PIONEER

Owner's Manual

DVD RDS AV RECEIVER

AVH-5400DVD

DOLBY
DIGITAL

DIVX™

SDHC™

DVD
VIDEO™

SD™

English

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.*

Contents

IMPORTANT SAFEGUARDS

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

1 **Read this manual fully and carefully before operating your display.**
2 **Keep this manual handy as a reference for operating procedures and safety information.**
3 **Pay close attention to all warnings in this manual and follow the instructions carefully.**
4 **Do not allow other persons to use this system until they have read and understood the operating instructions.**
5 **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.**
6 **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.**
7 **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.**
8 **Never use headphones while driving.**
9 **To promote safety, certain functions are disabled unless the parking brake is on, and the vehicle is not in motion.**
10 **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 DVD 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.

Precautions

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

Passengers in the rear seat can also watch moving images or still images if you connect this unit to a display using the **REAR MONITOR OUTPUT**.

⚠ WARNING

NEVER install the rear display in a location where the driver can watch a DVD 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.

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.

Information to User

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 69).

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. We recommend that you familiarize yourself with the functions and their operation by reading through the manual before you begin using this unit. It is especially important that you read and observe **WARNING**s and **CAU-TION**s in this manual.

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
300 Allstate Parkway
Markham, Ontario L3R 0P2
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.
   Serial number

Protecting your unit from theft

The front panel can be detached to deter theft.
• If the front panel is not detached from the head unit within four seconds of turning off the ignition, a warning tone will sound.
• You can turn off the warning tone. Refer to *Switching the warning tone* on page 38.
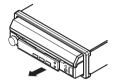
⚙ Important

• Handle gently when removing or attaching the front panel.
• Avoid subjecting the front panel to excessive shock.
• Keep the front panel out of direct sunlight and high temperatures.
• If removed, replace the front panel on the unit before starting up your vehicle.
• To avoid damaging the device or vehicle interior, remove any cables and devices attached to the front panel before detaching it.

Removing the front panel

● **Pinch the top and bottom of its right side and pull the front panel out.**
Take care not pinch it too tightly or to drop it, and also avoid contact with water or other fluids to prevent permanent damage.

Re-attaching the front panel

1 **Slide the front panel to the left.**
The front panel and the head unit are connected on the left side. Make sure that the front panel has been properly connected to the head unit.

2 **Press the right side of the front panel until it is firmly seated.**
■ If you can't attach the front panel to the head unit successfully, try again. Forcing the front panel into place may result in damage.

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.**

Before you start

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

RESET button

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

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. Refer to *Adjusting the response positions of the touch panels (Touch Panel Calibration)* on page 43.

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
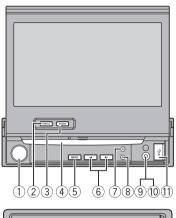
Point the remote control in the direction of the front panel to operate.
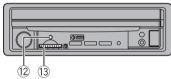
🔧 **Important**
- Do not store the remote control in high temperatures or direct sunlight.
- The remote control may not function properly in direct sunlight.
- Do not let the remote control fall onto the floor, where it may become jammed under the brake or accelerator pedal.

Head unit

	Part		Part
①	Volume/**MUTE**	⑧	**OPEN/CLOSE**
②	**MENU** Displaying the menu. Returning to the normal display.	⑨	AUX input jack (3.5 mm stereo/ video jack) Use to connect an auxiliary device.
③	**MODE** Turning the information display off.	⑩	Auto EQ microphone input jack Use to connect an auto EQ microphone.
④	Disc loading slot	⑪	USB port When connecting, open the USB connector lid.
⑤	**SRC/OFF**	⑫	**RESET**
⑥	◄/► (**TRACK/ SEEK**)	⑬	SD memory card slot
⑦	▲ (eject)		

⚠ **CAUTION**

- Use an optional Pioneer USB cable (CD-U50E) to connect the USB audio player/USB memory as any device connected directly to the unit will protrude out from the unit and may be dangerous.
- Do not use unauthorized products.

Notes
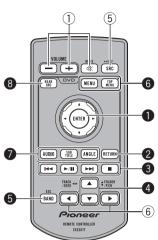
- Insert it with the contact surface facing down, and press on the card until it clicks and completely locks into place.
- Press and hold **MENU** to display **Picture Adjustment**.
  Refer to *Changing the picture adjustment* on page 43.

What's what

Remote control
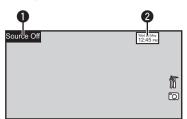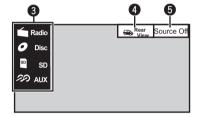
Part		Operation
❶	Thumb pad	Click to recall **Menu**. Use to select a menu on the DVD menu.
❷	**RETURN**	Press to display the PBC (playback control) menu during PBC playback.
❸	►/❚❚	Press to pause or resume playback.
	❙◄◄	Press to return to the previous track (chapter).
	►►❙	Press to go to the next track (chapter).
	■	Press to stop playback.
❹	▲/▼(**FOLDER/P.CH**)	Press to select the next/previous folder. Press to recall radio station frequencies assigned to preset tuning keys.

Part		Operation
❺	**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 discs with compressed audio and audio data (CD-DA) such as CD-EXTRA and MIXED-MODE CDs.
❻	**MENU**	Press to display the DVD menu during DVD playback.
	TOP MENU	Press to return to the top menu during DVD playback.
❼	**AUDIO**	Press to change the audio language during DVD playback. Press to switch audio output for Video CD/ DivX.
	SUBTITLE	Press to change the subtitle language during DVD/DivX playback.
	ANGLE	Press to change the viewing angle during DVD playback.
❽	**REAR SRC**	Not used.

What's what
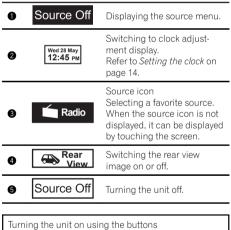
Basic operations of this unit

Touch panel keys

❶	Source Off	Displaying the source menu.
❷	Wed 28 May 12:45 PM	Switching to clock adjustment display. Refer to *Setting the clock* on page 14.
❸	Radio	Source icon Selecting a favorite source. When the source icon is not displayed, it can be displayed by touching the screen.
❹	Rear View	Switching the rear view image on or off.
❺	Source Off	Turning the unit off.

Turning the unit on using the buttons
⊡ Press **SRC/OFF** to turn the unit on.

Turning the unit off using the buttons
⊡ Press **SRC/OFF** and hold until the unit turns off.

Selecting a source using the buttons
⊡ Press **SRC/OFF** to cycle through the sources listed below:
Selecting a source using the touch panel keys
⊡ Touch the source icon and then touch the desired source name.
• **Radio** – Radio
• **AV** – AV input
• **Disc** – Built-in DVD player
• **USB** – USB
• **SD** – SD memory card
• **AUX** – AUX
• 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.
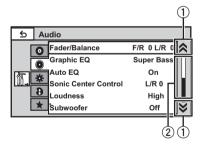
Adjusting the volume
⊡ Turn **MUTE** to adjust the volume.
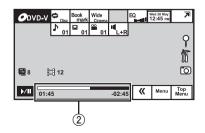
Note

When appropriately set up, the image from the rear view camera can be displayed automatically. For details, refer to *Setting the rear view camera (back up camera)* on page 38.

Operating the scroll icon and the scrubber bar

Basic operations

① Scroll icon
Appears when selectable items are hidden.
② Scrubber bar
Appears when the playback point can be specified or set by dragging.
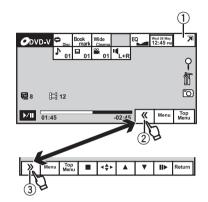
Viewing the hidden items
1 Touch the scroll icon or drag the scrubber bar to view any hidden items.
• Also, you can drag the list to view any hidden items.

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		Turning the display to simplified display. Returning to the normal display by touching the screen when playing moving images. Returning to the normal display by touching same icon when playing audio.
②	⟪	Viewing the hidden touch panel keys.
③	⟫	Shorten the touch panel area.

