

# Pioneer

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## Owner's Manual

DVD RECEIVER

# DVH-P4390UB



**DIIX**



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*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.*

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## To ensure safe driving

### ! WARNING

- To avoid the risk of accident and the potential violation of applicable laws, the front DVD or TV (sold separately) feature should never be used 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.
- NEVER** install the display in a location that enables the driver to watch images while driving.

When you park your car in a safe place and apply the parking brake, the picture appears on the screen. 

## In case of trouble


Should this unit fail to operate properly, please contact your dealer or nearest authorized PIONEER Service Station. 

## About this unit


### ! 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.
- 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.

## 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 67). 


## About this manual

- Function setting operations are completed even if the menu is cancelled before the operations are confirmed.
- In this manual, iPod and iPhone will be referred to as "iPod". 

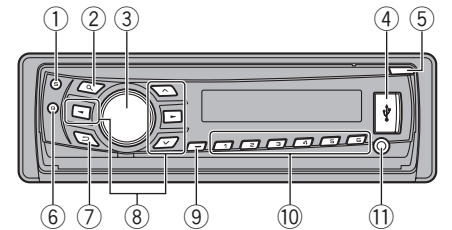
## Visit our website

Visit us at the following site:

<http://pioneer.jp/group/index-e.html>

- We offer the latest information about Pioneer Corporation on our website. 

## Head unit







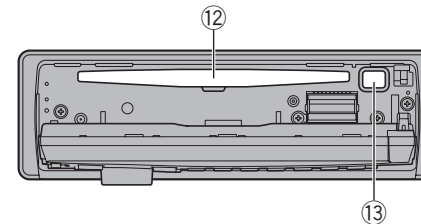
### ! CAUTION

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.

### Note

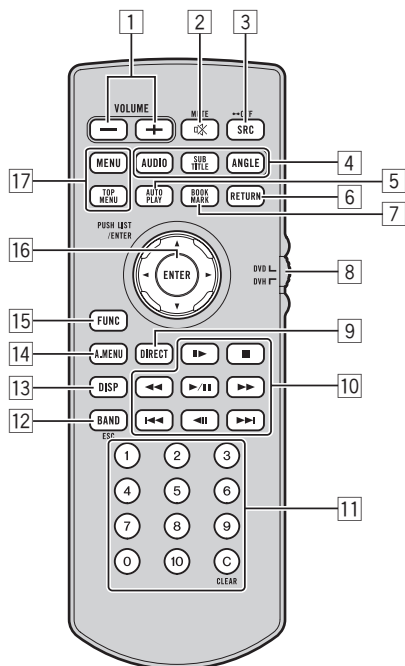
The function of  is different depending on the setting of the display connection (refer to **V.OUT** (display connection) on page 30). 

## Head unit (front panel open)



Part	Part
① S (SRC/OFF)	⑧ ▲/▼/◀/▶
② 🔍 (list)	⑨ ⌚ (clock)
③ MULTI-CONTROL (M.C.)	⑩ 1 to 6 • 1/S.Rtrv/DVD MENU • 2/PAUSE • 3/BOOKMARK • 4/iPod/AUDIO • 5/⌂/SUB TITLE • 6/↩/ANGLE
④ USB port	⑪ AUX input jack (3.5 mm stereo jack)
⑤ Open button	⑫ Disc loading slot
⑥ B (BAND/ESC)	⑬ ▲ (eject)
⑦ ↩ (Back/display/scroll)	

## Remote control



	Button names	DVH mode	DVD mode
1	<b>VOLUME</b>	Press to increase or decrease volume.	
2	<b>MUTE</b>	Press to mute. Press again to unmute.	
3	<b>SRC/OFF</b>	Press to cycle through all the available sources. Press and hold to turn the source off.	
4	<b>AUDIO</b>	(Only in DVD source) Press to change the audio language/audio system during DVD/DivX playback.	
	<b>SUBTITLE</b>	(Only in DVD source) Press to change the subtitle language during DVD/DivX playback.	
	<b>ANGLE</b>	(Only in DVD source) Press to change the viewing angle during DVD playback.	
5	<b>AUTO PLAY</b>	(Only in DVD source) Press to turn the DVD auto-playback function on or off.	
6	<b>RETURN</b>	(Only in DVD source) Press to display the PBC (playback control) menu during PBC playback.	
7	<b>BOOKMARK</b>	Not used.	(Only in DVD source) Press to turn the bookmark function on or off. For details, refer to <i>Resume playback (Bookmark)</i> on page 15.

	Button names	DVH mode	DVD mode
8	Remote control operation mode switch	Switch the operation mode between <b>DVD</b> and <b>DVH</b> modes. Normally, set to <b>DVH</b> . For details, refer to <i>Using the remote control operation mode switch</i> on the next page.	
9	<b>DIRECT</b>	Press to select tracks (chapters) directly.	Not used.
10	<b>PLAY/PAUSE (▶/⏸)</b>	Press to pause or resume playback.	(Only in DVD source) Press to switch sequentially between playback and pause.
	<b>REVERSE (◀◀)</b>	(Only in DVD source) Press to perform fast reverse.	
	<b>FORWARD (▶▶)</b>	(Only in DVD source) Press to perform fast forward.	
	<b>PREVIOUS (◀◀◀)</b>	(Only in DVD source) Press to return to the previous track (chapter).	
	<b>NEXT (▶▶▶)</b>	(Only in DVD source) Press to go to the next track (chapter).	
	<b>STEP (⏮/⏭)</b>	(Only in DVD source) Press to move ahead one frame at a time during DVD/Video CD/DivX playback. Press and hold for one second to activate slow playback.	
	<b>STOP (■)</b>	Not used.	(Only in DVD source) Press to stop playback.
11	<b>0 to 10, CLEAR</b>	When pressing <b>DIRECT</b> , press <b>0</b> to <b>10</b> to input numbers. Press <b>CLEAR</b> to clear the input numbers. Press <b>1</b> to <b>6</b> to select the desired preset station for the tuner.	Press to select to a desired title number on a DVD. Press to select a menu item on a video CD featuring PBC (playback control).
12	<b>BAND/ESC</b>	Press to select among three FM bands and one AM band and to cancel control modes of functions.	Press to switch between media file types. (Refer to <i>Switching the media file type</i> on page 12.)
13	<b>DISP</b>	Press to turn the information display on or off when the video is displayed. Depending on the selected source, pressing this button can switch the display indication.	
14	<b>A.MENU</b>	Press to select various sound quality controls.	
15	<b>FUNC</b>	Press to select functions.	
16	Move the thumb pad	Functions are the same as ▲/▼/◀/▶ on the head unit. Move to operate fast forward, reverse and track search controls. Also used for controlling functions.	Use to select a menu on the DVD menu.
	Click the thumb pad	Click to display the track title list, folder list or file list depending on the source.	Click to select a menu on the DVD menu.
17	<b>MENU</b>	Press to display the DVD menu during DVD playback.	
	<b>TOP MENU</b>	Press to return to the top menu during DVD playback.	

## Operating this unit

### Using the remote control operation mode switch

There are two remote control operation modes on the remote control. If you want to operate this unit by remote control, select **DVH** mode. In this case, both the head unit's buttons and remote control can control this unit.

### DVH mode operation

When operating this unit by remote control, the mode is normally switched to **DVH**.

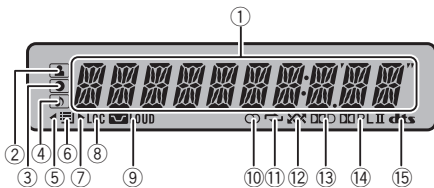
### DVD mode operation

If you switch the mode to **DVD**, the thumb pad and **0** to **10** operations are changed for the DVD player.

#### ● When you want to operate the following functions, switch the mode to DVD:

- When operating the DVD menu by using the thumb pad. (Refer to *Operating the DVD menu* on page 13.)
- When operating the PBC menu by using **0** to **10**. (Refer to *PBC playback* on page 13.)
- When specifying title or track by using **0** to **10**. (Refer to *Specifying title* on page 13 and *Specifying track* on page 14.)
- When operating the DVD setup menu by using the thumb pad. (Refer to *Setting up the DVD player* on page 25.)

### Display indication



Indicator	Operation
① Main display section	<ul style="list-style-type: none"> <li>Tuner: band and frequency</li> <li>Built-in DVD player, USB storage device and iPod: elapsed playback time and text information</li> </ul>
② [artist]	The disc (track) artist name is displayed. Artist search refinement of the iPod browsing function is in use.
③ [disc]	The disc (album) name is displayed. Album search refinement of the iPod browsing function is in use.
④ [song]	The track (song) name is displayed. A playable file is displayed during viewing the file name list of disc and a USB storage device. Song search refinement of the iPod browsing function is in use.
⑤ ◀	An upper tier of the folder or menu exists.
⑥ [list]	The list function is being operated.
⑦ ▶	A lower tier of the folder or menu exists. This flashes when a song/album related to the song currently playing is selected from the iPod.
⑧ LOC	Local seek tuning is on.
⑨ [LOUD] (loudness)	The loudness is on.
⑩ [stereo]	Receiving the stereo broadcasting.
⑪ [repeat]	Track or folder repeat is on.
⑫ [random]	Random play is on. The iPod source is selected and the shuffle or shuffle all function is on.
⑬ [Dolby Digital] indicator	Appears when Dolby Digital audio is selected. (Activated only when DEQ-P7650 is connected to this unit.)

## Operating this unit

Indicator	Operation
⑭ [Dolby Pro Logic II] indicator	Appears when Dolby Pro Logic II is used. (Activated only when DEQ-P7650 is connected to this unit.)
⑮ [dts] indicator	Appears when DTS audio is selected. (Activated only when DEQ-P7650 is connected to this unit.)

#### Note

When you set the display connection (refer to **V.OUT (display connection)** on page 30) to on, the indicators of ② to ⑦ do not appear.

## Basic Operations of this unit

### Important

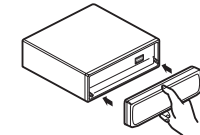
- Handle gently when removing or attaching the front panel.
- Avoid subjecting the front panel to excessive shock.
- Keep the front panel out of direct sunlight and high temperatures.
- To avoid damaging the device or vehicle interior, remove any cables and devices attached to the front panel before detaching it.

Removing the front panel to protect your unit from theft

- Press the open button to open the front panel.
- Grip the left side of the front panel and pull it gently outward. Take care not to grip it too tightly or to drop the front panel and protect it from contact with water or other fluids to prevent permanent damage.
- Always keep the detached front panel in a protection device such as a protection case.

#### Re-attaching the front panel

- Reattach the front panel by holding it upright to the unit and clipping it securely into the mounting hooks.



#### Turning the unit on

- Press **S (SRC/OFF)** to turn the unit on.

#### Turning the unit off

- Press and hold **S (SRC/OFF)** until the unit turns off.

#### Selecting a source


- Press **S (SRC/OFF)** repeatedly to switch between the following sources:  
**TUNER** (tuner)—**DVD** (built-in DVD player)—**USB** (USB storage device)/**USB-iPod** (iPod connected using USB input)—**EXTERNAL** (external unit 1)—**EXTERNAL** (external unit 2)—**AUX1** (AUX 1)—**AUX2** (AUX 2)—**BLUETOOTH** (Bluetooth telephone/audio)

#### Adjusting the volume

- Turn **M.C.** to adjust the volume.

## Operating this unit

### Notes

- Listening to the radio while connecting a USB storage device to this unit may generate noise. In this case disconnect the USB storage device.
- When this unit's blue/white lead is connected to the vehicle's auto-antenna relay control terminal, the vehicle's antenna extends when this unit's source is turned on. To retract the antenna, turn the source off. 

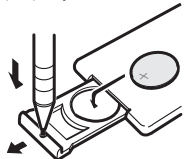
## Use and care of the remote control

### Using the remote control

- 1 Point the remote control in the direction of the front panel to operate.  
When using for the first time, pull out the film protruding from the tray.

