume can be adjusted. (No other audio adjustments can be made.)
- Operation returns to normal when the phone connection is ended.

Setting the rear output and subwoofer controller

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

1   Turn the source off.
Refer to *Turning the source ON/OFF* on page 8.

2   Press the home button to switch to the home display.

3   Touch the system key to open the system menu.

4   Touch Rear Speaker on the system menu to switch the subwoofer output or full-range speaker.
- When no subwoofer is connected to the rear output, select **Full** (full-range speaker).
- When a subwoofer is connected to the rear output, select **Subwoofer** (subwoofer).

Notes
- Even if you change this setting, there will be no output unless you turn the subwoofer output on (refer to *Using subwoofer output* on page 34).
- Both rear speaker lead outputs and RCA rear output are switched simultaneously in this setting.

Using the keyboard

Keyboard is available only in Advanced App Mode.

Setting the ever scroll

When ever scroll is set to **On**, recorded text information scrolls continuously in the display. Set to **Off** if you prefer the information to scroll just once.

1   Press the home button to switch to the home display.

2   Touch the system key to open the system menu.

3   Touch Ever Scroll on the system menu to turn ever scroll on or off.

Setting the Pandora connect mode

Refer to *Setting the Pandora connect mode* on page 28.

Setting the Bluetooth audio

(Function of AVH-X5500BHS/AVH-X4500BT/AVH-X3500BHS/AVH-X2500BT)
You need to activate the **Bluetooth Audio** source in order to use a Bluetooth audio player.

1   Press the home button to switch to the home display.

2   Touch the system key to open the system menu.

3   Touch Bluetooth Audio on the system menu to turn Bluetooth audio on or off.

Clearing Bluetooth memory

Important
Never turn the unit off while the Bluetooth memory is being cleared.

1   Turn the source off.
Refer to *Turning the source ON/OFF* on page 8.

2   Press the home button to switch to the home display.

3   Touch the system key to open the system menu.

4   Touch Bluetooth Memory Clear on the system menu.

5   Touch Clear.
After selecting a desired item, a confirmation display appears. Touch **OK** to delete the memory.
- If you do not want to clear the memory, touch **Cancel**.

Updating Bluetooth connection software

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

Important
Never turn the unit off and never disconnect the phone while the software is being updated.

1   Turn the source off.
Refer to *Turning the source ON/OFF* on page 8.

2   Press the home button to switch to the home display.

3   Touch the system key to open the system menu.

4   Touch BT Software Update.

5 Touch Start to display the data transfer mode.
▪ Follow the on-screen instructions to finish updating the Bluetooth software.

Displaying the Bluetooth system version

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

1 Turn the source off.
Refer to *Turning the source ON/OFF* on page 8.

2 Press the home button to switch to the home display.

3 Touch the system key to open the system menu.

4 Touch Bluetooth Version Information to display to the version of the Bluetooth module of this unit.

Setting the rear view camera (back up camera)

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

This unit features a function that automatically switches to the rear view camera video (**R.C IN**) when a rear view camera is installed on your car and the shift lever is moved to the **REVERSE (R)** position. (For more details, consult your dealer.)

You can also switch the rear view image by pressing the touch key.
For details refer to *Using the rear view* on page 10.
• After you set up the rear view camera setting, move the shift lever to **REVERSE (R)** and confirm that the rear view camera video is shown on the display.
• Change this setting if the display switches to the rear view camera video by error while you are driving forward.
• To stop watching the rear view camera video and return to the source display, press and hold **MUTE**.
• Touch the **RearView** source icon to display the rear view camera image while driving. Touch the source icon again to turn the rear view camera off. For details, refer to *Selecting a source* on page 8.

1 Press the home button to switch to the home display.

2 Touch the system key to open the system menu.

3 Touch Camera Polarity on the system menu to select the appropriate setting.
• **Battery** – When the polarity of the connected lead is positive while the shift lever is in **REVERSE (R)** position
• **Ground** – When the polarity of the connected lead is negative while the shift lever is in **REVERSE (R)** position
• **Off** – When a rear view camera is not connected to this unit
• The rear view key setting also turns off on the home display screen.

Auto EQ (auto-equalizing)

The auto-equalizer automatically measures the car's interior acoustic characteristics, and then creates an auto-equalizer curve based on that information.
• To perform this function, dedicated microphone (e.g. CD-MC20) is required.

⚠ WARNING
As a loud tone (noise) may be emitted from the speakers when measuring the car's interior acoustic characteristics, never perform auto EQ while driving.

⚠ CAUTION
• Thoroughly check the conditions before performing auto EQ as the speakers may be damaged if these functions are performed when:
  — The speakers are incorrectly connected. (For example, when a rear speaker is connected as a subwoofer output.)
  — A speaker is connected to a power amp delivering output higher than the speaker's maximum input power capability.
• If the microphone is placed in an unsuitable position the measurement tone may become loud and measurement may take a long time, resulting in battery drainage. Be sure to place the microphone in the specified location.

Before operating the auto EQ function

• Carry out auto EQ in as quiet a place as possible, with the car engine and air conditioning switched off. Also cut power to car phones or portable telephones in the car, or remove them from the car before carrying out auto EQ. Sounds other than the measurement tone (surrounding sounds, engine sound, telephones ringing etc.) may prevent correct measurement of the car interior acoustic characteristics.
• Be sure to carry out auto EQ using the optional microphone. Using another microphone may prevent measurement, or result in incorrect measurement of the car interior acoustic characteristics.
• In order to perform auto EQ, the front speaker must be connected.
• When this unit is connected to a power amp with input level control, auto EQ may not be possible if the power amp's input level is set below the standard level.
• When this unit is connected to a power amp with an LPF, turn this LPF off before performing auto EQ. Also set the cut-off frequency for the built-in LPF of an active subwoofer to the highest frequency.
• The distance has been calculated by computer to be the optimum delay to give accurate results for the circumstances, so please continue to use this value.
  — The reflected sound within the car is strong and delays occur.
  — The LPF on active subwoofers or external amps delay the lower sounds.
• Auto EQ changes the audio settings as follows:
  — The fader/balance settings return to the center position. (Refer to *Using fader/balance adjustment* on page 33.)

— The equalizer curve switches to **Flat**. (Refer to *Recalling equalizer curves* on page 33.)

— The front, center and rear speakers will automatically be adjusted to a high pass filter setting.

• Previous settings for auto EQ will be overwritten.

• If using an AVH-X3500BHS, AVH-X2500BT, or AVH-X1500DVD, connect a microphone extension cable (sold separately) to the AUX input in advance.

Performing auto EQ

1 Stop the car in a place that is quiet, close all the doors, windows and sun roof, and then turn the engine off.
If the engine is left running, engine noise may prevent correct auto EQ.

2 Fix the optional microphone in the center of the headrest of the driver's seat, facing forward.
The auto EQ may differ depending on where you place the microphone. If desired, place the microphone on the front passenger seat to carry out auto EQ.
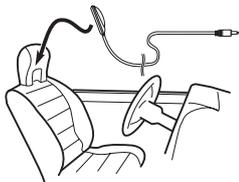
3 Turn the ignition switch to ON or ACC.
If the car's air conditioner or heater is turned on, turn it off. Noise from the fan in the air conditioner or heater may prevent correct auto EQ.

4 Press the home button to switch to the home display.

5 Touch the system key to open the system menu.

6 Touch Auto EQ Measurement to enter auto EQ measurement mode.

7 Plug the microphone into the microphone input jack on this unit.

AVH-X5500BHS and AVH-X4500BT

AVH-X3500BHS, AVH-X2500BT and AVH-X1500DVD

Extension Cable
(Sold separately)

Microphone

AUX input
(**AUX**)
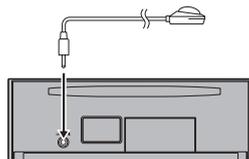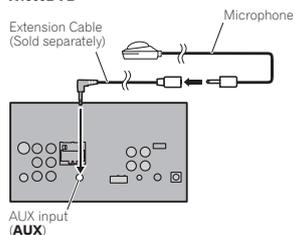
8 Touch Start to start auto EQ.

9 When the 10-second countdown starts, get out of the car and close the door within 10 seconds.
A measurement tone (noise) is emitted from the speakers, and auto EQ measurement begins.

When auto EQ is completed, **The measurement has finished. Please disconnect the microphone and then push HOME key.** is displayed. When the car's interior acoustic characteristics cannot be measured correctly, an error message will be displayed. (Refer to *Understanding auto EQ error messages* on page 56.)

▪ It takes about nine minutes for auto EQ measurement to be completed when all the speakers are connected.

▪ To stop auto EQ, touch **Stop**.

10 Store the microphone carefully in the glove compartment or another safe place.
If the microphone is subjected to direct sunlight for an extended period, high temperatures may cause distortion, color change or malfunction.

Setting the video signal

When you connect this unit to an AV equipment to this unit, select the suitable video signal setting.

• As this function is initially set to **Auto**, the unit will automatically adjust the video signal setting.

• You can operate this function only for the video signal input into the AV input.

1 Press the home button to switch to the home display.

2 Touch the system key to open the system menu.

3 Touch Video Signal Setting on the function menu.
Video Signal Setting items are displayed.

• **AV** – Adjusts the AV video signal
• **AUX** – Adjusts the AUX video signal
• **Camera** – Adjusts the rear view camera video signal

4 Touch ◄ or ► to select the desired video signal appears.
Auto—PAL—NTSC—PAL-M—PAL-N—SECAM

Favorite menu

Using the Favorite menu

1 Display menu columns to register.
Refer to *Menu operations* on page 33.
▪ You can customize menus except **Video Setup** menu.

2 Touch the star icon in the menu column for the desired menu to register the menu.
The star icon for the selected menu is filled in.
▪ To cancel the registration, touch the star icon in the menu column again.

3 Display the favorite menu and choose a registered menu.
Refer to *Menu operations* on page 33.

Note

You can register up to 12 columns.