Common operations for menu settings/lists

⚲	Displaying the list menu. Starting the search function.
🛠	Displaying the menu. Refer to *Introduction of menu operations* on page 28.

	Displaying still images as a slide show when listening to another source. Viewing slide shows. Refer to *Introduction of still image playback operations* on page 20.
	Returning to the previous display. Returning to the previous list/category (the folder/category one level higher.)

Opening and closing the LCD panel

The LCD panel will open or close automatically when the ignition switch is turned on or off. You can turn off the automatic close/open function.
- Do not close the LCD panel by force with your hands. That will cause a malfunction.
- The automatic close/open function will operate the display as follows.
  — When the ignition switch is turned OFF while the LCD panel is opened, the LCD panel will close after six seconds.
  — When the ignition switch is turned ON again (or turned to ACC), the LCD panel will open automatically.
  — Removing or attaching the front panel will automatically close or open the LCD panel. (Refer to *Protecting your unit from theft* on page 8.)
- When the ignition switch is turned OFF after the LCD panel has been closed, turning the ignition switch ON again (or turning it to ACC) will not open the LCD panel. In this case, press **OPEN/CLOSE** to open the LCD panel.
- When closing the LCD panel, check to make sure that it has closed completely. If the LCD panel has stopped halfway, leaving it like this could result in damage.

⚠ 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.

● **Press OPEN/CLOSE to open the LCD panel.**
■ To close the LCD panel, press **OPEN/CLOSE** again.

Turning the LCD panel horizontally
When the LCD panel is upright and hinders the operation of the air conditioner, the panel can be turned horizontally temporarily.

● **Press and hold OPEN/CLOSE to turn the LCD panel horizontally.**
■ To return to the original position, press and hold **OPEN/CLOSE** again.
■ The LCD panel returns to the original position automatically, indicated with a beeping sound 10 seconds after operation.

Ejecting a disc
1 **Press ⏏ (eject).**

2 **Eject a disc.**

Ejecting an SD
1 **Remove the front panel.**
Refer to *Removing the front panel* on page 8.
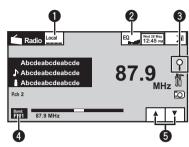
2 **Push an SD.**

3 **Eject an SD.**

Setting the clock
1 **Switch to Clock Adjustment display.**
Refer to *Basic operations of this unit* on page 12.

2 **Select the item to set.**

3 **Touch ▲ or ▼ to set the correct date and time.**

Tuner

Introduction of tuner operations

Touch panel keys

❶	Local	Turning local seek tuning on and off. Refer to *Tuning in to strong signals* on page 22.
❷	EQ	Switching the equalizer curves. Refer to *Using the equalizer* on page 29. Touch and hold for more than two seconds to turn the auto-equalizer on or off. Refer to *Using the auto-equalizer* on page 30.
❸	♀	Displaying the preset channel list. Refer to *Storing and recalling stations* on page 22. Refer to *Storing the strongest stations* on page 22.
❹	Band:	Selecting a band (FM1, FM2, FM3 for FM or AM).
❺	▲ ▼	Recalling radio station frequencies assigned to preset tuning keys.

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

Seek tuning using the buttons
1 Press and hold ◄ or ► (**TRACK/SEEK**).
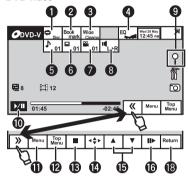
Playing moving images
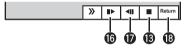
Introduction of video playback operations

You can view DVD/DVD-R/DVD-RW/CD/CD-R/CD-RW/USB/SD.

DVD video

Video CD

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

Touch panel keys

❶		Selecting the repeat range. Refer to *Repeating playback* on page 23.
❷	**Book mark**	During playback, touch the point at which you want to resume playback the next time the disc is loaded. Refer to *Resume playback (Bookmark)* on page 23.
❸	**Wide**	Changing the screen mode. Refer to *Changing the wide screen mode* on page 26.

❹	**EQ**	Switching the equalizer curves. Refer to *Using the equalizer* on page 29. Touch and hold for more than two seconds to turn the auto-equalizer on or off. Refer to *Using the auto-equalizer* on page 30.
❺	♪	Switching between audio languages during playback. Refer to *Changing audio language during playback (Multi-audio)* on page 24.
❻		Switching between subtitle languages during playback. Refer to *Changing the subtitle language during playback (Multi-subtitle)* on page 24.
❼		Switching among viewing angles during playback. Refer to *Changing the viewing angle during playback (Multi-angle)* on page 24.
❽		Switching the audio output, when playing video discs recorded with LPCM audio. Refer to *Selecting audio output* on page 25. Switching between stereo and monaural audio output, when playing Video CD discs.
❾		Starting the search function. Refer to *Searching for the part you want to play* on page 24. Refer to *Selecting files from the file name list* on page 25.
❿	▶/❙❙	Pausing playback. Returning to normal playback during paused, slow motion, or frame-by-frame playback.
⓫	**Menu**	Displaying the DVD menu during DVD playback. Refer to *Operating the DVD menu* on page 22.
⓬	**Top Menu**	Returning to the top menu during DVD playback.

Playing moving images

⑬	■	Stopping playback. Stopping playback at the point set in Resume playback. Touch one more time to stop playback completely when playing DivX. Refer to *Resume playback (Bookmark)* on page 23.
⑭	◄ ♦ ►	Displaying arrow keys to operate the DVD menu. Refer to *Using the arrow keys* on page 22.
⑮	▲ ▼	Skipping to another title. Selecting a folder during DivX file playback.
⑯	II►	Moving ahead one frame at a time during playback. Refer to *Frame-by-frame playback* on page 23. Touch and hold for more than two seconds to slow down playback speed. Speeding up the playback speed in four steps during slow motion playback on DVD video/Video CD.
⑰	◄II	Speeding down the playback speed in four steps, during slow motion playback on Video CD.
⑱	**Return**	Returning to the specified scene to which the DVD currently being played has been preprogrammed to return. Refer to *Return to the specified scene* on page 24.
⑲	**Media**	Switching between media file types to play on DVD/CD/USB/SD. Refer to *Switching the media file type* on page 22.

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 page 22 and *PBC playback* on page 25.
* 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 35.
* 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 26.

Ejecting a disc
* Refer to *Ejecting a disc* on page 14 or *Ejecting an SD* on page 14.

Selecting a chapter using the buttons
1. Press ◄ or ► (**TRACK/SEEK**).

Fast forwarding or reversing using the buttons
1. Press and hold ◄ or ► (**TRACK/SEEK**).
* Fast forward/fast rewind may not always be possible on some discs. In such cases, normal playback will automatically resume.

Notes
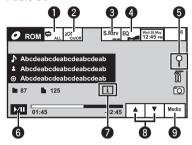
* This DVD player can play back a DivX file recorded on CD-R/RW or DVD-R/RW. (Please see the following section for files that can be played back. Refer to *DivX video files* on page 63.)
* Do not insert anything other than a DVD (-R/-RW) or CD (-R/-RW) into the disc loading slot.
* If the bookmark function is on, DVD playback resumes from the selected point. For more details, refer to *Resume playback (Bookmark)* on page 23.
* 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.

Playing moving images

Playing audio

Introduction of sound playback operations

You can listen to DVD-R/DVD-RW/CD/CD-R/CD-RW/USB/SD sound files.

Audio CD

Touch panel keys

❶		Selecting the repeat range. Refer to *Repeating playback* on page 23.
❷		Playing songs in random order. Refer to *Random play* on page 23.
❸	**S.Rtrv**	Switching the S.Rtrv (sound retriever) function setting when playing audio. Refer to *Using S.Rtrv (sound retriever)* on page 25.
❹	**EQ**	Switching the equalizer curves. Refer to *Using the equalizer* on page 29. Touch and hold for more than two seconds to turn the auto-equalizer on or off. Refer to *Using the auto-equalizer* on page 30.
❺		Displaying a list of track titles to select songs on a CD. Refer to *Selecting tracks from the track title list* on page 25. Displaying the file name list to select the files. Refer to *Selecting files from the file name list* on page 25.
❻	**▶/❚❚**	Pausing and starting playback.
❼	**i**	Switching the text information to display on this unit when playing MP3/WMA/AAC files.
❽	**▲** **▼**	Selecting a folder.
❾	**Media**	Switching between media file types on a DVD/CD/USB/SD. Refer to *Switching the media file type* on page 22.