### Replacing the battery

- 1 Slide the tray out on the back of the remote control.
- 2 Insert the battery with the plus (+) and minus (-) poles aligned properly.



### 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.

### 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. 

## Menu operations identical for function settings/audio adjustments/initial settings/lists

Returning to the previous display  
Returning to the previous list (the folder one level higher)

- 1 Press .

Returning to the main menu

- 1 Press and hold .

Returning to the ordinary display  
Canceling the initial setting menu

- 1 Press **B (BAND/ESC)**.



## Operating this unit



## Tuner

### Basic operations









Selecting a band

- 1 Press **B (BAND/ESC)** until the desired band (**F1**, **F2**, **F3** for FM or **AM**) is displayed.

Manual tuning (step by step)

- 1 Press  or .

Seeking


- 1 Press and hold  or , and then release.  
You can cancel seek tuning by briefly pressing  or .While pressing and holding  or , you can skip stations. Seek tuning starts as soon as you release  or .

### LOCAL (local seek tuning)

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

- 1 Press **M.C.** to display the setting mode.
- 2 Turn **M.C.** to select the desired setting.  
FM: **OFF—LEVEL 1—LEVEL 2—LEVEL 3—LEVEL 4**  
AM: **OFF—LEVEL 1—LEVEL 2**

The highest level setting allows reception of only the strongest stations, while lower levels allow the reception of weaker stations.



- 3 Press **M.C.** to confirm the selection. 

## Storing and recalling stations for each band

### Using preset tuning buttons

**1 When you find a station that you want to store in memory, press one of the preset tuning buttons (1 to 6) and hold until the preset number stops flashing.**

**2 Press one of the preset tuning buttons (1 to 6) to select the desired station.**

- You can also recall stored radio stations by pressing  or  during the frequency display.

## Function settings

**1 Press M.C. to display the main menu.**

**2 Turn M.C. to change the menu option and press to select FUNCTION.**

**3 Turn M.C. to select the function.**

After selecting, perform the following procedures to set the function.

### BSM (best stations memory)

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

- 1 Press **M.C.** to turn BSM on.  
To cancel, press **M.C.** again.

## Built-in DVD player

### Basic operations

Open the front panel
<ol style="list-style-type: none"> <li>Press the open button. Disc loading slot appears.</li> </ol>
Playing a disc
<ol style="list-style-type: none"> <li>Insert the disc into the disc loading slot with the label side up.</li> </ol>
Ejecting a disc
<ol style="list-style-type: none"> <li>Press <b>▲</b>.</li> </ol>
Selecting a folder
<ol style="list-style-type: none"> <li>Press <b>▲</b> or <b>▼</b>. You cannot select a folder that does not have a compressed audio file, JPEG file or DivX file recorded in it.</li> </ol>
Selecting a chapter/track/file
<ol style="list-style-type: none"> <li>Press <b>◀</b> or <b>▶</b>. You can also skip back or forward to another chapter/track/file by pressing <b>◀◀</b> or <b>▶▶</b>. During PBC playback, a menu may be displayed if you perform these operations.</li> </ol>
Fast forwarding or reversing
<ol style="list-style-type: none"> <li>Press and hold <b>◀</b> or <b>▶</b>. When DVD, DivX or Video CD is playing, if you press and hold <b>◀</b> or <b>▶</b> for five seconds, the icon <b>◀◀</b> or <b>▶▶</b> is highlighted. When this happens, fast reverse/fast forward continues even if you release <b>◀</b> or <b>▶</b>. To resume playback at a desired point, press <b>▶/II</b>.</li> </ol>
Returning to root folder
<ol style="list-style-type: none"> <li>Press and hold <b>B (BAND/ESC)</b>.</li> </ol>
Switching the media file type
<ol style="list-style-type: none"> <li>Press <b>B (BAND/ESC)</b> to switch between media file types.</li> </ol> <ul style="list-style-type: none"> <li>In case of DVD-R/RW/ROM, this unit does not allow playback of audio data (CD-DA) and JPEG file.</li> </ul>

#### Notes

- When the automatic playback function is on, this unit will cancel the DVD menu and automatically start playback from the first chapter of the first title. Refer to *Automatic playback of DVDs* on page 14.
- If you are playing a DVD or Video CD, a menu may appear. Refer to *Operating the DVD menu*

on the next page and *PBC playback* on the next page.

- When loading a CD/CD-R/RW containing only JPEG picture files, this unit automatically starts a slideshow from the first folder/picture on the disc. The player displays the pictures in each folder in alphabetical order.
- If the bookmark function is on, DVD playback resumes from the selected point. For more details, refer to *Resume playback (Bookmark)* on page 15.
- When you are watching a DVD and attempt to perform an operation, it may not be performed due to the programming on the disc. When this happens, the unit indicates the button **⊗** on the screen.

### Basic playback controls

The table below shows the basic controls for playing discs. The following chapters cover other playback features in more details.

Button	What it does
<b>▶/II</b>	Starts playback, pauses a disc that's playing or restarts a paused disc. Starts the slideshow, pauses the slideshow or restarts a paused slideshow.
<b>■</b>	Stops playback. Stopping playback at the point set in Resume playback. Press one more time to stop playback completely.
<b>◀◀</b>	Press and hold to perform fast reverse.
<b>▶▶</b>	Press and hold to perform fast forward.
<b>◀◀</b>	Skips to the start of the current track, chapter or file, then to previous tracks/chapters/files. Displays the previous picture.
<b>▶▶</b>	Skips to the next track, chapter or file. Displays the next picture.

#### Notes

- You may find with some DVD or Video CD discs that some playback controls do not work in certain parts of the disc. This is not a malfunction.

- If the remote control is set to **DVH**, **■** does not operate.

### Operating the DVD menu

Some DVDs allow you to make a selection from the disc contents using a menu.

- This function is available for DVD video.
  - You can display the menu by pressing the **MENU** or **TOP MENU** while a disc is playing. Pressing **MENU** again lets you start playback from the location selected from the menu. For details, refer to the instructions provided with the disc.
  - Ways to display the menu will differ depending on the disc.
- Press **▲/▼/◀/▶** to select the desired menu option.
  - Press **M.C.**  
Playback starts from the selected menu item.

### PBC playback

With Video CDs featuring PBC (playback control) function, you can operate a menu.

- This function is available for Video CD.
- When PBC menu is displayed, press **0** to **10** corresponding to a menu number to start playback. When the menu is two or more pages long, press **◀◀** or **▶▶** to switch between displays.

#### Notes

- You can display the menu by pressing **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), the following operations are not available:
  - Search and time search functions
  - Selection of a range for repeat play

### 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 DivX VOD content, the number of times you have played is shown on-screen and you then have the option of playing the disc (thereby using up one of the remaining plays), or stopping. If you load a disc that contains expired DivX VOD content (for example, content that has zero remaining plays), **EXPIRED (THIS DivX RENTAL HAS EXPIRED.)** is displayed.

- 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.
- If the message is displayed after loading a disc containing DivX VOD content, press **▶/II**. Playback of the DivX VOD content will start. To skip to the next file, press **▶▶**. To return to the previous file, press **◀◀**. If you do not want to play the DivX VOD content, press **■**.

#### Important

- In order to play DivX VOD content on this unit, you first need to register the unit with your DivX VOD content provider. About your registration code, refer to page 28.
- DivX VOD content is protected by a DRM (Digital Rights Management) system. This restricts playback of content to specific, registered devices.

### Specifying title

- This function is available for DVD video.
  - To perform this function, set the remote control to **DVD** mode.
- Press **0** to **10** corresponding to a desired title number when the disc is stopped.  
Title number is displayed for eight seconds and playback starts from the selected title.
    - To select 3, press **3**.
    - To select 10, press **10** and **0** in that order.
    - To select 23, press **10**, **10** and **3** in that order.

## Specifying track

You can use the search function to specify a track to search for a desired track.

- This function is available for Video CD.
- This function cannot be operated during Video CD playback featuring PBC (playback control).
- To perform this function, set the remote control to **DVD** mode.

For the numbers to press, please refer to *Specifying title* on the previous page.

## Searching for the part you want to play

You can use the search function to find the part you want to play.

- Chapter search and track search are not possible when disc playback has been stopped.
- This function cannot be operated during Video CD playback featuring PBC (playback control).
- To perform this function, set the remote control to **DVH** mode.

- 1 Press **DIRECT**.
- 2 Press **0** to **9** to input the desired number. To cancel the inputted numbers, press **CLEAR**.
- 3 Press **DIRECT**. This starts playback from the selected part.

### Note

With discs featuring a menu, you can also press **MENU** or **TOP MENU** and then make selections from the displayed menu.

## Frame-by-frame playback

This lets you move ahead one frame at a time during playback.

- This function is available for DVD video, DivX and Video CD.

- 1 Press **II▶** during playback. Each time you press **II▶**, you move ahead one frame. To return to normal playback, press **▶/II**. Images during frame-by-frame playback may be unclear for some discs.

## Slow motion playback

This lets you slow down playback speed.

- This function is available for DVD video, DivX and Video CD.

- 1 Press **II▶** and hold during playback. The icon **II▶** is displayed, forward slow motion playback begins.
- 2 Press **◀II** or **II▶** to adjust playback speed during slow motion playback. Each time you press **◀II** or **II▶** it changes the speed in four steps in the following order: 1/16—1/8—1/4—1/2. To return to normal playback, press **▶/II**. You cannot operate this step during DivX 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.

## Return to the specified scene

You can return to the specified scene where the DVD you are currently playing has been preprogrammed to return.

- This function is available for DVD video.
- 1 Press **RETURN** to return to the specified scene. This function cannot be used if a specified scene has not been preprogrammed on the DVD disc.

## 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.

- This function is available for DVD video.
- Some DVDs may not operate properly. If this function is not fully operated, turn this function off and start playback.

- 1 Press **AUTO PLAY** to turn automatic playback on. **A PLAY:ON** is displayed. To turn automatic playback off, press **AUTO PLAY** again.

## Displaying text information

Selecting the desired text information

- This function is available for CDs and compressed audio files.

- 1 Press **↵**.

Scrolling the text information to the left

- This function is available for CDs and compressed audio files.

- 1 Press and hold **↵**.

### Notes

- Text information items that can be changed depend on the media.
- Depending on the version of iTunes used to write MP3 files to a disc or media file types, incompatible text stored within an audio file may be displayed incorrectly.
- When ever scroll is set to on at the initial setting, text information scrolls continuously in the display. Refer to **SCROLL** (*ever scroll*) on page 30.

## Selecting and playing files/tracks from the file name/track title list

- 1 Press **Q** to switch to the file name/track title list mode.
- 2 Use **M.C.** to select the desired file name (or folder name).

Changing title, file or folder name

- 1 Turn **M.C.**

Playing

- 1 When a file or track is selected, press **M.C.**

Viewing a list of the files (or folders) in the selected folder

- 1 When a folder is selected, press **M.C.**

Playing a song in the selected folder

- 1 When a folder is selected, press and hold **M.C.**

### Notes

- This function is available for JPEG files, CD TEXT, compressed audio files and DivX.
- When the separately sold display is connected to this unit, the listed information will appear on it.

## Advanced operations using special buttons

### Operating the DVD menu

Some DVDs allow you to make a selection from the disc contents using a menu.

- This function is available for DVD video.
  - You can display the menu by pressing the **1/S.Rtrv/DVD MENU** while a disc is playing. Pressing **1/S.Rtrv/DVD MENU** again lets you start playback from the location selected from the menu. For details, refer to the instructions provided with the disc.
- 1 Press **▲/▼/◀/▶** to select the desired menu option.
  - 2 Press **M.C.** Playback starts from the selected menu item.

### Note

You can also perform this operation by pressing **MENU** or **TOP MENU** on the remote control.

### Resume playback (Bookmark)

By using the Bookmark function, you can resume playback from a selected scene the next time the disc is loaded.