Bluetooth connection menu

Bluetooth connection menu operations

(Function of AVH-X5500BHS/AVH-X4500BT/AVH-X3500BHS/AVH-X2500BT)

Note
If you are using a cellular phone that can be connected via Bluetooth wireless technology, we recommend that you use your phone to search for this unit and establish a connection between it and your phone. The PIN code is set to **0000** as default. The product name for this unit will display on your phone as the device name. For details, refer to *Entering PIN code for Bluetooth wireless connection* on the next page. For further details concerning the procedures for establishing Bluetooth wireless connections, refer to the instruction manual for the phone.

Pairing from this unit

1 Press the home button to switch to the home display.

2 Touch the Bluetooth key to open the Bluetooth connection menu.

3 Touch Connection to select a device.

4 Start to search.

🔍	Starting to search.

While searching, ⬦ is displayed and when available devices are found, the device names or Bluetooth device addresses (if names cannot be obtained) are displayed.
▪ If you want to switch between the device names and Bluetooth device addresses, touch the icon.

ⓘ	Switching between the device names and Bluetooth device addresses.

▪ To cancel searching, touch **Stop**.
▪ If three devices are already paired, **Memory Full** is displayed and pairing cannot be performed. In such cases, delete a paired device first. Refer to this page.
▪ If no device can be found, **Not Found** is displayed. In such cases, check the status of the Bluetooth device and search again.

5 Touch a device name to select the device you want to connect to.
While connecting, **Pairing** is displayed. If the connection is established, **Paired** is displayed.
▪ If your device support SSP (Secure Simple Pairing), 6-digit number appears on the display of this unit. Once the connection is established, this number disappears.
▪ If the connection fails, **Error** is displayed. In such cases, try again from the beginning.
▪ The PIN code is set to **0000** as the default, but can be changed. Refer to *Entering PIN code for Bluetooth wireless connection* on the next page.
▪ Once the connection is established, the device name is displayed.
Touch the device name to disconnect.
▪ If you want to delete a paired Bluetooth telephone, display **Delete OK?**. Touch **Yes** to delete the device.

🗑	Deleting a paired device.

▪ Never turn the unit off while the paired Bluetooth telephone is being deleted.

Bluetooth connection menu

Connecting to a Bluetooth device automatically

If this function is set to on, a connection be-tween your Bluetooth device and this unit will take place automatically as soon as the two devi-ces are less than a few meters apart.
Initially, this function is set to on.

1   Press the home button to switch to the home display.

2   Touch the Bluetooth key to open the Bluetooth connection menu.

3   Touch Auto Connect to turn automatic connection on.
If your Bluetooth device is ready for a Bluetooth wireless connection, a connection to this unit will automatically be established.
■ To turn automatic connection off, touch **Auto Connect** again.
If connection fails, "**Auto connection failed. Retry?**" appears. Touch **Yes** to reconnect.

4   Once you turn your vehicle's ACC switch on again, a connection is established auto-matically.

Switching visible unit

This function sets whether or not to make this unit visible to the other device.
Initially, this function is set to on.

1   Press the home button to switch to the home display.

2   Touch the Bluetooth key to open the Bluetooth connection menu.

3   Touch Visibility to select visibility off.
■ To turn visibility on, touch **Visibility** again.

Entering PIN code for Bluetooth wireless connection

To connect your Bluetooth device to this unit via Bluetooth wireless technology, you need to enter a PIN code on your Bluetooth device to verify the connection. The default code is **0000**, but you can change it with this function.

1   Press the home button to switch to the home display.

2   Touch the Bluetooth key to open the Bluetooth connection menu.

3   Touch PIN Code Input to select PIN Code Input.

4   Touch 0 to 9 to input pin code.

5   After inputting PIN code (up to 8 digits), store in this unit.

Storing the PIN code in this unit.

Displaying Bluetooth Device address

This unit displays its Bluetooth device address.

1   Press the home button to switch to the home display.

2   Touch the Bluetooth key to open the Bluetooth connection menu.

3   Touch Device Information to display de-vice information.
The Bluetooth device address is displayed.

Theme menu

Selecting the illumination color

This unit is equipped with multiple-color illumi-nation.

Direct selection from preset illumination colors

You can select an illumination color from the color list.

1   Press the home button to switch to the home display.

2   Touch the theme key to open the theme settings.

3   Touch Illumination and then touch a color on the list.

Customizing the illumination color

1   Press the home button to switch to the home display.

2   Touch the theme key to open the theme settings.

3   Touch Illumination and then touch Custom.

4   Display the customizing menu.

Displaying the customizing menu.

5   Touch the color bar to customize the color.

6   Touch ◀ or ▶ to fine-tune the color.

7   Touch the icon and hold to store the cus-tomized color in the memory.

Memo   Storing the customized color in the memory.

The customized color has been stored in the memory.
The set color will be recalled from the memory the next time you touch the same icon.

Selecting the OSD (on-screen display) color

The OSD color can be changed.

1   Press the home button to switch to the home display.

2   Touch the theme key to open the theme settings.

3   Touch Screen.

4   Touch one of the colors on the list.

Selecting the background display

You can switch the background that is displayed when listening to a source.

1   Press the home button to switch to the home display.

2   Touch the theme key to open the theme settings.

3   Touch Background.

4   Touch the desired setting.
■ If no JPEG images are stored in this unit, you cannot select photo. To store a JPEG image to this unit, refer to *Capture an image in JPEG files* on page 26.
■ If you want to delete the captured JPEG image, touch and hold the key of the JPEG image.
■ You can view the hidden settings by flicking the display.

Adjusting the response positions of the touch panels (Touch Panel Calibration)

If you feel that the touch panel keys on the screen deviate from the actual positions that respond to your touch, adjust the response positions of the touch panel. There are two adjustment methods: 4-point adjustment, in which you touch four corners of the screen; and 16-point adjustment, in which you make fine-adjustments on the entire screen.
- Park your car in a safe place and use this function. Do not operate it while driving.
- Touch the screen gently for adjustment. Forcefully pressing the touch panel may damage the touch panel. Do not use a sharp pointed tool such as a ballpoint pen or mechanical pen. Doing so may damage the screen.
- If the touch panel cannot be adjusted properly, consult your local Pioneer dealer.

1 Turn the source off.
Refer to *Turning the source ON/OFF* on page 8.

2 Press and hold the home button to start Touch Panel Calibration.
The 4-point touch panel adjustment screen appears. When 2-point appears at once, touch both.

3 Touch each of the arrows on the four corners of the screen.
▪ To cancel the adjustment, press and hold the home button.

4 Press the home button to complete 4-point adjustment.
Data for the adjusted position is saved.
▪ Do not turn off the engine while the data is being saved.

5 Press the home button to proceed to 16-point adjustment.
The 16-point touch panel adjustment screen appears.
▪ To cancel the adjustment, press and hold the home button.

6 Gently touch the center of the + mark displayed on the screen.
After you touch all the marks, the data for the adjusted position is saved.
▪ Do not turn off the engine while the data is being saved.

7 Press and hold the home button to complete the adjustment.

Using an AUX source

An auxiliary device or portable device sold separately can be connected to this unit.

About AUX connection methods

You can connect auxiliary devices to this unit.

Mini pin plug cable (AUX)

When connecting an auxiliary device using a mini plug cable
iPods and portable audio/video players can be connected to this unit via mini plug cable.
- If an iPod with video capabilities is connected to this unit via 3.5 mm plug (4 pole) cable (such as the CD-V150M), you can enjoy the video contents of the connected iPod.
- A portable audio/video player can be connected by using a 3.5 mm plug (4 pole) with an RCA cable (sold separately). However, depending on the cable, a reverse connection between the red (right side audio) cable and yellow (video) cable may be required in order for the sound and video image to be reproduced correctly.

● Insert the stereo mini plug into the AUX input jack on this unit.
Refer to *Connection* on page 46.

Resetting the microprocessor

By pressing **RESET**, you can reset the microprocessor to its initial settings without changing the bookmark information.
The microprocessor must be reset in the following situations:
- Before using this unit for the first time after installation
- If the unit fails to operate properly
- When strange or incorrect messages appear on the display

1 Turn the ignition switch OFF.

2 Press RESET with a pen tip or other pointed instrument.
Refer to *What's what* on page 7.

Note
Switch your engine ON or set the ignition switch to ACC ON before pressing **RESET** in the following situations:
- After completing connections
- When erasing all stored settings
- When resetting the unit to its initial (factory) settings

WARNING

• 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 unit's DVD features should not be used.

CAUTION

• Do not drill a hole into the engine compartment to connect the yellow cable of the display unit to the vehicle battery. Engine vibration may eventually cause the insulation to fail at the point where the wire passes from the passenger compartment into the engine compartment. Take extra care in securing the wire at this point.
• Make sure that cables will not interfere with moving parts of the vehicle, such as the shift lever, parking brake or seat sliding mechanism.

WARNING

• Use speakers over 50 W (output value) and between 4 Ω to 8 Ω (impedance value). Do not use 1 Ω to 3 Ω speakers for this unit.

• The black cable is ground. When installing this unit or power amp (sold separately), make sure to connect the ground wire first. Make sure that the ground cable is properly connected to metal parts of the car body using a spade terminal sold commercially. The ground wire of the power amp and the one of this unit or any other device must be connected to the car separately with different screws. If the screw for the ground wire loosens or falls out, it could result in fire, generation of smoke or malfunction.

Ground wire   POWER AMP

*1

Other devices
(Another electronic
device in the car)   Metal parts of car's body
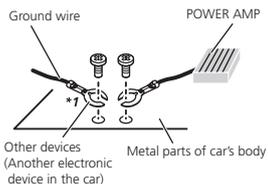
1 Non supplied for this unit

Important

• This unit cannot be installed in a vehicle without ACC (accessory) position on the ignition switch.

ACC position   No ACC position

• Use this unit with a 12-volt battery and negative grounding only. Failure to do so may result in a fire or malfunction.
• To prevent a short-circuit, overheating or malfunction, be sure to follow the directions below.
  — Disconnect the negative terminal of the battery before installation.