Playing back sound ① Insert the disc into the disc loading slot with the label side up. Playback will automatically start. • When the source icon is not displayed, it can be displayed by touching the screen.
Ejecting a disc • Refer to *Ejecting a disc* on page 14 or *Ejecting an SD* on page 14.
Selecting a track using the buttons ① Press ◄ or ► (**TRACK/SEEK**).
Fast forwarding or reversing using the buttons ① Press and hold ◄ or ► (**TRACK/SEEK**).

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.
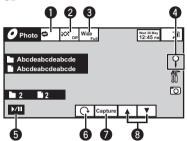
- If the characters recorded on the disc are not compatible with this unit, those characters will not be displayed.
- Disconnect the USB portable audio player/ USB memory when you are done using it.
- When you select **Clock** or **Speana** on *Selecting the background display* on page 42, the artwork is not displayed.

Playing audio

Playing still images

Introduction of still image playback operations

You can view still images saved in CD-R/CD-RW/USB/SD.

CD

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

When loading a CD-R/CD-RW/USB/SD containing JPEG picture files, this unit starts a slideshow from the first folder/picture on the disc/device. The player displays the pictures in each folder on the CD-R/CD-RW in alphabetical order by file name.
The table below shows the controls for viewing a slideshow.

Touch panel keys

❶	⇆	Selecting the repeat range. Refer to *Repeating playback* on page 23.
❷	⤬	Playing files in a random order. Refer to *Random play* on page 23.
❸	**Wide**	Changing the screen mode. Refer to *Changing the wide screen mode* on page 26.
❹	♀	Displaying the file name list to select the files. Refer to *Selecting files from the file name list* on page 25.

❺	▶/❚❚	Starting or pausing the slideshow.
❻	↻	Rotating the displayed picture 90° clockwise.
❼	**Capture**	Capturing an image in JPEG files. Refer to *Capture an image in JPEG files* on page 26.
❽	▲ ▼	Selecting a folder.
❾	**Media**	Switching between media file types. Refer to *Switching the media file type* on page 22.

Playing still images
1 Insert the disc into the disc loading slot with the label side up.
 Playback will automatically start.
• When the source icon is not displayed, it can be displayed by touching the screen.

Ejecting a disc.
• Refer to *Ejecting a disc* on page 14 or *Ejecting an SD* on page 14.

Selecting a file using the buttons
1 Press ◀ or ▶ (**TRACK/SEEK**).

Fast file searching
1 Press and hold ◀ or ▶ (**TRACK/SEEK**).
• You can search 10 JPEG files at a time.
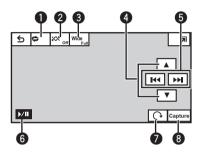
Notes
• This unit can play back a JPEG file recorded on CD-R/CD-RW/SD/USB storage device. (Please see the following section for files that can be played back. Refer to *JPEG picture files* on page 63.)
• Files are played back in file number order and folders are skipped if they contain no files. (If folder **01** (ROOT) contains no files, playback commences with folder **02**.)

Playing still images

Introduction of still image playback as a slideshow operations

You can view still images saved in CD-R/CD-RW/USB/SD as a slideshow when listening to another source.

The table below shows the controls for viewing a slideshow.

Touch panel keys

❶	⮂	Selecting the repeat range. Refer to *Repeating playback* on page 23.
❷	⤬	Playing files in a random order. Refer to *Random play* on page 23.
❸	**Wide**	Changing the screen mode. Refer to *Changing the wide screen mode* on page 26.
❹	▲ ▼	Selecting a folder.
❺	◄◄ ►►|	Selecting a file.
❻	►/‖	Starting or pausing the slideshow.

❼	↻	Rotating the displayed picture 90° clockwise.
❽	**Capture**	Capturing an image in JPEG files. Refer to *Capture an image in JPEG files* on page 26.

1   Start slideshow when listening to another source.
Refer to *Common operations for menu settings/lists* on page 13.

📷	Displaying still images as a slide show.

2   Select the device containing the files that you want to display.
- **Disc** – Built-in DVD player
- **USB** – USB
- **SD** – SD memory card
■ To cancel searching, touch **Cancel**.

Note
When the USB or SD source is selected, this unit cannot view still images on USB/SD as a slideshow.

Playing still images

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 screen.
Refer to *Introduction of tuner operations* on page 15.
The preset screen appears in the display.

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

3 Touch one of the preset tuning keys 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 *Introduction of tuner operations* on page 15.
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 lets you tune in to only those radio stations with sufficiently strong signals for good reception.

FM: off — ■ — ■■ — ■■■ — ■■■■
AM: off — ■■ — ■■■
The highest level setting allows reception of only the strongest stations, while lower levels allow the reception of weaker stations.

Switching the media file type

When playing a disc containing a mixture of various media file types, such as DivX and MP3, you can switch between media file types to play.
Audio data (CD-DA) and JPEG picture files on DVD-R/RW/ROM cannot be played back on this unit.

CD (audio data (CD-DA))—**Music/ROM** (compressed audio)—**Video** (DivX video files)—**Photo** (JPEG picture files)

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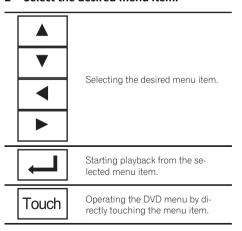
(Function for DVD video)
Some DVDs allow you to make a selection from the disc contents using a menu.

Using the arrow keys

1 Display arrow keys to operate the DVD menu.
Refer to *Playing moving images* on page 16.

2 Select the desired menu item.

▲ ▼ ◄ ►	Selecting the desired menu item.
↵	Starting playback from the selected menu item.
Touch	Operating the DVD menu by directly touching the menu item.

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

Detailed instructions

Key	Returning to the normal DVD video display.
◀ ▲ ▼ ▶	Displaying arrow keys.

■ 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

Songs/files can be played back in random 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

- **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
- **All** – Repeat all files

- 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 title 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 select USB or SD source, the repeat play range changes to **All**.
- If you perform track search or fast forward/ reverse during **File**, the repeat play range changes to **Folder**.
- If you perform title/chapter search, fast forward/reverse, frame-by-frame playback or slow motion playback during **Chapter**, the repeat play range changes to **OFF**.
- 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.

Resume playback (Bookmark)

(Function for DVD video)
By using the Bookmark function, you can resume playback from a selected scene the next time the disc is loaded.

The selected scene will be bookmarked so that playback resumes from that point next time.
- To clear the bookmark on a disc, touch and hold the button during playback.
- The oldest bookmark is replaced by the new one.

Frame-by-frame playback

(Function for DVD video/video CD/DivX file)

Note
Images during frame-by-frame playback may be unclear for some discs.

Slow motion playback
Notes
- 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.

Detailed instructions

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 *Playing moving images* on page 16.

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 *Playing moving images* on page 16.

Changing audio language during playback (Multi-audio)

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.

 Notes
- 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 32.

- Depending on the setting, the video may not be played back with the audio system used to record the DVD.
- You will return to normal playback if you change the **Audio** during fast forward/fast rewind, pause or slow motion playback.

Changing the subtitle language during playback (Multi-subtitle)

With DVDs/DivX files featuring multi-subtitle recordings, you can switch between subtitle languages during playback.

 Notes
- 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 32.
- You will return to normal playback if you change the **Subtitle** during fast forward/fast rewind, pause or slow motion playback.

Changing the viewing angle during playback (Multi-angle)

With DVDs featuring multi-angle (scenes shot from multiple angles) recordings, you can switch among viewing angles during 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 33.