- This function is available for DVD video.
- 1 During playback, press **3/BOOKMARK** at the point you want to resume playback next time. The selected scene will be bookmarked so that playback resumes from that point next time. You can bookmark up to five discs. After that, the oldest bookmark is replaced by the new one. To clear the bookmark on a disc, press and hold **3/BOOKMARK** during playback.

### Notes


- You can also perform this operation by pressing **BOOKMARK** on the remote control. To perform this function, set the remote control to **DVD** mode.
- You can also bookmark a disc by pressing and holding **▲** (eject) at the point you want to bookmark. Next time you load the disc, playback will resume from the bookmarked point. Note that you can only bookmark one disc using this method. To clear the bookmark on a disc, press **▲** (eject).



### Changing audio language during playback (Multi-audio)

With DVDs that provides audio playback in different languages and different audio systems (Dolby Digital, DTS, etc.), you can switch between languages/audio systems during playback.

- This function is available for DVD video, DivX and Video CD.

- Press **4/iPod/AUDIO** during playback. The audio selection icon  is displayed for eight seconds.
- Press **4/iPod/AUDIO** while the audio selection icon is displayed. The audio changes each time you press **4/iPod/AUDIO**.


#### Notes

- You can also perform this operation by pressing **AUDIO** on the remote control.
- With some DVDs and DivX, switching between languages/audio systems may only be possible using a menu display.
- You can also switch between languages/audio systems using DVD setup menu. For details, refer to *Setting the audio language* on page 25.
- Only digital output of DTS audio is possible. If the unit's optical digital outputs are not connected, select an audio setting other than DTS.
- Display indications such as **Dolby D** and **Mch** indicate the audio system recorded on the DVD and DivX. Depending on the setting, playback may not be with the same audio system as that indicated.
- Performing this operation during fast forward/fast reverse, pause or slow motion playback returns you to normal playback.

### Changing the subtitle language during playback (Multi-subtitle)

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

- This function is available for DVD video and DivX.


- Press **5/XX/SUB TITLE** during playback. The subtitle selection icon  is displayed for eight seconds.
- Press **5/XX/SUB TITLE** while the subtitle selection icon is displayed. The subtitle language changes each time you press **5/XX/SUB TITLE**.


#### Notes

- You can also perform this operation by pressing **SUBTITLE** on the remote control.
- With some DVDs and DivX, switching between subtitle languages may only be possible using a menu display.
- You can also switch between subtitle languages using DVD setup menu. For details, refer to *Setting the subtitle language* on page 25.
- Performing this operation during fast forward/fast reverse, pause or slow motion playback returns you to normal 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.

- This function is available for DVD video.
- During playback of a scene shot from multiple angles, the angle icon  is displayed. Turn angle icon display on or off using the DVD setup menu. For details, refer to *Setting the angle icon display* on page 26.

- Press **6/R/ANGLE** during playback of a scene shot from multiple angles. The angle icon  and angle number **1** are displayed for eight seconds.
- Press **6/R/ANGLE** while the angle icon and angle number are displayed. The angle changes each time you press **6/R/ANGLE**.

#### Notes

- You can also perform this operation by pressing **ANGLE** on the remote control.
- Performing this operation during fast forward/fast reverse, pause or slow motion playback returns you to normal playback, but the viewing angle does not change.

### Selecting a repeat play range

- This function is available for JPEG files, CDs and compressed audio files.
- Press **6/R/ANGLE** to select the repeat range.
    - TITLE** – Repeat the current title
    - CHAPTER** – Repeat the current chapter
    - TRACK** – Repeat the current track/file
    - FOLDER** – Repeat the current folder
    - DISC** – Play through the current disc
- During playback of Video CDs featuring PBC (Playback Control), this function cannot be operated.

### Playing tracks in random order

Tracks in a selected repeat range are played in random order.

- This function is available for JPEG files, CDs and compressed audio files.
- Press **5/XX/SUB TITLE** to turn random play on or off.

### Pausing playback

- Press **2/PAUSE** to pause or resume.

### Enhancing compressed audio and restoring rich sound (advanced sound retriever)

- This function is available for CDs and compressed audio files.
- Press **1/S.Rtrv/DVD MENU** to cycle between:
    - OFF** (off)—**1—2**
- 1** is effective for low compression rates, and **2** is effective for high compression rates.

### Function settings

#### 1 Press M.C. to display the main menu.

#### 2 Turn M.C. to change the menu option and press to select FUNCTION.

#### 3 Turn M.C. to select the function.

After selecting, perform the following procedures to set the function.

#### REPEAT (repeat play)

- During PBC (Playback Control) playback, you cannot select **REPEAT**.
- Press **M.C.** to display the setting mode.
  - Turn **M.C.** to select a repeat play range. For details, refer to *Selecting a repeat play range* on this page.
  - Press **M.C.** to confirm the selection.

#### RANDOM (random play)

- This function is available for JPEG files, CDs and compressed audio files.
- Press **M.C.** to turn random play on or off.

#### LR SELECT (audio output)

When playing DVD video discs recorded with LPCM audio, you can switch the audio output.

When playing Video CD discs, you can switch between stereo and monaural audio output.

- This function is available for DVD video and Video CD.
- This function is not available when disc playback is stopped.
- You may not be able to select or use this function depending on the disc and the playback location.
- If you select **Linear PCM**, you can operate this function when playing a disc recorded on a dual mono mode. (Refer to *Setting for digital output* on page 28.)

- Press **M.C.** to display the setting mode.
- Turn **M.C.** to select the desired setting.
  - L+R** – left and right
  - L** – left
  - R** – right
  - MIX** – mixing left and right
- Press **M.C.** to confirm the selection.

#### ROTATION (picture rotation)

## Operating this unit

- This function is available for JPEG files.

- 1 Press **M.C.** to display the setting mode.
- 2 Turn **M.C.** to select the desired setting.
  - **0** – Cancel the rotation
  - **90** – Rotate 90 degrees
  - **180** – Rotate 180 degrees
  - **-90** – Rotate -90 degrees
- 3 Press **M.C.** to confirm the selection.

**PAUSE** (pause)

- 1 Press **M.C.** to pause or resume.

**S.RTRV** (advanced sound retriever)

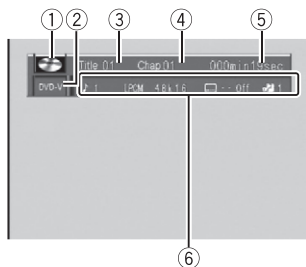
Automatically enhances compressed audio and restores rich sound.

- This function is available for CDs and compressed audio files.

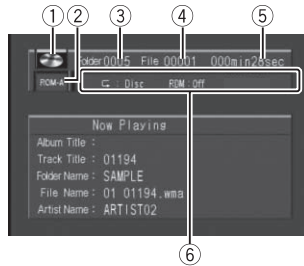
- 1 Press **M.C.** to display the setting mode.
- 2 Turn **M.C.** to select the desired setting.  
Refer to *Enhancing compressed audio and restoring rich sound (advanced sound retriever)* on the previous page.
- 3 Press **M.C.** to confirm the selection.

### Switching the information display

When the video output is set to on in the initial setting menu (refer to **V.OUT** (display connection) on page 30) and a separately sold display is connected to this unit, the text information appears on the display.



Information display



Title display

- 1 Disc icon
  - When playing a disc containing various data format, **MIXED** appear on it.
- 2 Media indicator
- 3 Title/Folder number indicator  
DVD: shows the title currently playing.  
Compressed audio, JPEG files and DivX: shows the folder currently playing.
- 4 Chapter/track/file number indicator  
DVD: shows the chapter currently playing.  
Video CD and CD: shows the track currently playing.  
Compressed audio, JPEG files and DivX: shows the file currently playing.
- 5 Play time indicator  
JPEG files: not available.
- 6 Variable message area  
DVD video: shows the audio language, subtitle language, viewing angle, repeat range and speaker output channel.  
Video CD: shows the repeat range and audio output channel.  
JPEG files: not available.  
DivX: shows the audio system, subtitle setting and repeat range.  
CD, compressed audio: shows the repeat range and random setting.

## Operating this unit

- 1 Press **⇐** to switch the information display.
  - DVD video:** Information display 1—Information display 2—Normal playback display
  - Video CDs:** Information display—Normal playback display
  - JPEG files and DivX:** Information display—Folder name display—File name display—Normal playback display
  - CD TEXT discs and compressed audio files:** Information display—Title display
- Title display shows the text information of the currently playing disc.
  - CD TEXT discs:** **Disc Title** (disc title), **Disc Artist** (disc artist name), **Track Title** (track title), **Track Artist** (track artist name)
  - Compressed audio files:** **Folder Name** (folder name), **File Name** (file name), **Track Title** (track title), **Artist Name** (artist name), **Album Title** (album title), **Comment** (comment), **Bit Rate** (bit rate)

### Notes

- Text information on the Title display does not scroll.
- When a Video CD featuring the PBC (playback control) function starts playing, **PLAYBACK CONTROL ON** will be displayed instead of track number indicator and play time indicator. **■**

## USB portable audio player/USB memory

You can play compressed audio files, DivX and JPEG image files stored in a USB storage device.

- For details about compatibility, refer to *Compressed audio and DivX compatibility (disc, USB)* on page 62.
- In the following instructions, USB memories and USB audio players are collectively referred to as "USB storage device".

### Basic operations

Playing files on a USB storage device	<ol style="list-style-type: none"> <li>1 Open the USB port cover and plug in the USB storage device using a USB cable.</li> </ol>
Stopping playback of files on a USB storage device	<ol style="list-style-type: none"> <li>1 You may disconnect the USB storage device at any time.</li> </ol>
Selecting a folder	<ol style="list-style-type: none"> <li>1 Press <b>▲</b> or <b>▼</b>.</li> </ol>
Fast forwarding or reversing	<ol style="list-style-type: none"> <li>1 Press and hold <b>◀</b> or <b>▶</b>.</li> </ol>
Selecting a file	<ol style="list-style-type: none"> <li>1 Press <b>◀</b> or <b>▶</b>.</li> </ol>
Returning to root folder	<ol style="list-style-type: none"> <li>1 Press and hold <b>B (BAND/ESC)</b>.</li> </ol>
Switching the media file type	<ol style="list-style-type: none"> <li>1 Press <b>B (BAND/ESC)</b> to switch between media file types.</li> </ol>
Pause or resume playback	<ol style="list-style-type: none"> <li>1 Press <b>▶/II</b>.</li> </ol>

### Selecting a file directly in the current folder

The operation is the same as that of the built-in DVD player.  
Refer to *Searching for the part you want to play* on page 14.

## Displaying text information

The operation is the same as that of the compressed audio on the built-in DVD player.  
Refer to *Displaying text information* on page 15.

## Selecting files from the file name list

The operation is the same as that of the built-in DVD player.  
Refer to *Selecting and playing files/tracks from the file name/track title list* on page 15.

## Advanced operations using special buttons

Changing audio language during playback (Multi-audio)

Refer to *Changing audio language during playback (Multi-audio)* on page 16.

- You cannot perform this operation by pressing the button of the same name on the remote control.

Changing the subtitle language during playback (Multi-subtitle)

Refer to *Changing the subtitle language during playback (Multi-subtitle)* on page 16.

- You cannot perform this operation by pressing the button of the same name on the remote control.

Selecting a repeat play range

Refer to *Selecting a repeat play range* on page 17.

However, the repeat play ranges you can select are different from that of the built-in DVD player. The repeat play ranges of the USB portable audio player/USB memory are:

- TRACK** – Repeat the current file
- FOLDER** – Repeat the current folder
- ALL** – Repeat all files

Playing tracks in random order

Refer to *Playing tracks in random order* on page 17.

Pausing playback

Refer to *Pausing playback* on page 17.

Enhancing compressed audio and restoring rich sound (advanced sound retriever)

Refer to *Enhancing compressed audio and restoring rich sound (advanced sound retriever)* on page 17.