  — Secure the wiring with cable clamps or adhesive tape. Wrap adhesive tape around wiring that comes into contact with metal parts to protect the wiring.
  — Place all cables away from moving parts, such as the shift lever and seat rails.
  — Place all cables away from hot places, such as near the heater outlet.
  — Do not connect the yellow cable to the battery by passing it through the hole to the engine compartment.
  — Cover any disconnected cable connectors with insulating tape.
  — Do not shorten any cables.
  — Never cut the insulation of the power cable of this unit in order to share the power with other devices. The current capacity of the cable is limited.
  — Use a fuse of the rating prescribed.
  — Never wire the negative speaker cable directly to ground.
  — Never band together negative cables of multiple speakers.
• When this unit is on, control signals are sent through the blue/white cable. Connect this cable to the system remote control of an external power amp or the vehicle's auto-antenna relay control terminal (max. 300 mA 12 V DC). If the vehicle is equipped with a glass antenna, connect it to the antenna booster power supply terminal.
• Never connect the blue/white cable to the power terminal of an external power amp. Also, never connect it to the power terminal of the auto antenna. Doing so may result in battery drain or a malfunction.

Connecting the power cord

Pioneer Add-on Navigation system (sold separately)

Please contact your dealer to inquire about the connectable navigation unit.

26 pin cable (Supplied with navigation unit)

Insert the 26 pin cable in the direction indicated in the figure.

RGB input

This product

Antenna input

Fuse (10 A)

AUX jack (3.5 ø)
Use a mini plug cable to connect with auxiliary device.

4 m (13 ft. 1 in.)

Microphone
(Function of AVH-X5500BHS/AVH-X4500BT/AVH-X3500BHS/AVH-X2500BT)

Microphone input
(Function of AVH-X5500BHS/AVH-X4500BT/AVH-X3500BHS/AVH-X2500BT)

Wired remote input
Hard-wired remote control adapter can be connected (sold separately).

Violet/white
Of the two lead wires connected to the back lamp, connect the one in which the voltage changes when the gear shift is in the REVERSE (R) position. This connection enables the unit to sense whether the car is moving forwards or backwards.

Yellow/black
If you use an equipment with Mute function, wire this lead to the Audio Mute lead on that equipment. If not, keep the Audio Mute lead free of any connections.

Yellow
Connect to the constant 12 V supply terminal.

Orange/white
Connect to lighting switch terminal.

Red
Connect to terminal controlled by ignition switch (12 V DC).

Black (chassis ground)
Connect to a clean, paint-free metal location.

White | Gray

Front speaker | | Front speaker

Left | White/black | Gray/black | Right

Green | Violet

Rear speaker or Subwoofer (4 Ω) | Green/black | Violet/black | Rear speaker or Subwoofer (4 Ω)

When using a subwoofer of 70 W (2 Ω), be sure to connect with Violet and Violet/black leads of this unit. Do not connect anything to Green and Green/black leads.

Green | Violet

Not used. | | | Subwoofer (4 Ω) × 2

Green/black | Violet/black

Connection method

1. Clamp the lead.

2. Clamp firmly with needle-nosed pliers.

Note:
· The position of the parking brake switch depends on the vehicle model. For details, consult the vehicle Owner's Manual or dealer.

Light green
Used to detect the ON/OFF status of the parking brake. This lead must be connected to the power supply side of the parking brake switch.

Power supply side

Ground side

Parking brake switch

Blue/white
Connect to system control terminal of the power amp or auto-antenna relay control terminal (max. 300 mA 12 V DC).

With a 2 speaker system, do not connect anything to the speaker leads that are not connected to speakers.

Note:
· Change the initial setting of this unit. The subwoofer output of this unit is monaural.

When connecting to separately sold power amp

Rear output

Front output

To front output

To rear output

Subwoofer output

To subwoofer output

This product

Power amp (sold separately)

Power amp (sold separately)

Power amp (sold separately)

Connect with RCA cables (sold separately)

System remote control

Blue/white
Connect to system control terminal of the power amp or auto-antenna relay control terminal (max. 300 mA 12 V DC).

Left

Right

Subwoofer

Subwoofer

Rear speaker

Rear speaker

Front speaker

Front speaker

Perform these connections when using the optional amplifier.

When connecting the external video component and the display

External video component (sold separately)

To audio outputs

To video output

This product

Audio inputs (**R IN**, **L IN**)

RCA cables (sold separately)

Rear monitor output (**V OUT**)

Video input (**V IN**)

To video input

Display with RCA input jacks (sold separately)

• It is necessary to change **AV Input** in the system menu when connecting the external video component.
Refer to *Setting AV input* on page 38.

This product's rear video output is for connection of a display to enable passengers in the rear seats to watch the DVD, etc.

⚠ WARNING

• Never install a rear display in a location that is visible to the driver while the vehicle is in motion.

When connecting with a rear view camera

If you switch the shift lever to REVERSE (R), the display on this unit will automatically switch to the rear view image. You need to set the **Camera Polarity** properly in the system unit to use. For details on settings, refer to *Setting the rear view camera (back up camera)* on page 40. You can also switch to the rear view image by pressing the Touch key. For details, refer to *Using the rear view* on page 10.

⚠ WARNING
USE INPUT ONLY FOR REVERSE OR MIRROR IMAGE REAR VIEW CAMERA. OTHER USE MAY RESULT IN INJURY OR DAMAGE.

⚠ CAUTION
• **You must use a camera which outputs mirror reversed images.**
• The screen image may appear reversed.
• 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.
• Objects in the rear view may appear closer or more distant than they actually are.

Rear view camera input (**R.C IN**)

This product

RCA cable
(sold separately)

To video output

Rear view camera
(sold separately)

Violet/white
Of the two lead wires connected to the back lamp, connect the one in which the voltage changes when the gear shift is in the REVERSE (R) position. This connection enables the unit to sense whether the car is moving forwards or backwards.
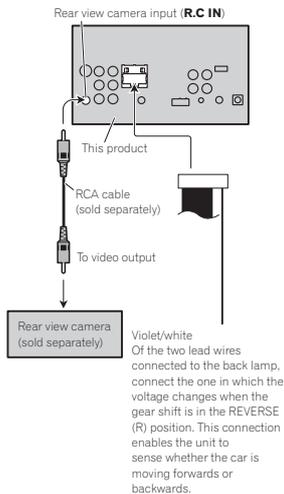
Optional SiriusXM Tuner connection

(Function of AVH-X5500BHS/AVH-X3500BHS)
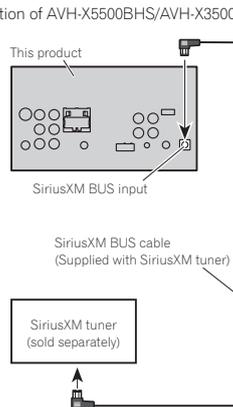
This product

SiriusXM BUS input

SiriusXM BUS cable
(Supplied with SiriusXM tuner)

SiriusXM tuner
(sold separately)

When connecting with optional CD-IU201V cable

USB/iPod input

This product

AUX input
(**AUX**)

iPod with video capabilities
(sold separately)

Dock connector

1.5 m (4 ft. 11 in.)

USB cable
(Supplied with this unit)
Connect to separately sold USB device.

Interface cable
(CD-IU201V) (sold separately)
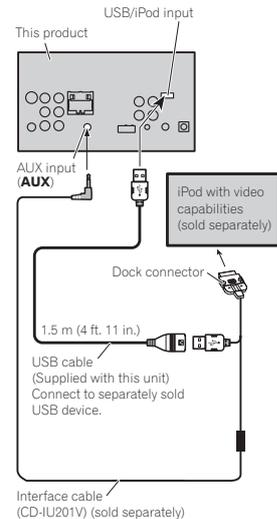
When connecting with optional CD-IU201S cable

USB/iPod input

This product

RGB input

iPod with video capabilities (sold separately)

Dock connector

1.5 m (4 ft. 11 in.)

USB cable
(Supplied with this unit)
Connect to separately sold USB device.

Interface cable
(CD-IU201S) (sold separately)
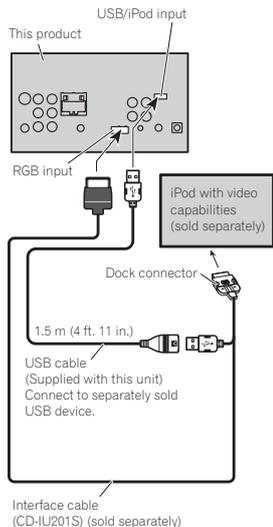
Notes
- Check all connections and systems before final installation.
- Do not use unauthorized parts as this may cause malfunctions.
- Consult your dealer if installation requires drilling of holes or other modifications to the vehicle.
- Do not install this unit where:
  — it may interfere with operation of the vehicle.
  — it may cause injury to a passenger as a result of a sudden stop.
- The semiconductor laser will be damaged if it overheats. Install this unit away from hot places such as near the heater outlet.
- Optimum performance is obtained when the unit is installed at an angle of less than 30°.

30°
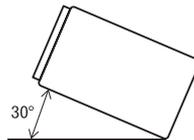
- When installing, to ensure proper heat dispersal when using this unit, make sure you leave ample space behind the rear panel and wrap any loose cables so they are not blocking the vents.

Leave ample space

5 cm

5 cm
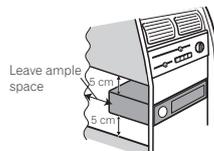
- To some types of vehicles, this unit cannot be properly installed. In such case, use the optional installation kit (ADT-VA133).

Installation using the screw holes on the side of the unit

● **Fastening the unit to the factory radio-mounting bracket.**
Position the unit so that its screw holes are aligned with the screw holes of the bracket, and tighten the screws at 3 locations on each side.

② ①

③

④
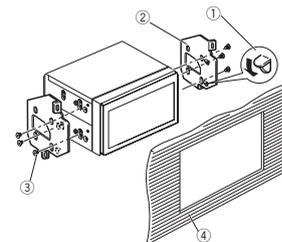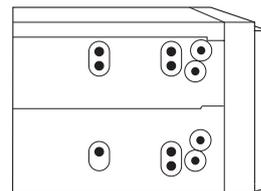
① If the pawl gets in the way, bend it down.
② Factory radio mounting bracket
③ Use either truss (5 mm × 8 mm) or flush surface (5 mm × 9 mm) screws, depending on the bracket screw holes.
④ Dashboard or console

Installing the microphone

(Function of AVH-X5500BHS/AVH-X4500BT/AVH-X3500BHS/AVH-X2500BT)

⚠ CAUTION

It is extremely dangerous to allow the microphone lead to become wound around the steering column or shift lever. Be sure to install the unit in such a way that it will not obstruct driving.