Note
You will return to normal playback if you change the viewing angle during fast forward/fast rewind, pause or slow motion playback.

Return to the specified scene

(Function for DVD video)

This function cannot be used if a specified scene has not been preprogrammed on the DVD disc.

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.

• **L+R** – left and right
• **Left** – left
• **Right** – right
• **Mix** – mixing left and right

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 *Playing moving images* on page 16.

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 *Playing audio* on page 18.

2   Touch your favorite track title.
Playback begins.

Selecting files from the file name list

(Function for compressed audio/DivX/JPEG)
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   Display the file (or folder) name list.
Refer to *Playing audio* on page 18.
Refer to *Introduction of still image playback operations* on page 20.

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 **01** (ROOT) contains no files, playback commences with folder **02**.

3   Start playback of the selected list.

| ▶ | Starting playback of the selected list. |

Using S.Rtrv (sound retriever)

Automatically enhances compressed audio and restores rich sound.

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

Detailed instructions

Detailed instructions

Playing DivX® VOD content

Some DivX VOD (video on demand) content may only be playable a fixed number of times. When you load a disc containing this type of content, the remaining number of times it can be played is shown on-screen. You can then decide whether or not to play the disc.
• If there is no limit to the number of times the DivX VOD content can be viewed, then you may load the disc into your player and play the content as often as you like, and no message will be displayed.
• You can confirm the number of times that the content can be played by checking the number displayed after **Remaining 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 35.
• 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**.

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   Pause the slideshow when the desired image is displayed.
Refer to *Introduction of still image playback operations* on page 20.
Refer to *Introduction of still image playback as a slideshow operations* on page 21.

2   Capture the image.
Refer to *Introduction of still image playback operations* on page 20.
Refer to *Introduction of still image playback as a slideshow operations* on page 21.

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**.

Changing the wide screen mode

You can select a desired mode for enlarging a 4:3 picture to a 16:9 picture.

1   Display the screen mode.
Refer to *Introduction of video playback operations* on page 16.
Refer to *Introduction of still image playback operations* on page 20.
Refer to *Introduction of still image playback as a slideshow operations* on page 21.

2   Touch the desired wide mode setting.

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

Just (just)
The picture is enlarged slightly at the center and the amount of enlargement increases horizontally toward the edges of the screen, enabling you to enjoy a 4:3 picture without sensing any disparity even when viewing on a wide screen.

Cinema (cinema)
The picture is enlarged by the same proportion as **Full** or **Zoom** in the horizontal direction and by an intermediate proportion between **Full** and **Zoom** in the vertical direction; ideal for a cinema-sized picture (wide screen picture) where captions lie outside the picture.

Detailed instructions

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).
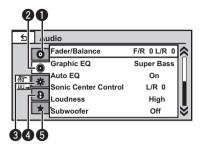
Normal (normal)

The 4:3 picture is displayed as it is, giving you no sense of disparity since its 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 **Cinema** or **Zoom** mode.

Detailed instructions

Introduction of menu operations

1 Display menus.
Refer to *Common operations for menu settings/lists* on page 13.

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

Touch panel keys

❶		Video Setup menu Refer to *Setting up the DVD player* on page 32.
❷		Audio function menu Refer to *Audio Adjustments* on the next page.
❸		System menu Refer to *System settings* on page 36.
❹		Entertainment menu Refer to *Entertainment settings* on page 41.
❺		Custom menu You can choose menus within each menu (Audio function menu, etc.) and register them to this custom menu. Refer to *Customizing menus* on page 42.

Notes
- You can display the **Video Setup** menu when a **Disc**, **USB** or **SD** 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.

Menu operations

Audio Adjustments

Note

When selecting FM as the source, you cannot switch to **Source Level Adjuster**.

Using fader/balance adjustment

You can change the fader/balance setting to provide an ideal listening environment for all of the occupied seats.

1   Display the audio function menu.
Refer to *Introduction of menu operations* on the previous page.

2   Touch Fader/Balance on the audio function menu.

3   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.
■ The front/rear speaker balance cannot be adjusted when the rear output setting is **Subwoofer**. Refer to *Setting the rear output and subwoofer controller* on page 36.

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

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
Powerful	Powerful
Natural	Natural

Display	Equalizer curve
Vocal	Vocal
Custom1	Custom 1
Custom2	Custom 2
Flat	Flat
Super Bass	Super bass

• 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   Display the audio function menu.
Refer to *Introduction of menu operations* on the previous page.

2   Touch Graphic EQ on the audio function menu.
■ You can select **Graphic EQ** when **Auto EQ** function is off.

3   Touch ◄ or ► to select the desired item.
Powerful—Natural—Vocal—Custom1—Custom2—Flat—Super Bass

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   Display the audio function menu.
Refer to *Introduction of menu operations* on the previous page.

2 Touch Graphic EQ on the audio function menu.

3 Touch ◄ or ► to select the desired item.
Powerful—Natural—Vocal—Custom1—
Custom2—Flat—Super Bass

4 Touch the Equalizer band to adjust.

5 Touch ▲ or ▼ to adjust the level of the equalizer band.
Range: **+12dB** to **–12dB**
▪ You can then select another band and adjust the level.

Using the auto-equalizer

The auto-equalizer is an equalizer curve created by auto EQ (refer to *Auto EQ (auto-equalizing)* on page 39).
You can turn the auto-equalizer on or off.
If you connect an optional microphone to this unit, you can use this function.

1 Display the audio function menu.
Refer to *Introduction of menu operations* on page 28.

2 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 Display the audio function menu.
Refer to *Introduction of menu operations* on page 28.

2 Touch Sonic Center Control on the audio function menu.

3 Touch ◄ or ► to select a listening position.
Range: **Left:7** to **Right:7**

Adjusting loudness

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

1 Display the audio function menu.
Refer to *Introduction of menu operations* on page 28.

2 Touch Loudness on the audio function menu.

3 Touch ◄ or ► to select a desired level.
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 Display the audio function menu.
Refer to *Introduction of menu operations* on page 28.

2 Touch Subwoofer on the audio function menu.

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

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

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

6 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.

Menu operations

Boosting the bass

You can boost the bass level.

1   Display the audio function menu.
Refer to *Introduction of menu operations* on
page 28.

2   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   Display the audio function menu.
Refer to *Introduction of menu operations* on
page 28.

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

Adjusting source levels

With SLA (source level adjustment), the vo-
lume 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   Display the audio function menu.
Refer to *Introduction of menu operations* on
page 28.

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

**3   Touch Source Level Adjuster on the
audio function menu.**

**4   Touch ▲ or ▼ to adjust the source vo-
lume.**
Range: **+4** to **–4**

 Notes
• The AM volume level can also be adjusted
  with this function.
• Video CD, CD, compressed audio and DivX
  are automatically set to the same source level
  adjustment volume.

Menu operations

Setting up the DVD player

Setting the subtitle language

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

1 Display the Video Setup menu.
Refer to *Introduction of menu operations* on page 28.

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

3 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 icon during playback. (Refer to *Playing moving images* on page 16.)
- The setting made here will not be affected even if the subtitle language is switched during playback using **Subtitle**.

When you select Others

A language code input display is shown when **Others** is selected. Refer to *Language code chart for DVD* on page 68.

1 Touch 0 to 9 to input the language code.
▪ To cancel the entered numbers, touch **C**.

2 Registering the code.

↵	Registering the code.

Setting the audio language

You can set the preferred audio language.

1 Display the Video Setup menu.
Refer to *Introduction of menu operations* on page 28.

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

3 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 **Audio** during playback. (Refer to *Playing moving images* on page 16.)
- The setting made here will not be affected even if the audio language is switched during playback using **Audio**.

Setting the menu language

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

1 Display the Video Setup menu.
Refer to *Introduction of menu operations* on page 28.

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

3 Touch the desired language.
The menu language is set.

▪ If you have selected **Others**, refer to *When you select* **Others** on this page.