## Function settings

### 1 Press M.C. to display the main menu.

### 2 Turn M.C. to select the function.

After selecting, perform the following procedures to set the function.

#### REPEAT (repeat play)

Refer to **REPEAT** (*repeat play*) on page 17.

However, the repeat play ranges you can select are different from that of the built-in DVD player. The repeat play ranges of the USB portable audio player/USB memory are:

- TRACK** – Repeat just the current file
- FOLDER** – Repeat the current folder
- ALL** – Repeat all files

#### RANDOM (random play)

Refer to **RANDOM** (*random play*) on page 17.

#### ROTATION (picture rotation)

- This function is available for JPEG files.

Refer to **ROTATION** (*picture rotation*) on page 17.

#### PAUSE (pause)

Refer to **PAUSE** (*pause*) on page 18.


#### S.RTRV (advanced sound retriever)

- This function is available for compressed audio files.

Refer to **S.RTRV** (*advanced sound retriever*) on page 18.

## Switching the information display

The operation is the same as that of the built-in DVD player.

Refer to *Switching the information display* on page 18. 

## iPod

### Basic operations

Playing songs on an iPod

1 Open the USB port cover.

2 Plug an iPod into the USB port/USB port and AUX input.

- When playing songs on an iPod, plug an iPod into the USB port using the iPod Dock Connector to USB Cable.
- When playing videos on an iPod with video capabilities, plug an iPod into the USB port and AUX input using an interface cable (e.g., CD-IU50V).

For details on the position of the USB port and AUX input, refer to *Head unit* on page 5.

3 Press **S (SRC/OFF)** to select **USB-iPod** as a source.

Playback will start.

Selecting a track (chapter)

1 Press ◀ or ▶.

Fast forwarding or reversing

1 Press and hold ◀ or ▶.

#### Notes

- The iPod cannot be turned on or off when the control mode is set to **CTRL AUDIO**.
- Disconnect headphones from the iPod before connecting it to this unit.
- The iPod will turn off about two minutes after the ignition switch is set to OFF.
- Read the precautions for iPod in the following section. Refer to page 61.
- If an error message is displayed, refer to *Error messages* on page 57.

### Browsing for a song/video

Operations to control an iPod with this unit is designed to be as close to the iPod as possible to make operation and song/video search easy.

- When the separately sold display is connected to this unit and the video output is set to on in the initial setting menu (refer to **V.OUT** (*display connection*) on page 30), the listed information of videos will appear on the display.

- Incompatible text saved on the iPod will not be displayed by the unit.

### 1 Press Q to switch to the top menu of list search.

### 2 Use M.C. to select a category/song.

Changing the name of the song or category

1 Turn **M.C.**

- When browsing for a song**  
Playlists—artists—albums—songs—podcasts—genres—composers—audiobooks
- When browsing for a video**  
Depending on your iPod, categories shown on the display differ.

Playing

1 When a song or video is selected, press **M.C.**

Viewing a list of songs/videos in the selected category

1 When a category is selected, press **M.C.**

Playing a song in the selected category

1 When a category is selected, press and hold **M.C.**

Searching the list by alphabet

- When a list for the selected category is displayed, press **Q** to switch to alphabet search mode.
- Turn **M.C.** to select a letter.
- Press **M.C.** to display the alphabetical list.
  - If alphabet search fails, **NOT FOUND** is displayed.

## Displaying text information

When the video output is set to off in the initial setting menu (refer to *Switching the information display* on page 18), the text information of the currently playing song will appear on this unit. You can switch the text information.

- When the video output is set to on in the initial setting menu and an separately sold display is connected to this unit, the text information appears on the display (refer to **V.OUT** (*display connection*) on page 30). The elapsed playing time is displayed on this unit and you cannot switch the text information.

## Operating this unit

Selecting the desired text information

- 1 Press **↵**.

Scrolling the text information to the left

- 1 Press and hold **↵**.

### Advanced operations using special buttons

Selecting a repeat play range

- 1 Press **6/↔/ANGLE** to cycle between the following:
  - **ONE** – Repeat the current song
  - **ALL** – Repeat all songs in the selected list

Playing songs in a random order (shuffle)

- 1 Press **5/⊗/SUB TITLE** to turn shuffle all on.
  - To turn off, set **SHUFFLE** in the **FUNCTION** menu to off.

Pausing playback

- 1 Press **2/PAUSE** to pause or resume.

Playing songs related to the currently playing song

You can play songs from the following lists.

- Album list of the currently playing artist
  - Song list of the currently playing album
  - Album list of the currently playing genre
- 1 Press and hold **⊗** to switch to link play mode.
  - 2 Turn **M.C.** to change the mode; press to select.
    - **ARTIST** – Plays an album of the artist currently being played.
    - **ALBUM** – Plays a song from the album currently being played.
    - **GENRE** – Plays an album from the genre currently being played.
    - **SEARCHING** flashes while searching the list and then the playback of the list starts.

Operating this unit's iPod function from your iPod  
This function is not compatible with the following iPod models.

- iPod nano 1st generation
  - iPod 5th generation
- 1 Press **4/iPod/AUDIO** to switch the control mode.
    - **CTRL IPOD** – This unit's iPod function can be operated from the connected iPod.
    - **CTRL AUDIO** – This unit's iPod function can be operated from this unit.
  - 2 When you select **CTRL IPOD**, operate the connected iPod to select a song/video and play.
    - Switching the control mode to **CTRL IPOD** pauses song/video playback. Operate the iPod to start playback.
    - The following functions are still accessible from the unit even if the control mode is set to **CTRL IPOD**.
      - Fast forward/reverse
      - Track up/down
      - Switching the text information

Enhancing compressed audio and restoring rich sound (advanced sound retriever)

- 1 Press **1/S.Rtrv/DVD MENU** to cycle between:
  - **OFF** (off)—1—2
  - **1** is effective for low compression rates, and **2** is effective for high compression rates.

### Function settings

**1 Press M.C. to display the main menu.**

**2 Turn M.C. to change the menu option and press to select FUNCTION.**

**3 Turn M.C. to select the function.**

After selecting, perform the following procedures to set the function.

#### REPEAT (repeat play)

- 1 Press **M.C.** to display the setting mode.
- 2 Turn **M.C.** to select a repeat play range. For details, refer to *Selecting a repeat play range* on this page.
- 3 Press **M.C.** to confirm the selection.

#### SHUFFLE (shuffle)

## Operating this unit

- 1 Press **M.C.** to display the setting mode.
- 2 Turn **M.C.** to select your favorite setting.
  - **SONGS** – Play back songs in the selected list in random order.
  - **ALBUMS** – Play back songs from a randomly selected album in order.
  - **OFF** – Cancel random play.
- 3 Press **M.C.** to confirm the selection.

#### SHUFFLEALL (shuffle all)

- This function is available only for songs.
- 1 Press **M.C.** to turn shuffle all on. To turn off, set **SHUFFLE** in the **FUNCTION** menu to off.

#### LINK PLAY (link play)

- This function is available only for songs.
- 1 Press **M.C.** to display the setting mode.
  - 2 Turn **M.C.** to change the mode; press to select. For details about the settings, refer to *Playing songs related to the currently playing song* on the previous page.

#### CTRL (control mode)

- 1 Press **M.C.** to select your favorite setting. For details, refer to *Operating this unit's iPod function from your iPod* on the previous page.

#### PAUSE (pause)

- 1 Press **M.C.** to pause or resume.

#### AUDIO BOOK (changing of audiobook speed)

- This function is available only for songs.
- 1 Press **M.C.** to display the setting mode.
  - 2 Turn **M.C.** to select your favorite setting.
    - **FASTER** – Playback at a speed faster than normal
    - **NORMAL** – Playback at normal speed
    - **SLOWER** – Playback at a speed slower than normal
  - 3 Press **M.C.** to confirm the selection.

#### WIDE (changing the screen mode)

- This function is available only for video.
- 1 Press **M.C.** to switch the screen mode.
    - **WIDE:ON** – Wide screen (16:9)
    - **WIDE:OFF** – Standard screen (4:3)

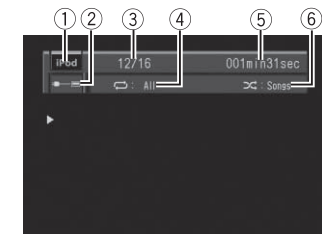
#### S.RTRV (advanced sound retriever)

- Automatically enhances compressed audio and restores rich sound.
- 1 Press **M.C.** to display the setting mode.
  - 2 Turn **M.C.** to select the desired setting. For details, refer to *Enhancing compressed audio and restoring rich sound (advanced sound retriever)* on the previous page.
  - 3 Press **M.C.** to confirm the selection.

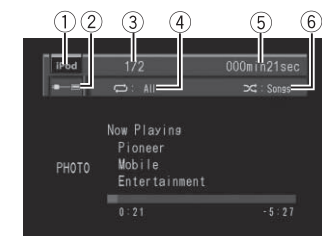
### Information display

When the video output is set to on in the initial setting menu (refer to **V.OUT** (display connection) on page 30) and a separately sold display is connected to this unit, the text information appears on the display.

- This function is available only for songs.



Information display



Title display

- 1 Source icon
- 2 Power indicator  
Appears when the power is supplied to the iPod.
- 3 Song number indicator
- 4 Repeat indicator
- 5 Play time indicator
- 6 Shuffle indicator

## Operating this unit

- Press **↔** to switch the information display.

Information display—Title display

- If an album art data is not included in a song, **PHOTO** is displayed.

## Audio Adjustments

### 1 Press M.C. to display the main menu.

### 2 Turn M.C. to change the menu option and press to select **AUDIO**.

### 3 Turn M.C. to select the audio function.

After selecting, perform the following procedures to set the audio function.

#### FAD/BAL (fader/balance adjustment)

- 1 Press **M.C.** to display the setting mode.
- 2 Press **M.C.** to cycle between fader (front/rear) and balance (left/right).
- 3 Turn **M.C.** to adjust speaker balance.

#### EQUALIZER (equalizer recall)

- 1 Press **M.C.** to display the setting mode.
- 2 Turn **M.C.** to select the equalizer.  
**DYNAMIC—VOCAL—NATURAL—CUSTOM—FLAT—POWERFUL**
- 3 Press **M.C.** to confirm the selection.

#### TONE CTRL (equalizer adjustment)

- Adjusted equalizer curve settings are stored in **CUSTOM**.
- 1 Press **M.C.** to display the setting mode.
  - 2 Press **M.C.** to select **BASS** (bass)/**MID** (mid)/**TREBLE** (treble).
  - 3 Turn **M.C.** to adjust the level.  
Adjustment range: **+6** to **-6**

#### LOUDNESS (loudness)

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

- 1 Press **M.C.** to display the setting mode.
- 2 Turn **M.C.** to select the desired setting.  
**OFF** (off)—**LOW** (low)—**HIGH** (high)
- 3 Press **M.C.** to confirm the selection.

#### SLA (source level adjustment)

**SLA** (Source level adjustment) lets you adjust the volume level of each source to prevent radical changes in volume when switching between sources.

When selecting FM as the source, you cannot switch to **SLA**.

- Settings are based on the FM volume level, which remains unchanged.
- 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.
- Bluetooth, external unit 1 and external unit 2 are automatically set to the same source level adjustment volume.
- iPod and USB storage device are automatically set to the same source level adjustment volume.

- 1 Press **M.C.** to display the setting mode.
- 2 Turn **M.C.** to adjust the source volume.  
Adjustment range: **+4** to **-4**
- 3 Press **M.C.** to confirm the selection.



## Operating this unit

## Setting up the DVD player

### Introduction of DVD setup adjustments

You can use this menu to change audio, subtitle, parental lock and other DVD settings.

- To perform this function, set the remote control to **DVD** mode.

- 1 Select **DVD** as the source and then press **■**.
- 2 Press **MENU** when the disc is stopped.  
The DVD setup menu is displayed.
- 3 Move the thumb pad left or right to switch the DVD setup menu categories.  
**LANG.** (language)—**PICT.** (picture)—**GEN.** (general)
- 4 Move the thumb pad up or down to select the DVD setup function names.