Note

Install the microphone in a position and orientation that will enable it to pick up the voice of the person operating the system.

When installing the microphone on the sun visor

1   Fit the microphone lead into the groove.

① Microphone lead
② Groove

2   Install the microphone clip on the sun visor.

With the sun visor up, install the microphone clip. (Lowering the sun visor reduces the voice recognition rate.)
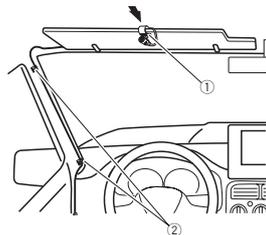
① Microphone clip
② Clamp
   Use separately sold clamps to secure the lead where necessary inside the vehicle.

When installing the microphone on the steering column

1   Detach the microphone base from the microphone clip.

To detach the microphone base from the microphone clip, slide the microphone base.
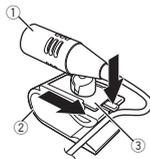
① Microphone
② Microphone clip
③ Microphone base

2   Install the microphone on the steering column.
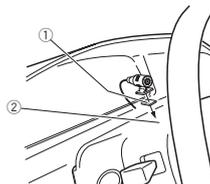
① Double-sided tape
② Install the microphone on the rear side of the steering column.
③ Clamp
   Use separately sold clamps to secure the lead where necessary inside the vehicle.

Adjusting the microphone angle

The microphone angle can be adjusted.

Additional information

Troubleshooting

Common

Symptom	Cause	Action (Reference page)
The power will not turn on. The unit will not operate.	Leads and connectors are incorrectly connected.	Confirm once more that all connections are correct.
	The fuse is blown.	Rectify the cause and then replace the fuse. Be sure to install a fuse with the same rating.
	Noise and/or other factors are causing the built-in microprocessor to operate incorrectly.	Press **RESET**. (Page 44)
Operation with the remote control is not possible. The unit does not operate correctly even when the appropriate remote control buttons are pressed.	Battery power is low.	Load a new battery.
	Some operations are prohibited with certain discs.	Try operating with another disc.

| Symptom	Cause	Action (Reference page)
Playback is not possible.	The disc is dirty.	Clean the disc.
	The type of disc loaded cannot be played on this unit.	Check the disc type.
	The disc loaded is not compatible with this video system.	Change the disc to one that is compatible with your video system.
There is no sound. The volume level will not rise.	Cables are not connected correctly.	Connect the cables correctly.
	The unit is performing still, slow motion or frame-by-frame playback.	There is no sound during still, slow motion or frame-by-frame playback.
There is no image displayed.	The parking brake cable is not connected.	Connect the parking brake cable, and apply the parking brake.
	The parking brake is not applied.	Connect the parking brake cable, and apply the parking brake.
The 🚫 icon is displayed, and operation is not possible.	The operation is prohibited for the disc.	This operation is not possible.
	The operation is not compatible with the configuration of the disc.	This operation is not possible.

Symptom	Cause	Action (Reference page)
The image displayed stops (pauses) and the unit cannot be operated.	The data could no longer be read during playback.	Stop playback once, and start playback again.
There is no sound. The volume level is low.	The volume level is low.	Adjust the volume level.
	The attenuator is on.	Turn the attenuator off.
The sound and video skip.	The unit is not firmly secured.	Firmly secure the unit.
	File size and transmission rate are above recommended rates.	Create a DivX file that is within the recommended size and transmission rate.
The aspect ratio is incorrect and the image is stretched.	The aspect ratio setting is incorrect for the display.	Select the appropriate setting for your display. (Page 36)
The motor sounds when the ignition switch is turned ON (or is turned to ACC).	The unit is confirming whether or not a disc is loaded.	This is a normal operation.

Symptom	Cause	Action (Reference page)
Nothing is displayed. The touch panel keys cannot be used.	The rear view camera is not connected.	Connect a rear view camera.
	Camera Polarity is at incorrect setting.	Press the home button to return to the source display and then select the correct setting for **Camera Polarity**. (Page 40)
No xxxx appears when a display is changed (**No Title**, for example).	There is no embedded text information.	Switch the display or play another track/file.
Subfolders cannot be played back.	Folder repeat play has been selected.	Select the repeat range again.
The repeat range changes automatically.	Another folder was selected during repeat play.	Select the repeat range again.
	Track search or fast forward/reverse was performed during file repeat play.	Select the repeat range again.

Additional information

DVD

Symptom	Cause	Action (Reference page)
Playback is not possible.	The loaded disc has a different region number from this unit.	Replace the disc with one featuring the same region number as this unit.
A parental lock message is displayed and playback is not possible.	Parental lock is activated.	Turn parental lock off or change the level. (Page 36)
Parental lock cannot be canceled.	The code number is incorrect.	Enter the correct code number. (Page 36)
	You have forgotten your code number.	Press **RESET**. (Page 44)
Dialog language (and subtitle language) cannot be switched.	The DVD being played does not feature multiple language recordings.	The language cannot be switched if they are not recorded on the disc.
	You can only switch between items indicated in the disc menu.	Switch the language using the disc menu.
No subtitles are displayed.	The DVD being played does not feature subtitles.	Subtitles are not displayed if they are not recorded on the disc.
	You can only switch between items indicated in the disc menu.	Switch the language using the disc menu.

Symptom	Cause	Action (Reference page)
Playback is not performed with the audio language and subtitle language settings selected in **Video Setup** menu.	The DVD being played does not feature dialog or subtitles in the selected language.	The language cannot be switched if the selected language is not recorded on the disc.
The viewing angle cannot be switched.	The DVD being played does not feature scenes shot from multiple angles.	The viewing angle cannot be switched if the DVD does not feature scenes recorded from multiple angles.
	You are trying to switch to multi-angle viewing for a scene that was not recorded from multiple angles.	Switch between multiple angles when watching scenes recorded from multiple angles.

Additional information

Symptom	Cause	Action (Reference page)
The image is extremely unclear/distorted and dark during playback.	Some discs feature a signal to prohibit copying.	Since this unit is compatible with the analog copy generation management system, when playing a disc that has a signal prohibiting copying, horizontal stripes or other imperfections may appear when viewed on some displays. This is not a malfunction.

Video CD

Symptom	Cause	Action
The PBC (playback control) menu cannot be called up.	The Video CD being played does not feature PBC.	This operation is not available for Video CDs that do not feature PBC.
Repeat play and track/time search are not possible.	The Video CD being played features PBC.	This operation is not available for Video CDs that feature PBC.

iPod

Symptom	Cause	Action
The iPod does not operate correctly.	The cables are incorrectly connected.	Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.
	The iPod version is old.	Update the iPod version.
Sound from the iPod cannot be heard.	The audio output direction may switch automatically when the Bluetooth and USB connections are used at the same time.	Use the iPod to change the audio output direction.

Additional information

Bluetooth audio/telephone

Symptom	Cause	Action
The sound from the Bluetooth audio source is not played back.	There is a call in progress on a Bluetooth connected cellular phone.	The sound will be played back when the call is terminated.
	A Bluetooth connected cellular phone is currently being operated.	Do not use the cellular phone at this time.
	A call was made with a Bluetooth connected cellular phone and then immediately terminated. As a result, communication between this unit and the cellular phone was not terminated properly.	Reconnect the Bluetooth connection between this unit and the cellular phone.

Error messages

When you contact your dealer or your nearest Pioneer Service Center, be sure to note the error message.

Common

Message	Cause	Action
AMP Error	This unit fails to operate or the speaker connection is incorrect; the protective circuit is activated.	Check the speaker connection. If the message fails to disappear even after the engine is switched off/on, contact your dealer or an authorized Pioneer Service Station for assistance.

Tuner

Message	Cause	Action
No Data Provided	This unit cannot receive artist name/song title information.	Move to the desirable location with good reception.
No Data	This unit cannot receive program service name information.	Move to the desirable location with good reception.

SiriusXM Satellite Radio

Message	Cause	Action
Check Antenna	The antenna connection is incorrect.	Check the antenna connection. If the message fails to disappear even after the engine is switched off/on, contact your dealer or an authorized Pioneer Service Station for assistance.

Additional information

Message	Cause	Action
Check Tuner	The SiriusXM Connect Vehicle Tuner connection is incorrect.	Check the tuner connection. If the message fails to disappear even after the engine is switched off/on, contact your dealer or an authorized Pioneer Service Station for assistance.
No Signal	The SiriusXM Connect Vehicle Tuner is having difficulty receiving the SiriusXM satellite signal.	• Verify that your vehicle is outdoors with a clear view of the southern sky. • Verify that the SiriusXM magnetic mount antenna is mounted on a metal surface on the outside the vehicle. • Move the SiriusXM antenna away from any obstructions.
Subscription Updated	This unit has detected a change in your SiriusXM subscription status.	Press any keys to clear the message.
Not Available	The channel that you have requested is not a valid SiriusXM channel.	Check the SiriusXM channel lineup.

Message	Cause	Action
Not Subscribed	The channel that you have requested is not included in your SiriusXM subscription package.	Check the content of your SiriusXM subscription package.
Channel Locked	Locked by the radio Parental Control feature.	Release the channel lock.

DVD

Message	Cause	Action (Reference page)
Different Region Disc	The disc does not have the same region number as this unit.	Replace the DVD with one bearing the correct region number. (Reference page)
Error-02-XX/FF-FF	The disc is dirty.	Clean the disc.
	The disc is scratched.	Replace the disc.
	The disc is loaded upside down.	Check that the disc is loaded correctly.
	There is an electrical or mechanical error.	Press **RESET**. (Page 44)
Unplayable Disc	This type of disc cannot be played on this unit.	Replace the disc with one that can be played on this unit.
	The inserted disc does not contain any playable files.	Replace the disc.