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

Menu operations

Setting the multi-angle DVD display

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

1   Display the Video Setup menu.
Refer to *Introduction of menu operations* on page 28.

2   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 **REAR MONITOR OUTPUT**.

• 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   Display the Video Setup menu.
Refer to *Introduction of menu operations* on page 28.

2   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 slide show interval

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

1   Display the Video Setup menu.
Refer to *Introduction of menu operations* on page 28.

2   Touch Time Per Photo Slide on the Video Setup menu to select the slide show 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 Display the Video Setup menu.
Refer to *Introduction of menu operations* on page 28.

2 Touch Parental on the Video Setup menu.

3 Touch 0 to 9 to input a four digit code number.
■ To cancel the entered numbers, touch **C**.

4 Registering the code.

←	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 Display the Video Setup menu.
Refer to *Introduction of menu operations* on page 28.

2 Touch Parental on the Video Setup menu.

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

4 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.

5 Touch 1 to 8 to select the desired level.

6 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 Display the Video Setup menu.
Refer to *Introduction of menu operations* on page 28.

Menu operations

2 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 Display the Video Setup menu.
Refer to *Introduction of menu operations* on page 28.

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

3 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 Display the Video Setup menu.
Refer to *Introduction of menu operations* on page 28.

2 Touch DivX VOD on the Video Setup menu.

3 Touch Deregistration Code.
- To cancel deregistration, touch **Cancel**.

4 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 Display the Video Setup menu.
Refer to *Introduction of menu operations* on page 28.

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

Menu operations

System settings

Switching the auxiliary setting

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

1   Display the system menu.
Refer to *Introduction of menu operations* on page 28.

2   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   Display the system menu.
Refer to *Introduction of menu operations* on page 28.

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

Setting the rear output and subwoofer controller

This unit's rear speaker leads can be connected with full-range speaker (**Full**) or subwoofer (**Subwoofer**). If you switch the rear speaker setting to **Subwoofer**, you can connect the lead directly to a subwoofer without using an auxiliary amp.
- When no subwoofer is connected to the rear output, select **Full** (full-range speaker).
- If the rear speaker leads are connected with a subwoofer, select **Subwoofer** (subwoofer).

This unit's rear output (RCA rear output) can be used for subwoofer (**Subwoofer**) or rear (**Rear Speaker**) connection.
- When no subwoofer is connected to the rear output, select **Rear Speaker** (Rear).
- When a subwoofer is connected to the rear output, select **Subwoofer** (subwoofer).

1   Turn the unit off.
Refer to *Basic operations of this unit* on page 12.

2   Display the system menu.
Refer to *Introduction of menu operations* on page 28.

3   Touch Rear Speaker on the system menu.
Rear Speaker items are displayed.
- **Rear Speaker** – Adjust the rear speaker connection.
- **Preout** – Adjust the preout connection.

4   Touch Rear Speaker item to select the desired rear speaker setting appears.
- **Rear Speaker** can be set **Full** or **Subwoofer**.
- **Preout** can be set **Subwoofer** or **Rear**.

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 30).
- If you change this setting, subwoofer output in the audio menu will return to the factory settings.

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   Display the system menu.
Refer to *Introduction of menu operations* on page 28.

2   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.)

Selecting the menu language

The menu language can be selected from four languages.

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:
  — System menu
  — Video Setup
  — On-screen display
  — 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   Display the system menu.
Refer to *Introduction of menu operations* on page 28.

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

3   Touch the desired language.
English (English)—**Français** (French)—
Español (Spanish)—**Português** (Portuguese)

Setting the automatic open function

To prevent the display from hitting the shift lever of an automatic vehicle when it is in the **P** (park) position, or when you do not wish the display to open/close automatically, you can set the automatic open function to manual mode.

1   Display the system menu.
Refer to *Introduction of menu operations* on page 28.

2   Touch Auto Flap to select whether to open/close the display automatically or manually.
Each time you touch **Auto Flap** the setting switches between:
- **On** – The LCD panel will open or close automatically when the ignition switch is turned on or off.
- **Off** – You have to press **OPEN/CLOSE** to open/close the LCD panel.

Adjusting the LCD panel slide position

You can adjust the LCD panel slide position so that the panel is set back or forward.

1   Display the system menu.
Refer to *Introduction of menu operations* on page 28.

2   Touch Flap Set Back.

3 Touching the Flap Set Back keys allows you to move the LCD panel back and forth.

→	The LCD panel slides to the back.
←	The LCD panel slides to the front.

Adjusting the LCD panel angle

Important

• If you can hear the LCD panel knocking against your vehicle's console or dashboard, touch and hold **OPEN/CLOSE** to temporarily level the LCD panel.
• When adjusting the LCD panel angle, be sure to touch and hold **OPEN/CLOSE**. Forcibly adjusting the LCD panel by hand may damage it.

1 Display the system menu.
Refer to *Introduction of menu operations* on page 28.

2 Touch Display Tilt.

3 Touch the Display Tilt keys to adjust the LCD panel to an easily viewable angle.

−	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.

Switching the warning tone

If the front panel is not detached from the head unit within four seconds of turning off the ignition, a warning tone sounds. You can turn off the warning tone.

1 Display the system menu.
Refer to *Introduction of menu operations* on page 28.

2 Touch DT.WARNING to turn the warning tone on.
▪ To turn the warning tone off, touch **DT.WARNING** again.

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 (**REAR VIEW CAMERA IN**) when a rear view camera is installed on your car and the gear shift is moved to the **REVERSE (R)** position. (For more details, consult your dealer.)
• After you set up the rear view camera setting, move the gear shift 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.
- When the **Camera Polarity** is on, press and hold **MUTE** to watch the rear view camera video.
- 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 using the touch panel keys* on page 12.

1 Display the system menu.
Refer to *Introduction of menu operations* on page 28.

2 Touch Camera Polarity on the system menu to select the appropriate setting.
- **Battery** – When the polarity of the connected lead is positive while the gear shift is in **REVERSE (R)** position
- **Ground** – When the polarity of the connected lead is negative while the gear shift is in **REVERSE (R)** position
- **Off** – When a rear view camera is not connected to this unit

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 Display the system menu.
Refer to *Introduction of menu operations* on page 28.

2 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

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

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.

⚠ 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.

Menu operations

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 29.)
  — The equalizer curve switches to **Flat**. (Refer to *Recalling equalizer curves* on page 29.)
  — The front, center and rear speakers will automatically be adjusted to a high pass filter setting.
- Previous settings for auto EQ will be overwritten.
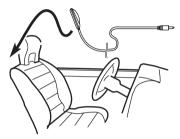
Performing auto EQ

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.
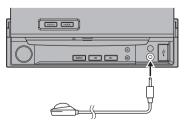
3   Turn the ignition switch to ON or ACC.
If the car's air conditioner or heater is turned on, turn it off. Noise from the fan in the air conditioner or heater may prevent correct auto EQ.

4   Display the system menu.
Refer to *Introduction of menu operations* on page 28.

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

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

7   Touch Start to start auto EQ.

Menu operations

8   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, **Complete** 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 59.)
■ It takes about nine minutes for auto EQ measurement to be completed when all the speakers are connected.
■ To stop auto EQ, touch **Stop**.
■ To cancel auto EQ measurement mode during this procedure, touch the following touch panel key.

↰	Canceling auto EQ measurement mode.

9   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.

Entertainment settings

Selecting the illumination color

This unit is equipped with multiple-color illumination.

Direct selection from preset illumination colors

You can select an illumination color from the color list.

1   Display the entertainment menu.
Refer to *Introduction of menu operations* on page 28.

2   Touch Appearance.

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

Customizing the illumination color

1   Display the entertainment menu.
Refer to *Introduction of menu operations* on page 28.

2   Touch Appearance.

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 customized 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.

Menu operations

Selecting the OSD color

The OSD color can be changed.

1   Display the entertainment menu.
Refer to *Introduction of menu operations* on page 28.

2   Touch Appearance.

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   Display the entertainment menu.
Refer to *Introduction of menu operations* on page 28.