**For LANG.:** **SUBTITLE LANG.** (subtitle language settings)—**AUDIO LANG.** (audio language settings)—**MENU LANG.** (menu language settings)—**OSD LANGUAGE** (on screen display language setting)—**CHARACTER SET** (character set setting)

**For PICT.:** **ANGLE ICON DISPLAY** (angle icon)—**TV ASPECT** (TV aspect)—**SLIDESHOW TIME** (slideshow interval time setting)

**For GEN.:** **PARENTAL** (parental lock)—**DivX SUBTITLE** (DivX subtitle)—**IEC DIGITAL OUTPUT** (digital output setting)—**DivX VOD** (DivX VOD)—**SAMPLING OUTPUT** (down sampling output setting)

If you press **MENU** during display of a DVD setup menu, the DVD setup menu is canceled and the unit returns to the previous display.

### Menu operations identical for DVD setup adjustments

Returning to the previous display

- 1 Press **RETURN**.

## Setting the subtitle language

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

- 1 Move the thumb pad up or down to select **SUBTITLE LANG.** in **LANG.**
- 2 Click the thumb pad.  
A subtitle language menu is displayed.
- 3 Move the thumb pad up, down, left or right to select the desired language.
- 4 Click the thumb pad.  
The subtitle language is set.

#### Notes

- If the selected language is not available, the language specified on the disc is displayed.
- You can also switch the subtitle language by pressing **SUBTITLE** during playback. (Refer to *Changing the subtitle language during playback (Multi-subtitle)* 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 66.

- 1 Pressing **CLEAR** cancels the input numbers.

## Setting the audio language

- 1 Move the thumb pad up or down to select **AUDIO LANG.** in **LANG.**
- 2 Click the thumb pad.  
An audio language menu is displayed.
- 3 Move the thumb pad up, down, left or right to select the desired audio language.
- 4 Click the thumb pad.  
The audio language is set.

#### Notes

- If the selected language is not available, the language specified on the disc is used.

## Operating this unit

- You can also switch the audio language by pressing **AUDIO** during playback. (Refer to *Changing audio language during playback (Multi-audio)* on page 16.)
- The setting made here will not be affected even if the audio language is switched during playback using **AUDIO**.
- If you have selected **OTHERS**, refer to *When you select OTHERS* on the previous page.

### Setting the menu language

- Move the thumb pad up or down to select **MENU LANG.** in **LANG.**
- Click the thumb pad.  
A menu language menu is displayed.
- Move the thumb pad up, down, left or right to select the desired menu language.
- Click the thumb pad.  
The menu language is set.

#### Notes

- If the selected language is not available, the language specified on the disc is displayed.
- If you have selected **OTHERS**, refer to *When you select OTHERS* on the previous page.

### Setting the on screen display language

You can set the preferred language for information display, DVD setup menu and list display etc.

- Move the thumb pad up or down to select **OSD LANGUAGE** in **LANG.**
- Click the thumb pad.  
An on screen display language menu is displayed.
- Move the thumb pad up or down to select the desired on screen display language.
- Click the thumb pad.  
The on screen display language is set.

### Setting the character set

You can set the preferred character set for DivX subtitle file, information display and list display.

- Move the thumb pad up or down to select **CHARACTER SET** in **LANG.**
- Click the thumb pad.  
A character set setting menu is displayed.
- Move the thumb pad up or down to select the desired character set.
- Click the thumb pad.  
The character set is set.

### Setting the angle icon display

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

- Move the thumb pad up or down to select **ANGLE ICON DISPLAY** in **PICT.**
- Click the thumb pad to select on or off.  
A character set setting menu is displayed.

### Setting the aspect ratio

There are two kinds of display: a wide screen display that has a width-to-height ratio (TV aspect ratio) of 16:9, and regular display that has a TV aspect of 4:3. Be sure to select the correct TV aspect for the display connected to **V OUT**.

- When using regular display, select either **LETTER BOX** or **PANSCAN**. 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.
- Move the thumb pad up or down to select **TV ASPECT** in **PICT.**
  - Click the thumb pad.  
TV aspect menu is displayed.
  - Move the thumb pad up or down to select the desired TV aspect.
    - 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
    - PANSCAN** – The picture is cut short on the right and left sides of the screen
  - Click the thumb pad.

## Operating this unit

#### Notes

- When playing discs that do not specify **PANSCAN**, the disc is played back in **LETTER BOX** display even if you select the **PANSCAN** 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.

- Move the thumb pad up or down to select **SLIDE-SHOW TIME** in **PICT.**
- Click the thumb pad.  
A slide show interval time menu is displayed.
- Move the thumb pad up or down to select the desired TV aspect.
  - Manual** – JPEG images can be switched manually
  - 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
- Click the thumb pad.  
The slideshow interval time is set.

### 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.

- Move the thumb pad up or down to select **PARENTAL** in **GEN.**
- Click the thumb pad.  
Parental lock setting menu is displayed.
- Press **0** to **9** to input a four digit code number.
- Move the thumb pad left or right to move the cursor to the previous or next position.
- Click the thumb pad after entering the four digit code number.  
The code number is set, and the level can now be set.
- Move the thumb pad left or right to select the desired level.
  - LEVEL8** – Playback of the entire disc is possible (initial setting)
  - LEVEL7** to **LEVEL2** – Playback of discs for children and non-adult-oriented discs is possible
  - LEVEL1** – Playback of discs for children only is possible
- Click the thumb pad.  
The parental lock level is set.


#### 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.

## Operating this unit

### Changing the level

You can change the set parental lock level.

- 1 Move the thumb pad up or down to select **PAR-  
ENTAL** in **GEN**.
- 2 Click the thumb pad.  
Parental lock setting menu is displayed.
- 3 Press **0** to **9** to input the registered code number.
- 4 Move the thumb pad left or right to move the cursor to the previous or next position.
- 5 Click the thumb pad after entering the four digit code number.  
This sets the code number, and the level can now be changed.
  - If you input an incorrect code number, the icon  is displayed. Input the correct code number.
  - If you forget your code number, refer to *If you forget your code number* on this page.
- 6 Move the thumb pad left or right to select the desired level.
- 7 Click the thumb pad.  
The parental lock level is set.

### If you forget your code number

Please see the following section, and press **CLEAR** 10 times in the parental lock setting menu. Refer to *Changing the level* on this page. The registered code number is canceled, letting you register a new one.

### 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 Move the thumb pad up or down to select **DivX  
SUBTITLE** in **GEN**.
  - 2 Click the thumb pad to select whether to display DivX external subtitles or not.
    - **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.

### Setting for digital output

Audio which is outputted from digital output of this unit can be selected. Normally, set to **STREAM**. If this unit's digital output is not used, there is no need to change settings.

- Selecting **Linear PCM** enables you to switch the output channel if playing dual mono mode DVD video discs.
- 1 Move the thumb pad up or down to select **IEC DI-  
GITAL OUTPUT** in **GEN**.
  - 2 Click the thumb pad to select the desired digital output setting.
    - **STREAM** – The Dolby Digital/DTS signal is output as it is (initial setting)
    - **Linear PCM** – The Dolby Digital/DTS signal is converted to and output as a linear PCM signal

### 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 Move the thumb pad up or down to select **DivX  
VOD** in **GEN**.
  - 2 Click the thumb pad.
  - 3 Move the thumb pad up or down to select **REGIS-  
TRATION CODE**.
  - 4 Click the thumb pad.  
Your registration code is displayed.

## Operating this unit

### Displaying the deregistration code

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

- 1 Move the thumb pad up or down to select **DivX  
VOD** in **GEN**.
- 2 Click the thumb pad.
- 3 Move the thumb pad up or down to select **DE-  
REGISTRATION CODE**.
- 4 Click the thumb pad.
- 5 Move the thumb pad up or down to select **OK**.
  - To cancel deregistration, select **CANCEL**.
- 6 Click the thumb pad.  
The deregistration is complete.

### Setting the down sampling output

If the sampling frequency of the audio is more than 96 kHz, the audio outputted from the digital output of this unit can be reduced to 48 kHz. Normally, set the down sampling output to on. If this unit's digital output is not used, there is no need to change settings.

- 1 Move the thumb pad up or down to select **SAM-  
PLING OUTPUT** in **GEN**.
- 2 Click the thumb pad.  
Each time you click the thumb pad the selected setting switches on or off.

### Initial Settings

**1 Press and hold S (SRC/OFF) until the unit turns off.**

**2 Press M.C. and hold until the initial setting menu appears in the display.**

**3 Turn M.C. to select one of the initial settings.**

After selecting, perform the following procedures to set the initial setting.

#### CLOCK SET (setting the clock)

- 1 Press **M.C.** to display the setting mode.
- 2 Press **M.C.** to select the segment of the clock display you wish to set.  
Each time you press **M.C.**, one segment of the clock display is selected.  
Hour—Minute
- 3 Turn **M.C.** to adjust the clock.

#### FM STEP (FM tuning step)

The FM tuning step employed by seek tuning can be switched between 100 kHz, the preset step, and 50 kHz.

- If seek tuning is performed in 50 kHz steps, stations may be tuned in imprecisely. Tune in the stations with manual tuning or use seek tuning again.
  - The tuning step remains at 50 kHz during manual tuning.
- 1 Press **M.C.** to display the setting mode.
  - 2 Turn **M.C.** to select the FM tuning step.  
**50KHZ** (50 kHz)—**100KHZ** (100 kHz)
  - 3 Press **M.C.** to confirm the selection.

#### AM STEP (AM tuning step)

- 1 Press **M.C.** to display the setting mode.
- 2 Turn **M.C.** to select the AM tuning step.  
**10KHZ** (10 kHz)—**9KHZ** (9 kHz)
- 3 Press **M.C.** to confirm the selection.

#### AUX1 (front AUX input setting)

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

- 1 Press **M.C.** to display the setting mode.
- 2 Turn **M.C.** to select the desired setting.  
**AUDIO** (auxiliary device connected with stereo mini plug cable) – **VIDEO** (auxiliary video device connected with a 4-pole mini plug cable) – **OFF** (No auxiliary device)
- 3 Press **M.C.** to confirm the selection.

#### AUX2 (rear RCA input setting)

- 1 Press **M.C.** to turn **AUX2** on or off.

#### VIDEO IN (Setting AV input)

## Operating this unit

You can connect AV components to the AV input with an RCA cable.

Switch the AV input setting according to the connected AV component.

For more details, refer to the installation manual.

- Select **EXT-VIDEO** to watch video of a connected video unit as **EXTERNAL** source.
- Select **AUX** to watch video of an auxiliary device as **AUX2** source.

- 1 Press **M.C.** to display the setting mode.
- 2 Turn **M.C.** to select the desired setting.  
**OFF** (off)—**EXT-VIDEO** (external video unit)—**AUX** (auxiliary device)
- 3 Press **M.C.** to confirm the selection.
  - To watch video of **AUX** source, set auxiliary 2 setting on. For details, refer to **AUX2** (rear RCA input setting) on the previous page.

### SCROLL (ever scroll)

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

- 1 Press **M.C.** to display the setting mode.
- 2 Turn **M.C.** to select the desired setting.  
**EVER** (ever)—**OFF** (off)
- 3 Press **M.C.** to confirm the selection.

### COLOR SYS (DVD output signal setting)

When this unit is connected to a display, you need to adjust the DVD output signal suitable to DVD and your display signal setting.

- 1 Press **M.C.** to display the setting mode.
- 2 Turn **M.C.** to select an appropriate DVD output signal.

#### NTSC—PAL

- 3 Press **M.C.** to confirm the selection.

### V.OUT (display connection)

You can use this unit with or without the display.

When using this unit connected to the display, you can turn the display connection setting on or off. If you turn this function on, the detailed text information of the **DVD**, **USB** and **USB-iPod** source appears on the display.