Additional information

Message	Cause	Action (Reference page)
Protect	All the files on the inserted disc are embedded with DRM.	Replace the disc.
Skipped	The inserted disc contains DRM protected files.	Play an audio file not embedded with Windows Media™ DRM 9/10.
TEMP	The temperature of the unit is outside the normal operating range.	Wait until the unit returns to a temperature within the normal operating limits.
This DivX rental has expired.	The inserted disc contains expired DivX VOD content.	Select a file that can be played.
Video resolution not supported	The inserted disc contains a high definition DivX/MPEG-1/MPEG-2/MPEG-4 file.	Select a file that can be played.
It is not possible to write it in the flash.	This unit's flash memory used as the temporary storage area is full.	Select a file that can be played.
Your device is not authorized to play this DivX protected video.	This unit's DivX registration code has not been authorized by the DivX VOD contents provider.	Register this unit to the DivX VOD contents provider.

Message	Cause	Action (Reference page)
Unplayable File	This type of file cannot be played on this unit.	Select a file that can be played.
Format Read	Sometimes there is a delay between the start of playback and when you start to hear any sound.	Wait until the message disappears and you hear sound.
Video frame rate not supported	DivX file's frame rate is more than 30 fps.	Select a file that can be played.
Audio Format not supported	This type of file is not supported on this unit.	Select a file that can be played.

External storage device (USB)

Message	Cause	Action (Reference page)
Unplayable File	This type of file cannot be played on this unit.	Select a file that can be played.
	There are no songs.	Transfer the audio files to the USB portable audio player/USB memory and connect.
	Security for the connected USB memory is enabled.	Follow the USB memory instructions to disable security.

Message	Cause	Action (Reference page)
Format Read	Sometimes there is a delay between the start of playback and when you start to hear any sound.	Wait until the message disappears and you hear sound.
Skipped	The connected USB portable audio player/USB memory contains WMA files that are protected by Windows Media™ DRM 9/10.	Play an audio file not embedded with Windows Media™ DRM 9/10.
Protect	All the files on the connected USB portable audio player/USB memory are protected by Windows Media DRM 9/10.	Transfer audio files not protected by Windows Media DRM 9/10 to the USB portable audio player/USB memory and connect.
Incompatible USB	The USB device connected to is not supported by this unit.	Connect a USB portable audio player or USB memory that is USB Mass Storage Class compliant.
	The USB device is not formatted with FAT12, FAT16 or FAT32.	The connected USB device should be formatted with FAT12, FAT16 or FAT32.

Message	Cause	Action (Reference page)
Check USB	The USB connector or USB cable has short-circuited.	Check that the USB connector or USB cable is not caught in something or damaged.
	The connected USB storage device consumes more than maximum allowable current.	Disconnect the USB portable audio player/USB memory and do not use it. Turn the ignition switch to OFF, then to ACC or ON and then connect a compliant USB portable audio player/USB memory.
Error-02-9X/-DX	Communication failed.	Perform one of the following operations. –Turn the ignition switch OFF and back ON. –Disconnect the USB portable audio player/USB memory. –Change to a different source. Then, return to the USB portable audio player/USB memory.

Additional information

Message	Cause	Action (Reference page)
This DivX rental has expired.	The inserted external storage device contains expired DivX VOD content.	Select a file that can be played.
Video resolution not supported	The inserted external storage device contains a high definition DivX/MPEG-1/MPEG-2/MPEG-4 file.	Select a file that can be played.
It is not possible to write it in the flash.	This unit's flash memory used as the temporary storage area is full.	Select a file that can be played.
Your device is not authorized to play this DivX protected video.	This unit's DivX registration code has not been authorized by the DivX VOD contents provider.	Register this unit to the DivX VOD contents provider.
Format Read	Sometimes there is a delay between the start of playback and when you start to hear any sound.	Wait until the message disappears and you hear sound.
Video frame rate not supported	DivX file's frame rate is more than 30 fps.	Select a file that can be played.
Audio Format not supported	This type of file is not supported on this unit.	Select a file that can be played.

Message	Cause	Action (Reference page)
Creating the Database has failed.	The mode was switched to video or JPEG image display while the database was being created.	Create the database again. (Page 25)

iPod

Message	Cause	Action
Format Read	Sometimes there is a delay between the start of playback and when you start to hear any sound.	Wait until the message disappears and you hear sound.
Error-02-6X/-9X/-DX	Communication failed.	Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.
	iPod failure.	Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.
Error-02-67	The iPod firmware version is old.	Update the iPod version.

Message	Cause	Action
Stop	There are no songs.	Transfer songs to the iPod.
	There are no songs in the current list.	Select a list that contains songs.
Not Found	No related songs.	Transfer songs to the iPod.

iTunes tagging

Message	Cause	Action
iPod full. Tags not transferred.	Memory used for tag information on the iPod is full.	Sync the iPod with iTunes and clean up the tagged playlist.
Memory full. Tags not stored. Connect iPod.	This unit's flash memory used as the temporary storage area is full.	The tag information on this unit is transferred to the iPod automatically when an iPod is connected.
Tag transfer failed. Reconnect your iPod.	This unit's tag information cannot transfer to the iPod.	Check the iPod and try again.
Tag store failed.	Tag information cannot be stored in this unit.	Try again.
Error-8D	Built-in FLASH ROM encountered an error	Turn the ignition OFF or ON.

Message	Cause	Action
Already stored	This tag information is already stored in memory.	Tag information can only be saved once for any given song. Tag information cannot be saved for the same song more than once.

Bluetooth

Message	Cause	Action
Error-10	The power failed for the Bluetooth module of this unit.	Turn the ignition switch OFF and then to ACC or ON. If the error message is still displayed after performing the above action, please contact your dealer or an authorized Pioneer Service Station.

Pandora®

Message	Cause	Action
Error-19	Communication failed.	Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.

Additional information

Message	Cause	Action
Start up the Pandora Application from your Device.	The Pandora application has not started running yet.	Start up the Pandora application from your iPhone.
Unable to save thumb rating. Try again later.	Unable to save thumb rating.	Try again later.
Unable to save Bookmark. Try again later.	Unable to save Bookmark.	Try again later.
Pandora system maintenance. Try again later.	Pandora system is undergoing maintenance.	Try again later.
Skip limit reached.	Skip limit reached.	Do not exceed the skip limit.
This version of the Pandora Application is not supported.	This version of the Pandora application is not supported.	Connect an iPhone that has a compatible version of the Pandora application installed.
Check Device	Device error message displayed in the Pandora application.	Please check your iPhone.
Pandora is unable to play music. Please see your Device.	Unable to play music from Pandora.	Please check your iPhone.

Message	Cause	Action
Create station within the Pandora Application on Device.	No station found.	Create a station in the Pandora application on your iPhone.
No Active Station	No station selected.	Select a station.
Communication error occured. Please reconnect your device.	If there is no ACK after 10 attempted retries at 750 ms, the accessory should assume that communication is interrupted and disconnect from PandoraLink.	Please reconnect your iPhone and try again.
Device has not been registered. Go to Bluetooth Connection Menu to register.	No Bluetooth device found.	Follow the instructions that appear on the screen.
BT error. Press BAND key to retry.	Bluetooth connection failed.	Follow the instructions that appear on the screen.
Start up Pandora. Press BAND key to retry.	Connection to the Pandora application failed.	Follow the instructions that appear on the screen.
Check Pandora. Press BAND key to retry.	Connection to the Pandora application failed.	Follow the instructions that appear on the screen.

Additional information

Message	Cause	Action
Disconnected.Press BAND key to retry.	Bluetooth connection lost.	Follow the instructions that appear on the screen.

Understanding auto EQ error messages

When correct measurement of the car's interior acoustic characteristics is not possible using auto EQ, an error message may appear on the display. In such cases, refer to the table below to see what the problem is and how it may be corrected. After checking, try again.

Message	Cause	Action
Please connect the microphone for measurement. When finished, please push HOME key.	The microphone is not connected.	Plug the optional microphone securely into the jack.
Error. Please check xxxx speaker.	The microphone cannot pick up the measuring tone of a speaker.	• Confirm that the speakers are connected correctly. • Correct the input level setting of the power amp connected to the speakers. • Plug the microphone securely into the jack.

Message	Cause	Action
Error. Please check noise.	The surrounding noise level is too high.	• Stop your car in a place that is quiet, and switch off the engine, air conditioner and heater. • Set the microphone correctly.
Error. Please check battery.	Power is not being supplied from the battery to this unit.	• Connect the battery correctly. • Check the battery voltage.

Understanding messages

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

Additional information

Indicator list

Area 1   Area 2

Area 3
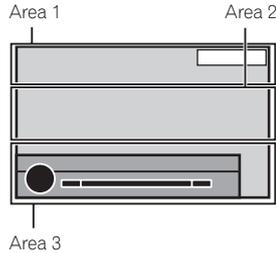
Area 1

◀)) Vol.	Indicates that the volume is adjusted.
◀× MUTE	Indicates that the mute function is on.
◀− ATT	Indicates that the sound is attenuated.

Area 2

◀·TAG	Shows when downloadable song information (tag) from a radio station is received. Disabled while song information (tag) from an HD Radio station is being saved to this unit.
Dolby D	Indicates that the digital format is Dolby Digital.

MPEG-A	Indicates that the digital format is MPEG Audio.
LPCM	Indicates that the digital format is Linear PCM.
48k16	Indicates the sampling frequency.
DTS	Indicates that the digital format is DTS.
1 ch / 1+1ch / 2 ch / Multi ch	Indicates the audio channel.
PBC On	Indicates that a disc with PBC On is being played.
⑧1	• Indicates that a cellular phone is connected. • Indicates that an incoming call has been received and has not been checked yet.
(battery)	Indicates the battery strength of the cellular phone. • The level shown on the indicator may differ from the actual battery strength. • If the battery strength is not available, nothing is displayed in the battery strength indicator area.

(bluetooth phone)	Indicates that the connected Bluetooth device only supports Bluetooth telephone.
(bluetooth audio)	Indicates that the connected Bluetooth device only supports Bluetooth audio.
◎	Show the album title when receiving the tag information. Shows the album title of the song currently being played for MP3/WMA/AAC/WAV files.
♪	Shows the song title when receiving the tag information. Shows the song title of the song currently being played for MP3/WMA/AAC/WAV files.
(disk)	Shows the comment currently being played.
(station)	Shows the station name currently tuned in to.
(person)	Shows the artist name when receiving the tag information. Shows the artist name of the artist currently being played for MP3/WMA/AAC/WAV files.
(cell)	Shows cellular phone information.
(phone)	Shows general phone information.
(home)	Shows home phone information.
(office)	Shows office phone information.