2   Touch Background.

3   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.

Customizing menus

1   Display menu columns to register.
Refer to *Introduction of menu operations* on page 28.
You can customize menus except **Video Setup** menu.

2   Touch and hold the menu column to register it.
■ To cancel registration, touch and hold the menu column again.

3   Display the custom menu and choose a registered menu.
Refer to *Introduction of menu operations* on page 28.

Note
You can register up to 12 columns.

Other Functions

Changing the picture adjustment

You can adjust the **Brightness** (brightness), **Contrast** (contrast), **Color** (color), **Hue** (hue), **Dimmer** (dimmer), **Temperature** (temperature) and **Black Level** (black level) for each source and rear view camera.

• You cannot adjust **Color**, **Hue** and **Black Level** for the audio source.

1   Press and hold MENU to display Picture Adjustment.
The adjustment function names are displayed.

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

Rear View	Adjusting the **Picture Adjustment** for the rear view camera.
Source	Adjusting the **Picture Adjustment** for the source.

3   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
• **Black Level** – Emphasizes the dark portions of images making the difference between bright and dark more distinct

▪ You cannot adjust the picture adjustment for the rear view camera when **Camera Polarity** is set to **Off**. (Refer to *Setting the rear view camera (back up camera)* on page 38.)

▪ With some rear view cameras, picture adjustment may not be possible.

4   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**.

5   Touch Black Level to adjust.
▪ **Black Level** can be set on or off.

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.

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.

• 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 unit off.
Refer to *Basic operations of this unit* on page 12.

2   Press and hold MENU to display Picture Adjustment.

Other Functions

**3 Press and hold MENU to start Touch
Panel Calibration.**
The 4-point touch panel adjustment screen ap-
pears.

**4 Touch each of the arrows on the four
corners of the screen.**
■ To cancel the adjustment, press and hold
MENU.

**5 Press MENU to complete 4-point adjust-
ment.**
Data for the adjusted position is saved.
■ Do not turn off the engine while the data is
being saved.

**6 Press MENU to proceed to 16-point ad-
justment.**
The 16-point touch panel adjustment screen
appears.
■ To cancel the adjustment, press and hold
MENU.

**7 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.

**8 Press and hold MENU to complete the
adjustment.**

Using an AUX source

A separately sold auxiliary device such as a
VCR or portable device can be connected to
this unit. When connected, the auxiliary device
is automatically recognized as an AUX source
and is assigned to **AUX**.

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*
A portable audio/video players can be con-
nected to this unit via mini plug cable.
• A portable audio/video player can be con-
  nected by using a 3.5 mm plug (4 pole) with
  an RCA cable (sold separately). However,
  depending on the cable, a reverse connec-
  tion between the red (right side audio)
  cable and yellow (video) cable may be re-
  quired 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 *Installation* on the next page.
Refer to *What's what* on page 10.

Installation

Connecting the units

⚠️ **WARNING**

- 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. Also, rear displays should not be in a location where they are visibly distracting to the driver.
- In some countries or states the viewing of images on a display inside a vehicle even by persons other than the driver may be illegal. Where such regulations apply, they must be obeyed and this unit's DVD features should not be used.

⚠️ **CAUTION**

- PIONEER does not recommend that you install or service your display unit yourself. Installing or servicing the product may expose you to risk of electric shock or other hazards. Refer all installation and servicing of your display unit to authorized Pioneer service personnel.
- Secure all wiring with cable clamps or electrical tape. Do not allow any bare wiring to remain exposed.
- 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 gearshift, parking brake or seat sliding mechanism.
- Do not shorten any cables. If you do, the protection circuit may fail to work properly.
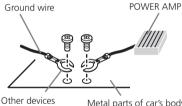
⚠️ **WARNING**

- **LIGHT GREEN LEAD AT POWER CONNECTOR IS DESIGNED TO DETECT PARKED STATUS AND MUST BE CON-NECTED 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.**

⚠️ **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. Ensure that the ground wire is properly connected to metal parts of the car's body. 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

Other devices (Another electronic device in the car)

Metal parts of car's body

🔷 **Important**

- This unit cannot be installed in a vehicle without ACC (accessory) position on the ignition switch.

ACC position   No ACC position
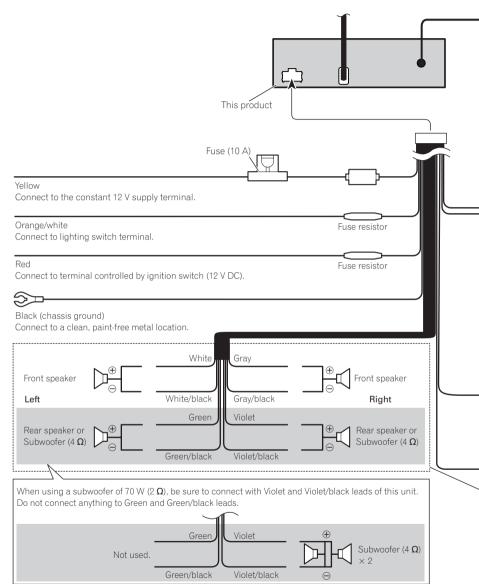
- Use this unit with a 12-volt battery and negative grounding only. Failure to do so may result in a fire or malfunction.

Installation

- To prevent a short-circuit, overheating or mal-function, be sure to follow the directions below.
  — Disconnect the negative terminal of the battery before installation.
  — Secure the wiring with cable clamps or ad-hesive 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 gear shift and seat rails.
  — Place all cables away from hot places, such as near the heater outlet.
  — Do not connect the yellow cable to the bat-tery 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 di-rectly 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 exter-nal 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 anten-na, 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 bat-tery drain or a malfunction.

Connecting the power cord

This product

Fuse (10 A)

Yellow
Connect to the constant 12 V supply terminal.

Orange/white
Connect to lighting switch terminal.

Fuse resistor

Red
Connect to terminal controlled by ignition switch (12 V DC).

Fuse resistor

Black (chassis ground)
Connect to a clean, paint-free metal location.

White   Gray

Front speaker

Left   White/black   Gray/black   **Right**   Front speaker

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   ⊖

Antenna input

Fuse resistor

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.

Connection method

1. Clamp the lead.
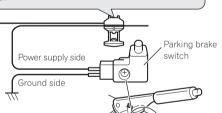
2. Clamp firmly with needle-nosed pliers.

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

Parking brake switch

Ground side

Blue/white
Connect to system control terminal of the power amp or auto-antenna relay control terminal (max. 300 mA 12 V DC).
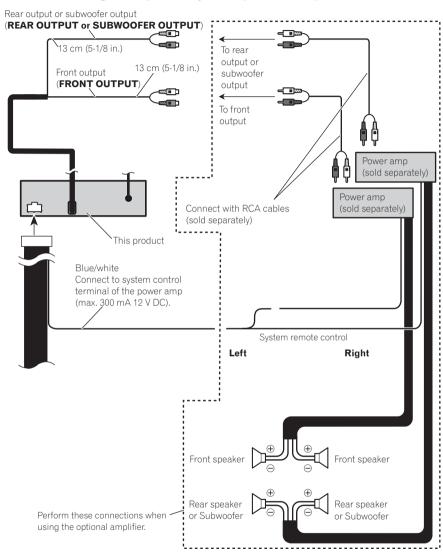
With a 2 speaker system, do not connect anything to the speaker leads that are not connected to speakers.

Note:
· Change the initial setting of this unit. The subwoofer output of this unit is monaural.
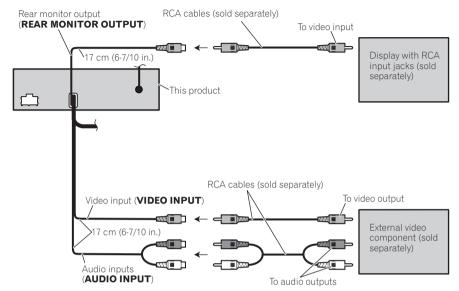
Installation

When connecting to separately sold power amp

Rear output or subwoofer output
(**REAR OUTPUT or SUBWOOFER OUTPUT**)

13 cm (5-1/8 in.)