- 1 Press **M.C.** to turn display connection on or off.

### DIGITALATT (Correcting distorted sound)

You can minimize distortion that may be caused by the equalizer curve settings.

Setting an equalizer level high can cause distortion. If high sound is crippled or distorted, try switching to **LOW**. Normally, leave the setting at **HIGH** to ensure quality sound.

- This function is available only when the multi-channel processor (DEQ-P7650) is connected to this unit.
- 1 Press **M.C.** to display the setting mode.
  - 2 Turn **M.C.** to switch the digital attenuator setting.
    - **HIGH** – High quality sound
    - **LOW** – Minimize distortion sound
  - 3 Press **M.C.** to confirm the selection.

### RESET (Resetting the audio functions)

- This function is available only when the multi-channel processor (DEQ-P7650) is connected to this unit.

You can reset audio functions other than the following settings.

- Volume setting (refer to *Adjusting the volume* on page 9)
- Listening position setting (refer to *Using the position selector* on page 34)
- Fader/balance setting (refer to *Using fader/balance adjustment* on page 34)
- SLA (source level adjustment) setting (refer to *Adjusting source levels* on page 36)
- Dynamic range control (refer to *Using dynamic range control* on page 36)
- Direct control setting (refer to *Using direct control* on page 36)
- Down-mix setting (refer to *Using the down-mix function* on page 36)

- 1 Press **M.C.** to display the setting mode.
- 2 Turn **M.C.** to display **YES**.
- 3 Press **M.C.**  
**REALLY?** appears in the display.
- 4 Press **M.C.** to reset audio functions.  
**COMPLETE** appears in the display.

### Notes

- When **V.OUT** is set to **ON**, you cannot switch to **SCROLL**.
- According to the setting of **V.OUT**, the operation of this unit differs. The examples are as follows:
  - Playing a compressed audio file and displaying the file name list mode

## Operating this unit

- When the display connection is set to on, the files of the currently playing folder are displayed.
  - When the display connection is set to off, the file of the root folder is displayed.
- Playing a compressed audio file and pressing **↵** in the file name list
- When the display connection is set to on, the name of the currently playing file is selected.
  - When the display connection is set to off, you can return to the previous list (the folder one level higher). **▣**

## Using AUX1 and AUX2 source About AUX1 and AUX2

There are two methods to connect auxiliary devices to this unit.

### AUX1 source

When connecting auxiliary device using the front AUX input.

- You need to activate the AUX setting in the initial setting menu. Refer to **AUX1** (front AUX input setting) on page 29.

#### 1 Insert the mini plug into the AUX input jack on this unit.

For more details, refer to *Head unit* on page 5. This auxiliary device is automatically set to **AUX1**.

#### 2 Press S (SRC/OFF) to select AUX1 as the source.

### AUX2 source

When connecting auxiliary device using the rear RCA input.

- You need to activate the AUX setting in the initial setting menu. Refer to **AUX2** (rear RCA input setting) on page 29.

#### 1 Use the rear RCA input to connect an auxiliary device featuring RCA output.

For more details, refer to the installation manual.

This auxiliary device is automatically set to **AUX2**.

- This type of connection can only be made if the auxiliary device has RCA outputs.

#### 2 Press S (SRC/OFF) to select AUX2 as the source. **▣**

## Switching between digital and analog

When this unit is connected to the DEQ-P7650, you can switch to the AUX mode to analog or digital. However, when you use **AUX2** as the source, make sure the AUX mode is set to analog.

#### 1 Press S (SRC/OFF) to select AUX2 as the source.

Press **S (SRC/OFF)** until **AUX2** appears in the display.

- If the auxiliary setting is not turned on, **AUX2** cannot be selected. For more details, refer to **AUX2** (rear RCA input setting) on page 29.

#### 2 Press B (BAND/ESC) to switch the modes.

**ANALOG** (analog) — **DIGITAL** (digital) **▣**

## Displaying the clock

- Press **⊖** to turn the clock display on or off.

### Note

The clock display disappears temporarily when you perform other operations, but the clock display appears again after 25 seconds. **▣**



## Using an external unit

An external unit refers to a Pioneer product, such as those which will be available in the future. Although incompatible as a source, the basic functions of up to two external units can be controlled with this unit. When two external units are connected, the external units are automatically allocated to external unit 1 or external unit 2.

The basic operations of the external unit are explained below. The allocated functions will differ depending on the connected external unit. For details concerning these functions, refer to the owner's manual for the external unit.

## Selecting the external unit as the source

- Press **S (SRC/OFF)** to select **EXTERNAL** as the source.

## Basic operations

The functions allocated to the following operations will differ depending on the connected external unit. For details concerning these functions, refer to the owner's manual for the connected external unit.

- Press **B (BAND/ESC)**.
- Press and hold **B (BAND/ESC)**.
- Press **◀** or **▶**.
- Press and hold **◀** or **▶**.
- Press **▲** or **▼**.

## Using the functions allocated to 1 to 6 keys

- Press any of **1** to **6**.

## Advanced operations

- 1 Press **M.C.** to display the main menu.

- 2 Use **M.C.** to select **FUNCTION**.

Turn to change the menu option. Press to select.


- 3 Turn **M.C.** to select the function.

**FUNCTION 1** (function 1)—**FUNCTION 2**

(function 2)—**FUNCTION 3** (function 3)—

**FUNCTION 4** (function 4)—**AUTO/MANU**


(auto/manual)

- You can also select the function by pressing **FUNC** on the remote control. 

## Bluetooth adapter

You can use this unit to control a Bluetooth adapter, which is sold separately.

For details concerning operation, refer to the Bluetooth adapter's manuals. This section provides information on Bluetooth telephone/audio operations with this unit which differs from that described in the Bluetooth adapter's manual.

- In some countries, CD-BTB100 is not sold on the market.
- This unit is a head unit group 1 unit.
  - But the selecting a function operation is the same as that of the head unit group 2.
  - When a phone call ends, the system returns to the previous source.
  - When a call comes in during sources other than Bluetooth telephone/audio source and the call is being carried on, you cannot use **B (BAND/ESC)** to switch Bluetooth telephone and Bluetooth audio. 

## Digital Signal Processor

You can use this unit to control a DEQ-P7650 multi-channel processor (sold separately).

By carrying out the following settings/adjustments in the order shown, you can effortlessly create a finely-tuned sound field.

- 1 *Setting the speaker setting*
- 2 *Using the position selector*
- 3 *Auto TA and EQ (auto-time alignment and auto-equalizing)*
- 4 *Adjusting time alignment*
- 5 *Adjusting the speaker output levels using a test tone*
- 6 *Selecting a cross-over frequency*
- 7 *Adjusting the speaker output levels*
- 8 *Adjusting the 3-band parametric equalizer*

## Introduction of DSP adjustments

- 1 Press **M.C.** to display the main menu.

- 2 Use **M.C.** to select **AUDIO**.

Turn to change the menu option. Press to select.

- 3 Turn **M.C.** to select the audio function.

**FADER** (balance adjustment)—**POSI** (position selector)—**PLII** (Dolby Pro Logic II)—**PANO** (music mode adjust)—**OFF** (sound field control)—**Lo/Ro** (down mix)—**DRC** (dynamic range control)—**DIRECT** (direct)—**SLA** (source level adjustment)—**AUTO EQ** (auto-equalizer on/off)—**FRONT** (speaker setting)—**HPF** (cross-over frequency)—**FRONT-L** (speaker output level)—**TEST TONE** (test tone)—

**INITIAL** (time alignment mode)—**FL** (time alignment adjustment)—**POWERFUL** (equalizer recall)—**PEQ** (3-band parametric equalizer)

- You can also use **A.MENU** on the remote control to select an audio menu.

- You can switch to **PLII** when the speaker setting for either center or rear speakers is set to on.
- When direct control is on, you can select **PLII**, **PANO** and **DIRECT** in the audio function menu.
- When you select **MUSIC** in the **PLII**, you can select adjusting music mode.

- **DRC** is only effective for Dolby Digital sound.
- When selecting FM as the source, you cannot switch to **SLA**.
- When you select **TA:OFF** in **INITIAL**, you cannot select **FL**.
- You cannot select **AUTO EQ** if auto TA and EQ has not been carried out. **SET A-EQ** is displayed.
- To return to the display of each source, press **B (BAND/ESC)**.
- If you do not operate the DSP function except for **TEST TONE**, **FL** and **PEQ** within about 30 seconds, the display is automatically returned to the source display.

## Using fader/balance adjustment

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

### 1 Use M.C. to select FADER in the audio function menu.

Refer to *Introduction of DSP adjustments* on the previous page.

- If the balance setting has been previously adjusted, **BALANCE** will be displayed.

### 2 Press ▲ or ▼ to adjust front/rear speaker balance.

**FADER:F25** to **FADER:R25** is displayed as the front/rear speaker balance moves from front to rear.

- **FADER:0** is the proper setting when only two speakers are used.

### 3 Press ◀ or ▶ to adjust the left/right speaker balance.

**BALANCE:L25** to **BALANCE:R25** is displayed as the left/right speaker balance moves from left to right.

## Using the position selector

One way to assure a more natural sound is to optimize the stereo image and place you right in the center of the sound field. With the position selector function, you can automatically adjust the speaker output levels and insert a

delay time to match the number and position of the occupied seats. When used in conjunction with the SFC, this feature will make the sound image more natural and offer a panoramic sound that envelops you.

- When adjustments are made to the listening position, the speaker outputs are automatically set to the appropriate levels. To tailor the levels more precisely, refer to *Adjusting the speaker output levels using a test tone* on page 38 or *Adjusting the speaker output levels* on page 38.

### 1 Use M.C. to select POSI in the audio function menu.

Refer to *Introduction of DSP adjustments* on the previous page.

### 2 Press ◀/▶/▲/▼ to select a listening position.

Direction	Display	Position
◀	F/L	Left front seat
▶	F/R	Right front seat
▲	FRT	Front seats
▼	ALL	All seats

- To cancel the selected listening position, press the same button again.

## Using Dolby Pro Logic II

Dolby Pro Logic II creates five full-bandwidth output channels from two-channel sources to achieve high-purity matrix surround sound.

- If both the center and the rear speakers are set to **OFF**, you cannot use this function.
- Dolby Pro Logic II supports stereo sources with a sampling rate of up to 48 kHz and has no effect on other types of sources.

### 1 Use M.C. to select PLII in the audio function menu.

Refer to *Introduction of DSP adjustments* on the previous page.

### 2 Press ◀ or ▶ to select the desired mode.

- **MOVIE** – Suitable for movie playback
- **MUSIC** – Suitable for music playback
- **MATRIX** – Suitable when FM radio reception is weak
- **OFF** – Turn Dolby Pro Logic II off

## Adjusting the music mode

You can adjust the music mode with the following three controls.

- Panorama (**PANO**) extends the front stereo image to include the surround speakers for an exciting “wraparound” effect.
- Dimension (**DIME**) gradually adjusts the sound field either towards the front or rear.
- Center width control (**CENTER**) positions center-channel sounds between the center, left and right speakers. It improves the left-center-right stage presentation for both the driver and front passenger.

### 1 Use M.C. to select PANO (adjusting music mode) in the audio function menu.

Refer to *Introduction of DSP adjustments* on page 33.

- You can adjust the music mode only when **MUSIC** has been selected in **PLII** (Dolby Pro Logic II).

### 2 Press ◀ or ▶ to select controls.

**PANO** (panorama)—**DIME** (dimension)—**CENTER** (center width)

### 3 Press ▶ to select PANO and then press ▲ to turn the panorama control on.

- To turn the panorama control off, press ▼.

### 4 Press ▶ to select DIME and then ▲ or ▼ to adjust front/rear speaker balance.

**+3** to **-3** is displayed as the front/rear speaker balance moves from front to surrounds.

### 5 Press ▶ to select CENTER and then ▲ or ▼ to adjust the center image.

Each time ▲ or ▼ is pressed it gradually spreads the center channel sound into the

front left and right speakers over a range **0** to **7**.