●	Shows other phone information.
(clef)	Shows the composer name.
(category)	Shows the category name.
(folder)	Shows the folder name of the folder containing the MP3/WMA/AAC file currently being played.
(file)	Shows the file name of the MP3/WMA/AAC file currently being played.
P.CH	Shows the preset number of the station currently being tuned in to.
CH	Shows the channel currently being tuned in to.
i	Shows SiriusXM information.
(title)	Shows the title number currently being played.
(chapter)	Shows the chapter number currently being played.
⏰	Shows the replay time currently being played.
(game)	Shows when the game alert function is on while receiving SiriusXM stations.
(guitar)	Shows the genre of the track/song currently being played.

Area 3

	Shows when radio signal is received.
ANALOG	Shows when analog audio of HD Radio signal is received.
DIGITAL	Shows when digital audio of HD Radio signal is received.
HD	Shows when HD Radio station information is received.
BSM	Touch to turn BSM on.
Auto EQ	Indicates that Auto EQ is on.
	Shows when this unit has the song information (tag).
	Indicates that the unit is currently processing an operation such as search.
DB	Shows when creating the database in Music browse mode.
DB	Shows when saving the database in Music browse mode.
	Indicates the signal strength of the cellular phone.
	Indicates that a Bluetooth telephone is connected.

Handling guidelines

Discs and player

Use discs featuring any of the following logos.

Use 12-cm discs. Do not use 8-cm discs or an adapter for 8-cm discs.

Use only conventional, fully circular discs. Do not use shaped discs.

Do not insert anything other than a DVD-R/RW or CD-R/RW into the disc loading slot.

Do not use cracked, chipped, warped, or otherwise damaged discs as they may damage the player.

Unfinalized CD-R/RW discs cannot be played back.

Do not touch the recorded surface of the discs.

Store discs in their cases when not in use.

Do not attach labels, write on or apply chemicals to the surface of the discs.

To clean a disc, wipe the disc with a soft cloth outward from the center.

Condensation may temporarily impair the player's performance. Let it rest for about one hour to adjust to a warmer temperature. Also, wipe any damp discs off with a soft cloth.

Playback of discs may not be possible because of disc characteristics, disc format, recorded application, playback environment, storage conditions, and so on.

Road shocks may interrupt disc playback.

Certain functions may not be available for some DVD video discs.

It may not be possible to play back some DVD video discs.

It is not possible to play back DVD-RAM discs.

This unit is not compatible with discs recorded in AVCHD (Advanced Video Codec High Definition) format. Do not insert AVCHD discs as you may not be able to eject the disc.

When using discs that can be printed on label surfaces, check the instructions and the warnings of the discs. Depending on the discs, inserting and ejecting may not be possible. Using such discs may result in damage to this equipment.

Do not attach commercially available labels or other materials to the discs.
• The discs may warp making the disc unplayable.
• The labels may come off during playback and prevent ejection of the discs, which may result in damage to the equipment.

External storage device (USB)

Depending on the external storage device (USB), the following problems may occur.
• Operations may vary.
• The storage device may not be recognized.
• Files may not be played back properly.

USB storage device

Connections via USB hub are not supported.

Do not connect anything other than a USB storage device.

Firmly secure the USB storage device when driving. Do not let the USB storage device fall onto the floor, where it may become jammed under the brake or accelerator pedal.

Depending on the USB storage device, the device may cause noise to occur in the radio.

Copyright protected files that are stored in the USB devices cannot be played back.

You cannot connect a USB portable audio player/USB memory to this unit via USB hub.

Partitioned USB memory is not compatible with this unit.

Depending on the kind of USB portable audio player/USB memory you use, the device may not be recognized or audio files may not be played back properly.

Do not leave the USB portable audio player/USB memory in direct sunlight for extended amounts of time. Doing so may cause the device to malfunction from the extreme rise in temperature.

iPod

To ensure proper operation, connect the dock connector cable from the iPod directly to this unit.

Firmly secure the iPod when driving. Do not let the iPod fall onto the floor, where it may become jammed under the brake or accelerator pedal.

Additional information

About iPod settings
• When an iPod is connected, this unit changes the EQ (equalizer) setting of the iPod to off in order to optimize the acoustics. When you disconnect the iPod, the EQ returns to the original setting.
• You cannot set Repeat to off on the iPod when using this unit. Repeat is automatically changed to All when the iPod is connected to this unit.

Incompatible text saved on the iPod will not be displayed by the unit.

DVD-R/RW discs

Unfinalized DVD-R/RW discs which have been recorded in the Video format (video mode) cannot be played back.
Playback of DVD-R/RW discs may not be possible, due to disc characteristics, scratches or dirt on the disc, or dirt, condensation, etc. on the lens of this unit.
Depending on the application settings and the environment, playback of discs recorded on a personal computer may not be possible. (For details, contact the manufacturer of the application.)

CD-R/RW discs

When CD-R/RW discs are used, playback is possible only for discs which have been finalized.
Playback of CD-R/RW discs recorded on a music CD recorder or a personal computer may not be possible due to disc characteristics, scratches or dirt on the disc, or dirt, condensation, etc., on the lens of this unit.
Depending on the application settings and the environment, playback of discs recorded on a personal computer may not be possible. (For details, contact the manufacturer of the application.)

Playback of CD-R/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/RW disc may not be displayed by this unit (in the case of audio data (CD-DA)).

DualDiscs

DualDiscs are two-sided discs that have a recordable CD for audio on one side and a recordable DVD for video on the other.
Playback of the DVD side is possible with this unit. However, since the CD side of DualDiscs is not physically compatible with the general CD standard, it may not be possible to play the CD side with this unit.
Frequent loading and ejecting of a DualDisc may result in scratches on the disc. Serious scratches can lead to playback problems on this unit. In some cases, a DualDisc may become stuck in the disc loading slot and will not eject. To prevent this, we recommend you refrain from using DualDisc with this unit.
Please refer to the information from the disc manufacturer for more detailed information about DualDiscs.

JPEG picture files

JPEG is short for Joint Photographic Experts Group and refers to a still image compression technology standard.

Files are compatible with Baseline JPEG and EXIF 2.1 still images up to a resolution of 8 192 × 7 680. (EXIF format is used most commonly with digital still cameras.)

Playback of EXIF format files that were processed by a personal computer may not be possible.

There is no progressive JPEG compatibility.

DivX video files

Depending on the composition of the file information, such as the number of audio streams or file size, there may be a slight delay when playing back discs.

Some special operations may be prohibited due to the composition of the DivX files.

Only DivX files downloaded from a DivX partner site are guarantee for proper operation. Unauthorized DivX files may not operate properly.

DRM rental files cannot be operated until playback is started.

Recommended file size: 2 GB or less with a transmission rate of 2 Mbps or less.

The ID code of this unit must be registered to a DivX VOD provider in order to playback DivX VOD files. For information on ID codes, refer to *Displaying the DivX$^®$ VOD registration code* on page 37.

MPEG-1/MPEG-2/MPEG-4 video files

Elapsed playback time may not be displayed correctly.

⊖ Important
• When naming a JPEG image file, add the corresponding file name extension (.jpg, .jpeg or .jpe).
• This unit plays back files with these file name extensions (.jpg, .jpeg or .jpe) as a JPEG image file. To prevent malfunctions, do not use these extensions for files other than JPEG image files.

Compressed audio compatibility (USB)

WAV

File extension: .wav
Quantization bits: 8 and 16 (LPCM), 4 (MS ADPCM)
Sampling frequency: 16 kHz to 48 kHz (LPCM), 22.05 kHz and 44.1 kHz (MS ADPCM)

Compressed audio compatibility (disc, USB)

WMA

File extension: .wma
Bit rate: 48 kbps to 320 kbps (CBR), VBR
Sampling frequency: 32 kHz to 48 kHz
Windows Media™ Audio Professional, Lossless, Voice/DRM Stream/Stream with video: Not compatible

MP3

File extension: .mp3
Bit rate: 8 kbps to 320 kbps (CBR), VBR
Sampling frequency: 8 kHz to 48 kHz (32 kHz, 44.1 kHz, 48 kHz for emphasis)
Compatible ID3 tag version: 1.0, 1.1, 2.2, 2.3, 2.4 (ID3 tag Version 2.x is given priority over Version 1.x.)
M3u playlist: Not compatible
MP3i (MP3 interactive), mp3 PRO: Not compatible

AAC

Compatible format: AAC encoded by iTunes
File extension: .m4a
Sampling frequency: 11.025 kHz to 48 kHz
Bit rate: 16 kbps to 320 kbps
Apple Lossless: Not compatible
AAC file bought from the iTunes Store (.m4p file extension): Not compatible

DivX compatibility

Compatible format: DivX video format implemented in relation to DivX standards
File extensions: .avi or .divx
DivX Ultra format: Not compatible
DivX HD format: Not compatible
DivX files without video data: Not compatible
DivX plus: Not compatible
Compatible audio codec: MP2, MP3, Dolby Digital
LPCM: Compatible
Bit rate: 8 kbps to 320 kbps (CBR), VBR
Sampling frequency: 8 kHz to 48 kHz
Compatible external subtitle file extension: .srt

MPEG-1/MPEG-2/MPEG-4 video

File extensions: .mpg or .mpeg (MPEG-1/MPEG-2), .avi (MPEG-4)
Compatible audio codec: MP2 (MPEG-1/MPEG-2), MP2, MP3, Dolby Digital (MPEG-4)
H.264 (MPEG-4AVC): Compatible
LPCM: Not compatible

Bit rate: 8 kbps to 320 kbps (CBR), VBR
Sampling frequency: 8 kHz to 48 kHz

Supplemental information

Some characters in a file name (including the file extension) or a folder name may not be displayed.
This unit may not work properly depending on the application used to encode WMA files.
There may be a slight delay at the start of playback of audio files embedded with image data or audio files stored on a USB storage device that has numerous folder hierarchies.