Front output
(**FRONT OUTPUT**)

13 cm (5-1/8 in.)

To rear
output or
subwoofer
output

To front
output

Power amp
(sold separately)

Power amp
(sold separately)

Connect with RCA cables
(sold separately)

This product

Blue/white
Connect to system control
terminal of the power amp
(max. 300 mA 12 V DC).

System remote control

Left   **Right**

Front speaker   Front speaker

Rear speaker   Rear speaker
or Subwoofer   or Subwoofer

Perform these connections when
using the optional amplifier.

Installation

When connecting the external video component and the display

Rear monitor output
(**REAR MONITOR OUTPUT**)
RCA cables (sold separately)
To video input
17 cm (6-7/10 in.)
This product
Display with RCA input jacks (sold separately)

RCA cables (sold separately)
To video output
Video input (**VIDEO INPUT**)
17 cm (6-7/10 in.)
Audio inputs
(**AUDIO INPUT**)
To audio outputs
External video component (sold separately)

- It is necessary to change **AV Input** in **System Menu** when connecting the external video component.

When using a display connected to rear video output

This product's rear video output and rear audio output are for connection of a display to enable passengers in the rear seats to watch the DVD, etc.

⚠ WARNING

- Never install the display in a location where it is visible to the driver while driving.

Installation

When connecting with a rear view camera
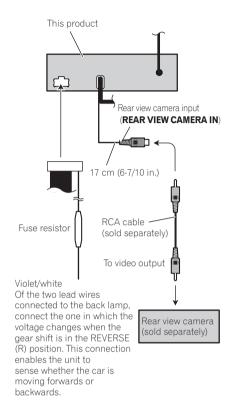
When this product is used with a rear view camera, it is possible to automatically switch from the video to rear view image when the gear shift is moved to REVERSE (R).

⚠ WARNING
USE INPUT ONLY FOR REVERSE OR MIR-ROR IMAGE REAR VIEW CAMERA. OTHER USE MAY RESULT IN INJURY OR DAMAGE.

⚠ CAUTION
- 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.

This product

Rear view camera input
(**REAR VIEW CAMERA IN**)

17 cm (6-7/10 in.)

Fuse resistor

RCA cable
(sold separately)

To video output

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.

Rear view camera
(sold separately)

⚠ CAUTION
You must use a camera which outputs mirror reversed images.

It is necessary to set **Camera Polarity** properly in **System Menu** when connecting the rear view camera.
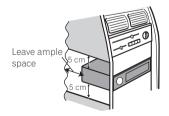
Installation

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.
- 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.
- 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°.
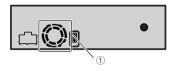
30°
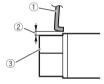
- To ensure proper heat dispersal when using this unit, make sure you leave ample space behind the rear panel and wrap any loose cables so they are not blocking the vents when installing the unit.

Leave ample space
5 cm
5 cm

- The cords must not cover up the area shown in the figure below. This is necessary to allow the amplifiers to radiate freely.

① Do not cover this area.
- Make sure you leave enough gap between the dashboard and the LCD panel of this unit so the LCD panel can be opened and closed without contacting with the dashboard.

① Dashboard
② Leave gap
③ LCD panel

DIN front/rear-mount
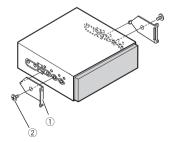
This unit can be properly installed using either front-mount or rear-mount installation.
Use commercially available parts when installing.

DIN Front-mount

1   Decide the position of the side brackets.
When installing in a shallow space, change the position of side brackets (small).
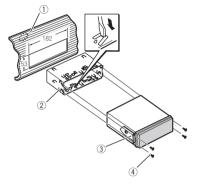
① Side bracket (small)
② Flush surface screw (5 mm × 6 mm)

2 Install the unit into the dashboard.

Insert the mounting sleeve into the dashboard. And then secure the mounting sleeve by using a screwdriver to bend the metal tabs (90°) into place.
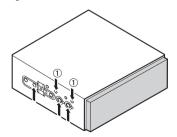
① Dashboard
② Mounting sleeve
③ Side bracket
④ Screw (2 mm × 3 mm)

DIN Rear-mount

1 Determine the appropriate position where the holes on the bracket and the side of the unit match.
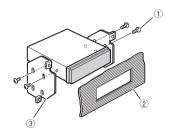
When installing in a shallow space, use the following screw holes.

① Use binding screws (4 mm × 3 mm) only.

2 Tighten two screws on each side.

Use any of binding screws (4 mm × 3 mm), binding screws (5 mm × 6 mm) or flush surface screws (5 mm × 6 mm), depending on the shape of screw holes in the bracket.

① Screw
② Dashboard or console
③ Factory radio mounting bracket
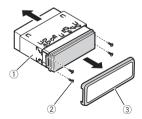
Note

In some types of vehicles, discrepancy may occur between the unit and the dashboard. If this happens, use the supplied frame to fill the gap.

Removing the unit

Extend top and bottom of the trim ring outwards to remove the trim ring. And then loosen the screws (2 mm × 3 mm) to remove the mounting sleeve.

• When reattaching the trim ring, push the trim ring onto the unit until it clicks. (If the trim ring is attached upside down, the trim ring will not fit properly.)

① Mounting sleeve
② Screw (2 mm × 3 mm)
③ Trim ring

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 10)
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.
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.

Symptom	Cause	Action (Reference page)
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.
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 33)
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.

Additional Information

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 and hold **MENU** to return to the source display and then select the correct setting for **Camera Polarity**. (Page 39)
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.
Sub-folders 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.

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 33)
Parental lock cannot be canceled.	The code number is incorrect.	Enter the correct code number. (Page 33)
	You have forgotten your code number.	Press **RESET**. (Page 34)

Symptom	Cause	Action (Reference page)
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.
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.

Error messages

When you contact your dealer or your nearest Pioneer Service Center, be sure to note the error message.

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.

DVD

Message	Cause	Action
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.
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**.
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.
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.

Additional Information

Message	Cause	Action
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.
Rental 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 file.	Select a file that can be played.
It is not possible to write it in the flash.	Flash memory error.	Replace the flash memory.
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.
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, SD)

Message	Cause	Action
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 external storage device and connect.
	Security for the connected USB memory is enabled.	Follow the USB memory instructions to disable security.
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 external storage device 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 external storage device is protected by Windows Media DRM 9/10.	Transfer audio files not protected by Windows Media DRM 9/10 to the external storage device 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 FAT16 or FAT32.	The connected USB device should be formatted with FAT16 or FAT32.
Incompatible SD	Unsupported SD card is inserted.	Use the supported SD card.
	Non-compatible SD storage device	Remove your device and replace it with a compatible SD storage device.

Additional Information

Message	Cause	Action
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 portable audio player/USB memory 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.
Rental 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 file.	Select a file that can be played.
It is not possible to write it in the flash.	Flash memory error.	Replace the flash memory.
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
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.

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.
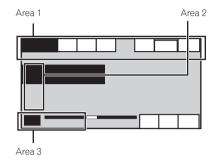
Message	Cause	Action
Error. Please check MIC.	The microphone is not connected.	Plug the optional microphone securely into the jack.
Error. Please check xxxx speaker.	The microphone cannot pick up the measuring tone of a speaker.	• Confirm that the speakers are connected correctly. • Correct the input level setting of the power amp connected to the speakers. • Plug the microphone securely into the jack.
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.

Additional Information

Message	Cause	Action
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.**

Indicator list

Area 1   Area 2

Area 3

Area 1

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 **2 ch** **Mch**	Indicates the audio channel.
PBC On	Indicates that a disc with PBC On is being played.
Auto EQ	Indicates that Auto EQ is on.
♪	Shows which audio language has been selected.
🔳	Shows which subtitle language has been selected.