**3** is the default and it's recommended for most recordings. **0** places all center sound in the center speaker. **7** places all center sound equally in the left/right speakers.

## Using sound field control

The SFC function creates the sensation of a live performance.

- The acoustics of performance spaces differ depending on the extent and contour of space through which sound waves can move and on how the created sounds bounce off the stage, walls, floors and ceilings. At a live performance you hear music in three stages: direct sound, early reflections, and late reflections, or reverberations. These factors are programmed into the SFC circuitry to recreate the acoustics of various performance settings.

### 1 Use M.C. to select OFF (sound field control) in the audio function menu.

Refer to *Introduction of DSP adjustments* on page 33.

### 2 Press ◀ or ▶ to select the desired SFC mode.

**MUSICAL** (musical)—**DRAMA** (drama)—**ACTION** (action)—**JAZZ** (jazz)—**HALL** (hall)—**CLUB** (club)—**OFF** (off)

#### Note

If the source is a 2-channel LPCM or Dolby Digital audio source, we recommend turning Dolby Pro Logic II on when selecting SFC effects that are most suitable for 5.1-channel audio sources (such as **MUSICAL**, **DRAMA** or **ACTION**). On the other hand, when selecting SFC effects that are suitable for 2-channel audio sources (such as **JAZZ**, **HALL** or **CLUB**), we recommend turning Dolby Pro Logic II off.

## Using the down-mix function

Multi-channel audio can be played back in 2-channels with the down-mix function.

### 1 Use M.C. to select Lo/Ro (down mix) in the audio function menu.

Refer to *Introduction of DSP adjustments* on page 33.

### 2 Press ◀ or ▶ to switch the down mix settings.

- **Lt/Rt** – Down mixing so that the surround sound components can be restored (decoded).
- **Lo/Ro** – Stereo mixing the original audio data that does not contain channel modes such as surround sound components.

## Using dynamic range control

The dynamic range refers to the difference between the smallest and largest sounds emitted. Dynamic range control compresses this difference so that the sounds can be heard clearly even at low volume levels.

- The dynamic range control is only effective for Dolby Digital sound.

### 1 Use M.C. to select DRC in the audio function menu.

Refer to *Introduction of DSP adjustments* on page 33.

### 2 Press ▲ and ▼ to turn the dynamic range control on and off.

## Using direct control

You can override the audio settings to check their effectiveness.

- When direct control is on, all audio functions except **VOLUME** and **PLII** are locked.

### 1 Use M.C. to select DIRECT in the audio function menu.

Refer to *Introduction of DSP adjustments* on page 33.

### 2 Press ▲ and ▼ to turn the direct control on or off.

## Adjusting source levels

With SLA (source level adjustment), the volume levels of each source can be adjusted to prevent significant differences between sources.

- Settings are based on the FM volume level, which remains unchanged.

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

### 2 Use M.C. to select SLA in the audio function menu.

Refer to *Introduction of DSP adjustments* on page 33.

### 3 Press ▲ or ▼ to adjust the source volume.

Each time **M.C.** is pushed up or down, source volume increases or decreases. **+4** to **-4** is displayed as the source volume is increased or decreased.

#### 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.
- External unit 1 and external unit 2 are automatically set to the same source level adjustment volume.
- iPod and USB storage device are automatically set to the same source level adjustment volume.

## Using the auto-equalizer

The auto-equalizer is the equalizer curve created by auto TA and EQ (refer to *Auto TA and EQ (auto-time alignment and auto-equalizing)* on page 41).

You can turn the auto-equalizer on or off.

### 1 Use M.C. to select AUTO EQ in the audio function menu.

Refer to *Introduction of DSP adjustments* on page 33.

- If auto TA and EQ have not been carried out, **SET A-EQ** is displayed instead of **AUTO EQ**.

### 2 Press ▲ to turn the auto-equalizer on. ON appears in the display.

- To turn auto-equalizer off, press ▼.

## Setting the speaker setting

Be sure to adjust the speaker settings, such as size (bass capacity), according to the speakers installed. Set the size to **LRG** (large) if the speaker is capable of reproducing sounds of about 100 Hz and below. Otherwise, select **SML** (small).

- Low frequency sound is not emitted if the subwoofer is set to **OFF** and the front and rear speakers are set to **SML** or **OFF**.
- It is imperative that speakers that are not installed be set to **OFF**.
- Set the front or rear speaker to **LRG** if the speaker is capable of reproducing bass content, or if no subwoofer is installed.

### 1 Use M.C. to select FRONT (speaker setting) in the audio function menu.

Refer to *Introduction of DSP adjustments* on page 33.

### 2 Press ◀ or ▶ to select the speaker to be adjusted.

**FRONT** (front speakers)—**CENTER** (center speaker)—**REAR** (rear speakers)—**SUB.W** (subwoofer)—**PHASE** (subwoofer setting)

- You can only switch to **PHASE** when the subwoofer has been set to **ON**.

### 3 Press ▲ or ▼ to select the correct size for the selected speaker.

**OFF** (off)—**SML** (small)—**LRG** (large)

- You cannot select **OFF** when **FRONT** (front speakers) has been selected.
- You can select **ON** or **OFF** when **SUB.W** (subwoofer) has been selected.

- You can switch **REV** (reverse phase) or **NOR** (normal phase) when **PHASE** (subwoofer setting) has been selected.

## Correcting the subwoofer's phase

If boosting the bass output from the subwoofer is not effective or you feel that the bass is becoming less clear, the subwoofer output and bass content emitted from the other speakers may be canceling each other out.

### 1 Use M.C. to select FRONT (speaker setting) in the audio function menu.

Refer to *Introduction of DSP adjustments* on page 33.

### 2 Press ◀ or ▶ to select SUB.W.

Refer to *Setting the speaker setting* on this page.

### 3 Press ▲ to turn the subwoofer output on.

### 4 Press ▶ to select PHASE (subwoofer setting).

### 5 Press ▲ or ▼ to select the phase of subwoofer output.

Press ▲ to select **NOR** (normal phase). Press ▼ to select **REV** (reverse phase).

#### Note

When playing a 2-channel mono source with Dolby Pro Logic II turned on:

- No sound is emitted if the center speaker setting is **SML** or **LRG** and no center speaker is installed.

## Selecting a cross-over frequency

The frequency under which sounds are reproduced through a subwoofer can be selected. For example, if the size of one of the installed speakers is set to **SML**, you can select the frequency under which sounds will be reproduced through a speaker set to **LRG** or a subwoofer.

## Available accessories

**1 Use M.C. to select HPF in the audio function menu.**

Refer to *Introduction of DSP adjustments* on page 33.

**2 Press ◀ or ▶ to select the speaker to be adjusted.**

**F** (front speakers)—**C** (center speaker)—**R** (rear speakers)—**SW** (subwoofer)

**3 Press ▲ or ▼ to select cross-over frequency for the selected speaker.**

**63—80—100—125—160—200** (Hz)

**Note**

When you select a cross-over frequency, you are setting the cross-over frequency for the subwoofer's L.P.F. (low-pass filter) and the **SML** speaker's H.P.F. (high-pass filter). The cross-over frequency setting has no effect if the subwoofer is set to **OFF** and other speakers are set to **LRG** or **OFF**.

**Adjusting the speaker output levels**

Fine adjustments of the speaker output level can be made by listening to audio output. First, use the test tone to adjust the speaker to an approximate level, and then use this function to make fine adjustments.

**Adjusting the speaker output levels****1 Use M.C. to select FRONT-L (speaker output level) in the audio function menu.**

Refer to *Introduction of DSP adjustments* on page 33.

**2 Press ◀ or ▶ to select the speaker to be adjusted.**

**FRONT-L** (left front speaker)—**CENTER** (center speaker)—**FRONT-R** (right front speaker)—**REAR-R** (right rear speaker)—**REAR-L** (left rear speaker)—**SUB.W** (subwoofer)

- Speakers with the size set to **OFF** cannot be selected. (Refer to *Setting the speaker setting* on the previous page.)

**3 Press ▲ or ▼ to adjust the speaker output level.**

**+10** to **-10** is displayed as the level is increased or decreased.

**Note**

You will get the same results whether you adjust the speaker output levels with this mode or with **TEST TONE**.

**Adjusting the speaker output levels using a test tone**

You can easily get the right overall balance among the speakers with this function.

**1 Use M.C. to select TEST TONE in the audio function menu.**

Refer to *Introduction of DSP adjustments* on page 33.

**2 Press ▶ to start the test tone output.**

The test tone is emitted from each speaker in the following sequence at intervals of about two seconds. The current settings for the speaker emitting the test tone will be shown on the display.

**FRONT-L** (left front speaker)—**CENTER** (center speaker)—**FRONT-R** (right front speaker)—**REAR-R** (right rear speaker)—**REAR-L** (left rear speaker)—**SUB.W** (subwoofer)

- Check each speaker output level. If no adjustments are necessary, perform step 4 to stop the test tone.
- The settings for speakers with the size set to **OFF** will not be displayed. (Refer to *Setting the speaker setting* on the previous page.)

**3 Press ▲ or ▼ to adjust the speaker output level.**

**+10** to **-10** is displayed as the level is increased or decreased.

- The test tone will be emitted from the next speaker after about two seconds after the last operation.

**4 Press ◀ to stop the test tone output.**

## Available accessories

**5 Press B (BAND/ESC) to return to the ordinary display.****Notes**

- If necessary, select speakers and adjust their 'absolute' output levels. (Refer to *Adjusting the speaker output levels* on the previous page.)
- You will get the same results whether you adjust the speaker output levels with this mode or with **FRONT-L**.

**Using time alignment**

The distance between the listening position and each speaker can be adjusted with this function.

**1 Use M.C. to select INITIAL (time alignment mode) in the audio function menu.**

Refer to *Introduction of DSP adjustments* on page 33.

**2 Press ◀ or ▶ to select the time alignment.**

- INITIAL** – Initial time alignment (factory setting)
- AUTO TA** – Time alignment created by auto TA and EQ. (Refer to *Auto TA and EQ (auto-time alignment and auto-equalizing)* on page 41.)
- CUSTOM** – Adjusted time alignment that you can create
- TA:OFF** – Turns Time Alignment off
- If auto TA and EQ have not been carried out, you cannot select **AUTO TA**. In this case, **SET A-TA** is displayed.

**Adjusting time alignment**

The distance between the selected position and each speaker can be adjusted.

- The adjusted time alignment is stored in **CUSTOM**.

**1 Use M.C. to select FL (time alignment adjustment) in the audio function menu.**

Refer to *Introduction of DSP adjustments* on page 33.

- When you select **TA:OFF** in **INITIAL**, you cannot select **FL**.
- If a position other than **F/L** or **F/R** is selected, **CHECK POS1** is displayed. To set the position, refer to *Using the position selector* on page 34.

**2 Press ◀ or ▶ to select the speaker to be adjusted.**

**FL** (front speaker left)—**C** (center speaker)—**FR** (front speaker right)—**RR** (rear speaker right)—**RL** (rear speaker left)—**SW** (subwoofer)

- Speakers with the size set to **OFF** cannot be selected. (Refer to *Setting the speaker setting* on page 37.)

**3 Press ▲ or ▼ to adjust the distance between the selected speaker and the listening position.**

**0.0** (cm) to **500.0** (cm) is displayed as the distance is increased or decreased.

**4 Press B (BAND/ESC) to return to the ordinary display.****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.

- The equalizer curves for **CUSTOM1** and **CUSTOM2** can be adjusted.
- 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 Use M.C. to select POWERFUL (equalizer recall) in the audio function menu.

Refer to *Introduction of DSP adjustments* on page 33.

#### 2 Press ◀ or ▶ to select the equalizer. POWERFUL—NATURAL—VOCAL—FLAT—CUSTOM1—CUSTOM2—SUPER-BASS

### Adjusting the 3-band parametric equalizer

For **CUSTOM1** and **CUSTOM2** equalizer curves, you can adjust the front, rear and center equalizer curves separately by selecting a center frequency, an equalizer level and a Q factor for each band.