Disc (CD/DVD)

Playable folders: up to 99 for CD-R/RW
Playable folders: up to 700 for DVD-R/RW
Playable files: up to 999 for CD-R/RW
Playable files: up to 3 500 for DVD-R/RW
File system: ISO 9660 Level 1 and 2, Romeo, Joliet, UDF 1.02 (DVD-R/RW)
Multi-session playback: Compatible
Packet write data transfer: Not compatible
Regardless of the length of blank sections between the songs from the original recording, compressed audio discs play with a short pause between songs.

External storage device (USB)

Playable folders: up to 1 500 (up to 700 for DivX/MPEG-1/MPEG-2/MPEG-4)
Playable files: up to 15 000

Playback of copyright-protected files: Not compatible
Partitioned external storage device (USB): Only the first playable partition can be played.
There is no compatibility for Multi Media Cards (MMC).

⚠ **CAUTION**
- Pioneer accepts no responsibility for data lost on the USB memory/USB portable audio player even if that data is lost while using this unit.
- Pioneer cannot guarantee compatibility with all USB mass storage devices and assumes no responsibility for any loss of data on media players, smart phones, or other devices while using this product.
- Do not leave the discs/external storage device (USB) or iPod in places with high temperatures.

iPod compatibility

This unit supports only the following iPod models. Supported iPod software versions are shown below. Older versions may not be supported.
Made for
- iPod touch 4th generation (software version 5.1.1)
- iPod touch 3rd generation (software version 5.1.1)
- iPod touch 2nd generation (software version 4.2.1)
- iPod touch 1st generation (software version 3.1.3)
- iPod classic 160GB (software version 2.0.4)
- iPod classic 120GB (software version 2.0.1)
- iPod classic (software version 1.1.2)
- iPod with video (software version 1.3)
- iPod nano 6th generation (software version 1.2)

- iPod nano 5th generation (software version 1.0.2)
- iPod nano 4th generation (software version 1.0.4)
- iPod nano 3rd generation (software version 1.1.3)
- iPod nano 2nd generation (software version 1.1.3)
- iPod nano 1st generation (software version 1.3.1)
- iPhone 4S (software version 5.1.1)
- iPhone 4 (software version 5.1.1)
- iPhone 3GS (software version 5.1.1)
- iPhone 3G (software version 4.2.1)
- iPhone (software version 3.1.3)

Depending on the generation or version of the iPod, some functions may not be available.
Operations may vary depending on the software version of iPod.
When using an iPod, an iPod Dock Connector to USB Cable is required.
When you use Pioneer CD-IU51V/CD-IU201V interface cable, consult your dealer for details.
About the file/format compatibility, refer to the iPod manuals.
Audiobook, Podcast: Compatible

⚠ **CAUTION**
Pioneer accepts no responsibility for data lost on the iPod, even if that data is lost while this unit is used.

About iTunes tagging

This function can be performed with the following iPod models.
— *iPod touch 4th generation*
— *iPod touch 3rd generation*
— *iPod touch 2nd generation*

Additional information

— iPod touch 1st generation
— iPod classic 160GB
— iPod classic 120GB
— iPod classic
— iPod with video
— iPod nano 6th generation
— iPod nano 5th generation
— iPod nano 4th generation
— iPod nano 3rd generation
— iPhone 4S
— iPhone 4
— iPhone 3GS
— iPhone 3G
— iPhone

The song information (tag) can be saved from the broadcasting station to your iPod. The songs will show up in a playlist called "Tagged playlist" in iTunes the next time you sync your iPod. Then you can directly buy the songs you want from the iTunes Store.
The tagged songs and the song that you can buy from the iTunes Store may be different. Make sure to confirm the song before you make the purchase.
If you cannot use this function normally, update your iPod firmware.

Sequence of audio files

The user cannot assign folder numbers and specify playback sequences with this unit.

Example of a hierarchy

: Folder
: Compressed audio file
01 to 05: Folder number
① to ⑥: Playback sequence

Level 1 Level 2 Level 3 Level 4
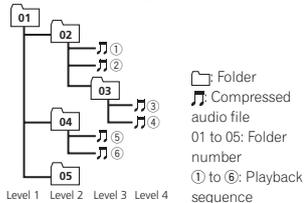
Disc

Folder selection sequence or other operation may differ depending on the encoding or writing software.

External storage device (USB)

The playback sequence is the same as the recorded sequence in the external storage device (USB).
To specify the playback sequence, the following method is recommended.
1 Create a file name that includes numbers that specify the playback sequence (e.g., 001xxx.mp3 and 099yyy.mp3).
2 Put those files into a folder.
3 Save the folder that contains the files to the external storage device (USB).
However, depending on the system environment, you may not be able to specify the playback sequence.
For USB portable audio players, the sequence is different and depends on the player.

Using the display correctly

⚠ **CAUTION**

- If liquid or foreign matter should get inside this unit, turn off the power immediately and consult your dealer or the nearest authorized PIONEER Service Station. Do not use the unit in this condition because doing so may result in fire, electric shock, or other failure.
- If you notice smoke, a strange noise or smell, or any other abnormal signs from the display, turn off the power immediately and consult your dealer or the nearest authorized PIONEER Service Station. Using this unit in this condition may result in permanent damage to the system.

- Do not disassemble or modify this unit, as there are high-voltage components inside which may cause electric shock. Be sure to consult your dealer or the nearest authorized PIONEER Service Station for internal inspection, adjustments, or repairs.

Handling the display

- Never touch the screen with anything besides your finger when operating the touch panel function. The screen can scratch easily.
- When the display is subjected to direct sunlight for a long period of time, it will become very hot resulting in possible damage to the LCD screen. You should avoid exposing the display unit to direct sunlight as much as possible.
- The display should be used within the temperature range of 14 °F to 140 °F.
  At temperatures higher or lower than this operating temperature range, the display may not operate normally.
- The LCD screen is exposed in order to increase its visibility within the vehicle. Do not press it strongly on it as this may damage it.
- Do not push the LCD screen forcefully as this may scratch it.

Liquid crystal display (LCD) screen

- Heat from the heater may damage the LCD screen, and cool air from the cooler may cause moisture to form inside the display 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.
- When using a cellular phone, keep the antenna away from the display to prevent disruption of the video image by the appearance of spots, colored stripes, etc.

LED (light-emitting diode) backlight

- At low temperatures, using the LED backlight may increase image lag and degrade the image quality due to the characteristics of the LCD screen. Image quality will improve with an increase in temperature.
- To protect the LED backlight, the display will darken in the following environments:
  — In the direct sunlight
  — Near the heater vent
- 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 dark and the image will no longer be projected. In such cases, please consult your dealer or the nearest authorized PIONEER Service Station.

Keeping the display in good condition

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

Bluetooth profiles

In order to use Bluetooth wireless technology, devices must be able to interpret certain profiles. This unit is compatible with the following profiles.
- GAP (Generic Access Profile)
- SDP (Service Discovery Protocol)
- OPP (Object Push Profile)
- HFP (Hands Free Profile)
- HSP (Head Set Profile)
- PBAP (Phone Book Access Profile)
- A2DP (Advanced Audio Distribution Profile)

AVRCP (Audio/Video Remote Control Profile) 1.3
• SPP (Serial Port Profile) 1.1

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Glenn Randers-Pehrson
glennrp at users.sourceforge.net
January 6, 2011

Additional information

Language code chart for DVD

Language (code), input code			
Japanese (ja), **1001**	Dzongkha (dz), **0426**	Kurdish (ku), **1121**	Kinyarwanda (rw), **1823**
English (en), **0514**	Ewe (ee), **0505**	Komi (kv), **1122**	Sanskrit (sa), **1901**
French (fr), **0618**	Esperanto (eo), **0515**	Cornish (kw), **1123**	Sardinian (sc), **1903**
Spanish (es), **0519**	Estonian (et), **0520**	Kirghiz, Kyrgyz (ky), **1125**	Sindhi (sd), **1904**
German (de), **0405**	Basque (eu), **0521**	Latin (la), **1201**	Northern Sami (se), **1905**
Italian (it), **0920**	Persian (fa), **0601**	Luxembourgish (lb), **1202**	Sangho (sg), **1907**
Chinese (zh), **2608**	Fulah (ff), **0606**	Ganda (lg), **1207**	Sinhala (si), **1909**
Dutch, Flemish (nl), **1412**	Finnish (fi), **0609**	Limburgan (li), **1209**	Slovak (sk), **1911**
Portuguese (pt), **1620**	Fijian (fj), **0610**	Lingala (ln), **1214**	Slovenian (sl), **1912**
Swedish (sv), **1922**	Faroese (fo), **0615**	Lao (lo), **1215**	Samoan (sm), **1913**
Russian (ru), **1821**	Western Frisian (fy), **0625**	Lithuanian (lt), **1220**	Shona (sn), **1914**
Korean (ko), **1115**	Irish (ga), **0701**	Luba-Katanga (lu), **1221**	Somali (so), **1915**
Greek (el), **0512**	Gaelic (gd), **0704**	Latvian (lv), **1222**	Albanian (sq), **1917**
Afar (aa), **0101**	Galician (gl), **0712**	Malagasy (mg), **1307**	Serbian (sr), **1918**
Abkhazian (ab), **0102**	Guarani (gn), **0714**	Marshallese (mh), **1308**	Swati (ss), **1919**
Avestan (ae), **0105**	Gujarati (gu), **0721**	Maori (mi), **1309**	Sotho, Southern (st), **1920**
Afrikaans (af), **0106**	Manx (gv), **0722**	Macedonian (mk), **1311**	Sundanese (su), **1921**
Akan (ak), **0111**	Hausa (ha), **0801**	Malayalam (ml), **1312**	Swahili (sw), **1923**
Amharic (am), **0113**	Hebrew (he), **0805**	Mongolian (mn), **1314**	Tamil (ta), **2001**
Aragonese (an), **0114**	Hindi (hi), **0809**	Marathi (mr), **1318**	Telugu (te), **2005**
Arabic (ar), **0118**	Hiri Motu (ho), **0815**	Malay (ms), **1319**	Tajik (tg), **2007**
Assamese (as), **0119**	Croatian (hr), **0818**	Maltese (mt), **1320**	Thai (th), **2008**
Avaric (av), **0122**	Haitian (ht), **0820**	Burmese (my), **1325**	Tigrinya (ti), **2009**
Aymara (ay), **0125**	Hungarian (hu), **0821**	Nauru (na), **1401**	Turkmen (tk), **2011**
Azerbaijani (az), **0126**	Armenian (hy), **0825**	Bokmal (nb), **1402**	Tagalog (tl), **2012**
Bashkir (ba), **0201**	Herero (hz), **0826**	Ndebele, North (nd), **1404**	Tswana (tn), **2014**
Belarusian (be), **0205**	Interlingua (ia), **0901**	Nepali (ne), **1405**	Tonga (to), **2015**
Bulgarian (bg), **0207**	Indonesian (id), **0904**	Ndonga (ng), **1407**	Turkish (tr), **2018**
Bihari (bh), **0208**	Interlingue (ie), **0905**	Nynorsk (nn), **1414**	Tsonga (ts), **2019**
Bislama (bi), **0209**	Igbo (ig), **0907**	Norwegian (no), **1415**	Tatar (tt), **2020**
Bambara (bm), **0213**	Sichuan Yi (ii), **0909**	Ndebele, South (nr), **1418**	Twi (tw), **2023**