Additional Information

	Shows which viewing angle has been selected.
	Shows which audio output has been selected.

Area 2

	Shows the disc title of the CD text disc currently being played.
	Shows the track title of the track currently being played for CD text discs. Shows the song title of the song currently being played for MP3/WMA/AAC files.
	Shows the artist name of the track/song currently being played for CD text discs. Shows the artist name of the artist currently being played for MP3/WMA/AAC files.
	Shows the folder name of the folder containing the MP3/WMA/AAC file currently being played.
	Shows the file name of the MP3/WMA/AAC file currently being played.

Area 3

	Shows the title number currently being played.
	Shows the chapter number currently being played.
	Shows the replay time currently being played.

Handling guidelines

Discs and player

Use only discs featuring any of 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/CD-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.

Additional Information

Read the precautions for discs before using them.

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.

External storage device (USB, SD)

Depending on the external storage device (USB, SD), 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.

SD memory card

This unit supports only the following types of SD memory cards.
- SD
- SDHC

Keep the SD memory card out of the reach of children. Should the SD memory card be swallowed, consult a doctor immediately.

Do not touch the connectors of the SD memory card directly with your fingers or with any metal device.

Do not insert anything other than an SD memory card into the SD card slot. If a metal object (such as a coin) is inserted into the slot, the internal circuits may break and cause malfunctions.

Do not insert a damaged SD memory card (e.g. warped, label peeled off) as it may not be ejected from the slot.

Do not try to force an SD memory card into the SD card slot as the card or this unit may be damaged.

When ejecting an SD memory card, press it and hold it until it clicks. It is dangerous for you to release your finger immediately after you press on the card as the card may shoot out of the slot and hit you in the face, etc. If the card shoots out of the slot, it may become lost.

DVD-R/DVD-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/DVD-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/CD-RW discs

When CD-R/CD-RW discs are used, playback is possible only for discs which have been finalized.
Playback of CD-R/CD-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.

Additional Information

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/CD-RW discs may become impossible in case of direct exposure to sunlight, high temperatures, or the storage conditions in the vehicle.
Titles and other text information recorded on a CD-R/CD-RW disc may not be displayed by this 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 Mbps or less with a transmission rate of 2 GB 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 35.

For more details about DivX, visit the following site: http://www.divx.com/

Important
- When naming a JPEG image file, add the corresponding filename extension (.jpg, .jpeg, .jpe or .jfif).
- This unit plays back files with these filename extensions (.jpg, .jpeg, .jpe or .jfif) as a JPEG image file. To prevent malfunctions, do not use these extensions for files other than JPEG image files.

Compressed audio compatibility (disc, USB, SD)

WMA

File extension: .wma

Bit rate: 5 kbps to 320 kbps (CBR), VBR

Sampling frequency: 8 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

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 (ID3 tag Version 2.x is given priority over Version 1.x.)

Additional Information

M3u playlist: Not compatible

MP3i (MP3 interactive), mp3 PRO: Not compatible

AAC

Compatible format: AAC encoded by iTunes

File extension: .m4a

Sampling frequency: 8 kHz to 44.1 kHz

Bit rate: 8 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 HD format: Not compatible

Compatible audio codec: MP2, MP3, Dolby Digital

LPCM: Not compatible

Bit rate: 8 kbps to 320 kbps (CBR), VBR

Sampling frequency: 8 kHz to 48 kHz

Compatible external subtitle file extension: .srt

Supplemental information

Some characters in a file name (including the file extension) or a folder name may not be displayed.

This unit may not operate correctly 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 an external storage device (USB/SD) that has numerous folder hierarchies.

Disc

Playable folders: up to 700

Playable files: up to 999 for CD-R/CD-RW

Playable files: up to 3 500 for DVD-R/DVD-RW

File system: ISO 9660 Level 1 and 2, Romeo, Joliet, UDF 1.02 (DVD-R/DVD-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.

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, SD)

Playable folders: up to 6 000

Playable files: up to 65 535, up to 255 for one folder

Playback of copyright-protected files: Not compatible

Partitioned external storage device (USB, SD): Only the first playable partition can be played.

There is no compatibility for Multi Media Cards (MMC).

Compatibility with all SD memory cards is not guaranteed.

This unit is not compatible with SD-Audio/SD-Video.
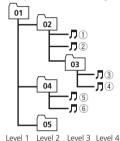
⚠ CAUTION

• Pioneer accepts no responsibility for data lost on the USB memory/USB portable audio player/SD memory card even if that data is lost while using this unit.

Additional Information

• Do not leave the discs/external storage device (USB, SD) in places with high temperatures.

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, SD)

The playback sequence is the same as the recorded sequence in the external storage device (USB, SD).
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, SD).
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 −10°C to +60°C (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.

Additional Information

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.

Copyright and trademark

This item incorporates copy protection technology that is protected by U.S. patents and other intellectual property rights of Rovi Corporation. Reverse engineering and disassembly are prohibited.

DVD video

DVD is a trademark of DVD Format/Logo Licensing Corporation.

iTunes

Apple and iTunes are trademarks of Apple Inc., registered in the U.S. and other countries.

MP3

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http://www.mp3licensing.com.

WMA

Windows Media is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries. This product includes technology owned by Microsoft Corporation and cannot be used or distributed without a license from Microsoft Licensing, Inc.

SD memory card

SD Logo is a trademark of SD-3C, LLC.
SDHC Logo is a trademark of SD-3C, LLC.

Dolby Digital

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Additional Information

DivX

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ABOUT DIVX VIDEO: DivX® is a digital video format created by DivX, Inc. This is an official DivX Certified® device that plays DivX video. Visit divx.com for more information and software tools to convert your files into DivX video.

ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in *Menu operations*. Go to vod.divx.com for more information on how to complete your registration.

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**
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 × 50 mm ×
165 mm
(7 in. × 2 in. × 6-1/2 in.)
       Nose .... 170 mm × 46 mm × 27 mm
(6-3/4 in. × 1-3/4 in. × 1 in.)
Weight .... 2.1 kg (4.63 lbs)

Display

Screen size/aspect ratio .... 7.0 inch wide/16:9
(effective display area:
154.0 mm × 86.9 mm)
Pixels .... 345 600 (1 440 × 240)
Display method .... TFT active matrix, driving
type
Color system .... NTSC
Durable temperature range (power off)
.... −20 °C to +80 °C
Angle adjustment .... 50° to 110°
(initial settings: 90°)

Audio

Maximum power output .... 50 W × 4
70 W × 1/2 Ω (for subwoo-
fer)
Continuous power output ... 22 W × 4 (1 kHz, 5 % THD, 4
Ω load, both channels dri-
ven)
Load impedance .... 4 Ω (4 Ω to 8 Ω (2 Ω for 1 ch)
allowable)
Preout maximum output level
.... 2.0 V
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 system
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 net-
work) (RCA level)
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 en-
coded only) (.m4a)
(Ver. 9.0.3 and earlier)
DivX decoding format .... Home Theater Ver. 3, 4, 5.2,
6 (.avi, .divx)

USB

USB standard specification
.... USB 1.1, USB 2.0 full speed
Maximum current supply .... 500 mA
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 en-
coded only)
(Ver. 9.0.3 and earlier)
DivX decoding format .... Home Theater Ver. 3, 4, 5.2,
6 (.avi, .divx)

SD

Compatible physical format
.... Version 1.1
File system FAT12, 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)

Additional Information

AAC decoding format .... MPEG-4 AAC (iTunes en-
coded only)
(Ver. 9.0.3 and earlier)
DivX decoding format .... Home Theater Ver. 3, 4, 5.2,
6 (.avi, .divx)

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 .... 72 dB (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 .... 62 dB (IHF-A network)

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 mod-
ifications without notice.

En

Register your product at
Enregistrez votre produit au
Registre su producto en

http://www.pioneerelectronics.com

See "Visit our website" page
Voir la page "Visitez notre site Web"
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Printed in Thailand

<KOMZX> <11H00000>   <CRB3773-A/N> UC