Language (code), input code			
Bengali (bn), **0214**	Inupiaq (ik), **0911**	Navajo, Navaho (nv), **1422**	Tahitian (ty), **2025**
Tibetan (bo), **0215**	Ido (io), **0915**	Chichewa (ny), **1425**	Uighur, Uyghur (ug), **2107**
Breton (br), **0218**	Icelandic (is), **0919**	Occitan (oc), **1503**	Ukrainian (uk), **2111**
Bosnian (bs), **0219**	Inuktitut (iu), **0921**	Ojibwa (oj), **1510**	Urdu (ur), **2118**
Catalan (ca), **0301**	Javanese (jv), **1022**	Oromo (om), **1513**	Uzbek (uz), **2126**
Chechen (ce), **0305**	Georgian (ka), **1101**	Oriya (or), **1518**	Venda (ve), **2205**
Chamorro (ch), **0308**	Kongo (kg), **1107**	Ossetian (os), **1519**	Vietnamese (vi), **2209**
Corsican (co), **0315**	Kikuyu, Gikuyu (ki), **1109**	Panjabi, Punjabi (pa), **1601**	Volapük (vo), **2215**
Cree (cr), **0318**	Kuanyama (kj), **1110**	Pali (pi), **1609**	Walloon (wa), **2301**
Czech (cs), **0319**	Kazakh (kk), **1111**	Polish (pl), **1612**	Wolof (wo), **2315**
Church Slavic (cu), **0321**	Kalaallisut (kl), **1112**	Pashto, Pushto (ps), **1619**	Xhosa (xh), **2408**
Chuvash (cv), **0322**	Central Khmer (km), **1113**	Quechua (qu), **1721**	Yiddish (yi), **2509**
Welsh (cy), **0325**	Kannada (kn), **1114**	Romansh (rm), **1813**	Yoruba (yo), **2515**
Danish (da), **0401**	Kanuri (kr), **1118**	Rundi (rn), **1814**	Zhuang, Chuang (za), **2601**
Divehi (dv), **0422**	Kashmiri (ks), **1119**	Romanian (ro), **1815**	Zulu (zu), **2621**

Additional information

Specifications

General

Power source .... 14.4 V DC (10.8 V to 15.1 V allowable)

Grounding system .... Negative type

Maximum current consumption
.... 10.0 A

Dimensions (W × H × D):

   D

     Chassis .... 178 mm × 100 mm × 165 mm
      (7 in. × 3-7/8 in. × 6-1/2 in.)

     Nose .... 171 mm × 97 mm × 18 mm
      (6-3/4 in. × 3-7/8 in. × 3/4 in.)

     (AVH-X5500BHS/AVH-X4500BT)

     Nose .... 171 mm × 97 mm × 9 mm
      (6-3/4 in. × 3-7/8 in. × 3/8 in.)

     (AVH-X3500BHS/AVH-X2500BT/AVH-X1500DVD)

Weight .... 2.0 kg (4.4 lbs)
(AVH-X5500BHS/AVH-X4500BT)

Weight .... 1.7 kg (3.7 lbs)
(AVH-X3500BHS/AVH-X2500BT/AVH-X1500DVD)

Display

Screen size/aspect ratio ... 6.95 inch wide/16:9 (effective display area: 156.6 mm × 81.6 mm)
(AVH-X5500BHS/AVH-X4500BT)

Screen size/aspect ratio ... 6.1 inch wide/16:9 (effective display area: 136.2 mm × 72.0 mm)
(AVH-X3500BHS/AVH-X2500BT/AVH-X1500DVD)

Pixels .... 1 152 000 (2 400 × 480)

Display method .... TFT active matrix, driving type

Color system .... NTSC/PAL/PAL-M/PAL-N/SECAM compatible

Durable temperature range (power off)
.... −4 °F to +176 °F

Audio

Maximum power output ... 50 W × 4
70 W × 1/2 Ω (for subwoofer)

Continuous power output
.... 22 W × 4 (50 Hz to 15 000 Hz, 5 % THD, 4 Ω load, both channels driven)

Load impedance .... 4 Ω (4 Ω to 8 Ω (2 Ω for 1 ch) allowable)

Preout maximum output level
.... 4.0 V
(AVH-X5500BHS/AVH-X4500BT)

Preout maximum output level
.... 2.0 V
(AVH-X3500BHS/AVH-X2500BT/AVH-X1500DVD)

Equalizer (8-Band Graphic Equalizer):

     Frequency .... 40 Hz/80 Hz/200 Hz/400 Hz/1 kHz/2.5 kHz/8 kHz/10 kHz

     Gain .... ±12 dB

HPF:

     Frequency .... 50 Hz/63 Hz/80 Hz/100 Hz/125 Hz

     Slope .... −12 dB/oct

Subwoofer (mono):

     Frequency .... 50 Hz/63 Hz/80 Hz/100 Hz/125 Hz

     Slope .... −18 dB/oct

     Gain .... +6 dB to −24 dB

     Phase .... Normal/Reverse

Bass boost:

     Gain .... +12 dB to 0 dB

DVD Player

System .... DVD video, Video CD, CD, WMA, MP3, AAC, DivX, JPEG, MPEG player

Usable discs .... DVD video, Video CD, CD, CD-R/RW, DVD-R/RW/R DL

Region number 1

Frequency response .... 5 Hz to 44 000 Hz (with DVD, at sampling frequency 96 kHz)

Signal-to-noise ratio .... 96 dB (1 kHz) (IHF-A network) (RCA level)
(AVH-X5500BHS/AVH-X4500BT)

Signal-to-noise ratio .... 91 dB (1 kHz) (IHF-A network) (RCA level)
(AVH-X3500BHS/AVH-X2500BT/AVH-X1500DVD)

Output level:

     Video .... 1.0 Vp-p/75 Ω (±0.2 V)

Number of channels .... 2 (stereo)

MP3 decoding format .... MPEG-1 & 2 Audio Layer 3

WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11, 12 (2 ch audio) (Windows Media Player)

AAC decoding format .... MPEG-4 AAC (iTunes encoded only) (.m4a) (Ver. 10.6 and earlier)

JPEG:

     JPEG decoding format
     .... .jpeg, .jpg, .jpe

     Pixel Sampling 4:2:2, 4:2:0

     Decode Size .... MAX:8 192(H) × 7 680(W), MIN:32(H) x 32(W)

DivX decoding format .... Home Theater Ver. 3, 4, 5.2, 6 (Except ultra and HD) (.avi, .divx)

MPEG video decoding format
.... MPEG1, MPEG2, MPEG4

USB

USB standard specification
.... USB 1.1, USB 2.0 full speed (For video files) USB 2.0 high speed (For audio files)

Maximum current supply
.... 1.0 A

USB Class .... MSC (Mass Storage Class)

File system FAT16, FAT32

MP3 decoding format ...... MPEG-1 & 2 Audio Layer 3

WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11, 12 (2 ch audio) (Windows Media Player)

AAC decoding format .... MPEG-4 AAC (iTunes encoded only) (Ver. 10.6 and earlier)

WAV:

     WAV signal format .... Linear PCM, MS ADPCM (.wav)

     Sampling Frequency
     .... Linear PCM:16 kHz, 22.05 kHz, 24 kHz, 32 kHz, 44.1 kHz, 48 kHz MS ADPCM:22.05 kHz, 44.1 kHz

JPEG:

     JPEG decoding format
     .... .jpeg, .jpg, .jpe

     Pixel Sampling 4:2:2, 4:2:0

     Decode Size .... MAX:8 192(H) x 7 680(W), MIN:32(H) x 32(W)

DivX decoding format .... Home Theater Ver. 3, 4, 5.2, 6 (Except ultra and HD) (.avi, .divx)

MPEG video decoding format
.... MPEG1, MPEG2, MPEG4

FM tuner

Frequency range .... 87.9 MHz to 107.9 MHz

Usable sensitivity .... 9 dBf (0.8 μV/75 Ω, mono, S/N: 30 dB)

Signal-to-noise ratio .... 80 dB (digital broadcasting) (IHF-A network)
(AVH-X5500BHS/AVH-X3500BHS)

Signal-to-noise ratio .... 72 dB (analog broadcasting) (IHF-A network)

AM tuner

Frequency range .... 530 kHz to 1 710 kHz (10 kHz)

Usable sensitivity .... 25 μV (S/N: 20 dB)

Signal-to-noise ratio .... 80 dB (digital broadcasting) (IHF-A network)
(AVH-X5500BHS/AVH-X3500BHS)

Signal-to-noise ratio .... 62 dB (analog broadcasting) (IHF-A network)

Bluetooth

(AVH-X5500BHS/AVH-X4500BT/AVH-X3500BHS/AVH-X2500BT)

Version .... Bluetooth 3.0 certified

Output power .... +4 dBm Maximum (Power class 2)

CEA2006 Specifications

Power output .... 14 W RMS × 4 Channels (4 Ω and ≤ 1 % THD+N)

S/N ratio .... 91 dBA (reference: 1 W into 4 Ω)

Note

Specifications and the design are subject to modifications without notice.