- A separate **CUSTOM1** curve can be created for each source.
- A **CUSTOM2** curve that is common for all sources can be created.
- The center speaker largely determines the sound image and getting the balance right is not easy. We recommend that you first adjust the balance among all of the speakers except the center speaker, by playing 2-channel audio (a CD, for example). Then, play 5.1-channel audio (Dolby Digital or DTS) and adjust the center speaker output to match the balance already created among the other speakers.

#### 1 Use M.C. to select PEQ (3-band parametric equalizer) in the audio function menu.

Refer to *Introduction of DSP adjustments* on page 33.

- Adjusted **PEQ** settings are memorized in **CUSTOM1** in the audio function menu.

#### 2 Press ◀ or ▶ to select the desired item.

**PEQ FRONT** (speakers)—**FRONT:LOW** (bands)—**F LOW : 80** (center frequency)—**F LOW : 0** (equalizer level)—**LOW 0:WIDE** (Q factor)

#### 3 Press ▶ to select the speakers setting and then ▲ or ▼ to select the speaker to be adjusted.

**FRONT** (front speakers)—**CENTER** (center speaker)—**REAR** (rear speakers)

- Speakers with the size set to **OFF** cannot be selected. (Refer to *Setting the speaker setting* on page 37.)

#### 4 Press ▶ to select the band setting and then press ▲ or ▼ to select the equalizer band to be adjusted.

**LOW** (low)—**MID** (mid)—**HI** (high)

#### 5 Press ▶ to select the center frequency setting and then press ▲ or ▼ to select the center frequency of selected band.

**40—50—63—80—100—125—160—200—250—315—400—500—630—800—1K—1.2K—1.6KHZ—2K—2.5K—3.1K—4K—5K—6.3K—8K—10K—12K** (Hz)

#### 6 Press ▶ to select the equalizer level setting and then press ▲ or ▼ to adjust the equalizer level.

**+6** to **-6** is displayed as the level is increased or decreased.

#### 7 Press ▶ to select the Q factor setting and then press ▲ or ▼ to select the desired Q factor.

**WID** (wide)—**NAR** (narrow)

- Adjust the parameters of each band for the other speakers in the same way.

#### 8 Press B (BAND/ESC) to return to the ordinary display.

#### Note

A center frequency can be selected for each band and can be changed in 1/3-octave steps. However, the interval between the selected center frequencies cannot be shorter than 1 octave.

### Auto TA and EQ (auto-time alignment and auto-equalizing)

Auto-time alignment automatically adjusts the time alignment according to the distance between the listening position and each speaker. The auto-equalizer automatically measures the car's interior acoustic characteristics, and then creates an auto-equalizer curve based on that information.

- To perform this function, dedicated microphone (e.g. CD-MC20) is required.

#### ! WARNING

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

#### ! CAUTION

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

### Before operating the auto TA and EQ function

- Perform auto TA and EQ in a quiet place, with both the car engine and air conditioning switched off. Also turn off any car phones or portable telephones in the car, or remove them from the car. Sounds other than the measurement tone (such as surrounding sounds, engine sound, telephones ringing) may prevent correct measurement of the car's interior acoustic characteristics.

- Be sure to perform auto TA and EQ using the optional microphone. Using another microphone may prevent measurement, or result in incorrect measurement of the car's interior acoustic characteristics.
- In order to perform auto TA and EQ, the front speaker must be connected.
- When this unit is connected to a power amp with input level control, auto TA and 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 TA and EQ. Also set the cut-off frequency for the built-in LPF of an active subwoofer to the highest frequency.
- The time alignment value resulting from auto TA and EQ has been calculated by a computer and is the optimum delay time that will give accurate results. Be sure to use the resulting value although it may differ from the actual distance when:
  - The reflected sound within the car is strong and delays occur.
  - The LPF on active subwoofers or external amps delay the lower sounds.
- Auto TA and EQ changes the audio settings as follows:
  - The fader/balance settings return to the center position. (Refer to *Using fader/balance adjustment* on page 34.)
  - The equalizer curve switches to **FLAT**. (Refer to *Recalling equalizer curves* on the previous page.)
  - When a subwoofer is connected to this unit, it will be adjusted automatically to both subwoofer output and high pass filter setting for rear speaker.
- Previous settings for auto TA and EQ will be overwritten.

### Performing auto TA and EQ

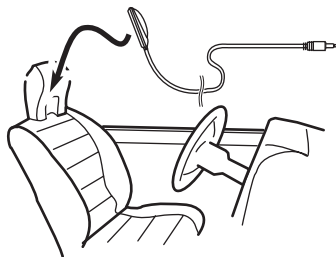
#### 1 Stop the car in a place that is quiet, close all the doors, windows and sun roof, and then turn the engine off.

If the engine is left running, the noise from the engine may cause incorrect auto TA and EQ.

## Available accessories

### 2 Fix the optional microphone in the center of the headrest of the driver's seat, facing forward.

The auto TA and EQ may differ depending on where you place the microphone. If desired, place the microphone on the front passenger seat to perform auto TA and EQ.



### 3 Turn the ignition switch to ON or ACC.

If the air conditioner or heater is turned on, turn it off. The noise from the fan may cause incorrect auto TA and EQ.

- Press **S (SRC/OFF)** to turn the source on if this unit is turned off.

### 4 Select the position for the seat on which the microphone is placed.

Refer to *Using the position selector* on page 34.

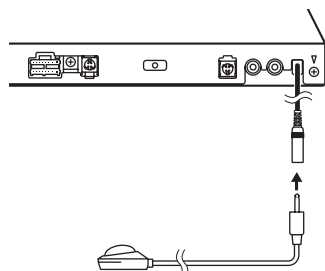
- If no position is selected before auto TA and EQ is started, **F/L** is automatically selected.

### 5 Press and hold **S (SRC/OFF)** until the unit turns off.

### 6 Press and hold **1/S.Rtrv** to enter the auto TA and EQ measurement mode.

- You can also perform this operation by pressing and holding **A.MENU** on the remote control.

### 7 Plug the microphone into the microphone input jack on the multi-channel processor.



### 8 Press **M.C.** to start the auto TA and EQ.

### 9 When the 10-second countdown starts, get out of the car and close the door within 10 seconds.

The measurement tone (noise) is outputted from the speakers, and auto TA and EQ begins.

- When all speakers are connected, auto TA and EQ is completed in about nine minutes.
- To stop auto TA and EQ, press any keys.
- To cancel auto TA and EQ part way through, press **B (BAND/ESC)**.

### 10 When auto TA and 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 *Auto TA and EQ error messages* on page 59.)

### 11 Press **B (BAND/ESC)** to cancel the auto TA and EQ mode.

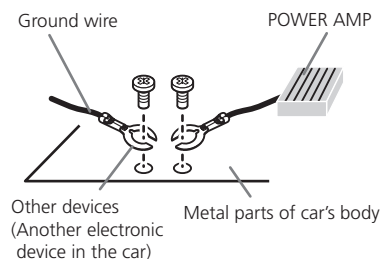
### 12 Store the microphone carefully in the glove compartment or another safe place.

If the microphone is subjected to direct sunlight for an extended period, high temperatures may cause distortion, color change or malfunction. □

## Connections

### ! WARNING

- To avoid the risk of accident and the potential violation of applicable laws, the front DVD or TV (sold separately) feature should never be used 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.
- 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.



- 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.
- It is extremely dangerous to allow the display lead to become wound around the steering column or gearshift. Be sure to install the display in such a way that it will not obstruct driving.
- Make sure that wires 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.

### Notes

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



ACC position

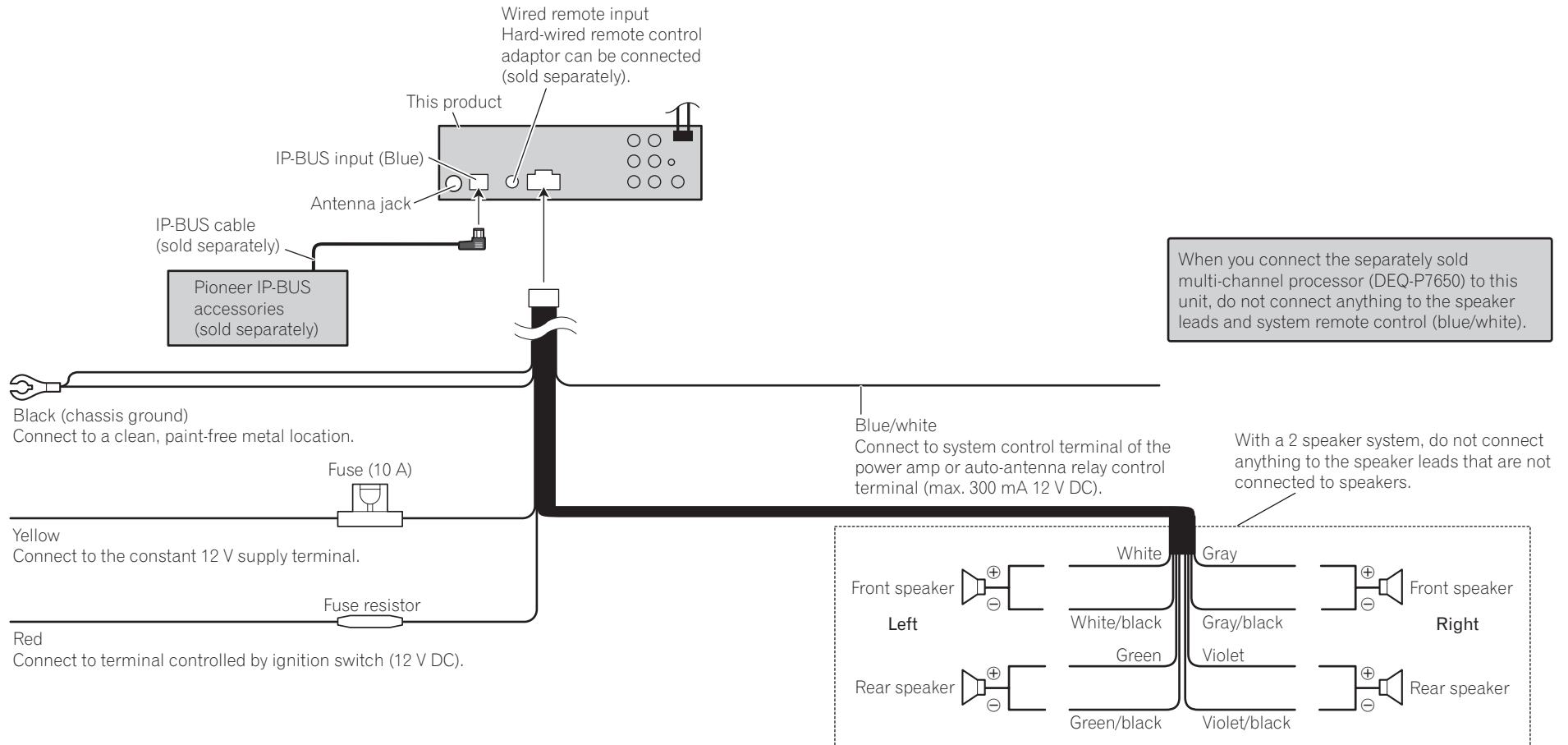


No ACC position

- Use this unit with a 12-volt battery and negative grounding only. Failure to do so may result in a fire or malfunction.
- To prevent a short-circuit, overheating or malfunction, be sure to follow the directions below.
  - Disconnect the negative terminal of the battery before installation.
  - Secure the wiring with cable clamps or adhesive tape. Wrap adhesive tape around wiring that comes into contact with metal parts to protect the wiring.
  - Place all cables away from moving parts, such as the gear shift and seat rails.
  - Place all cables away from hot places, such as near the heater outlet.

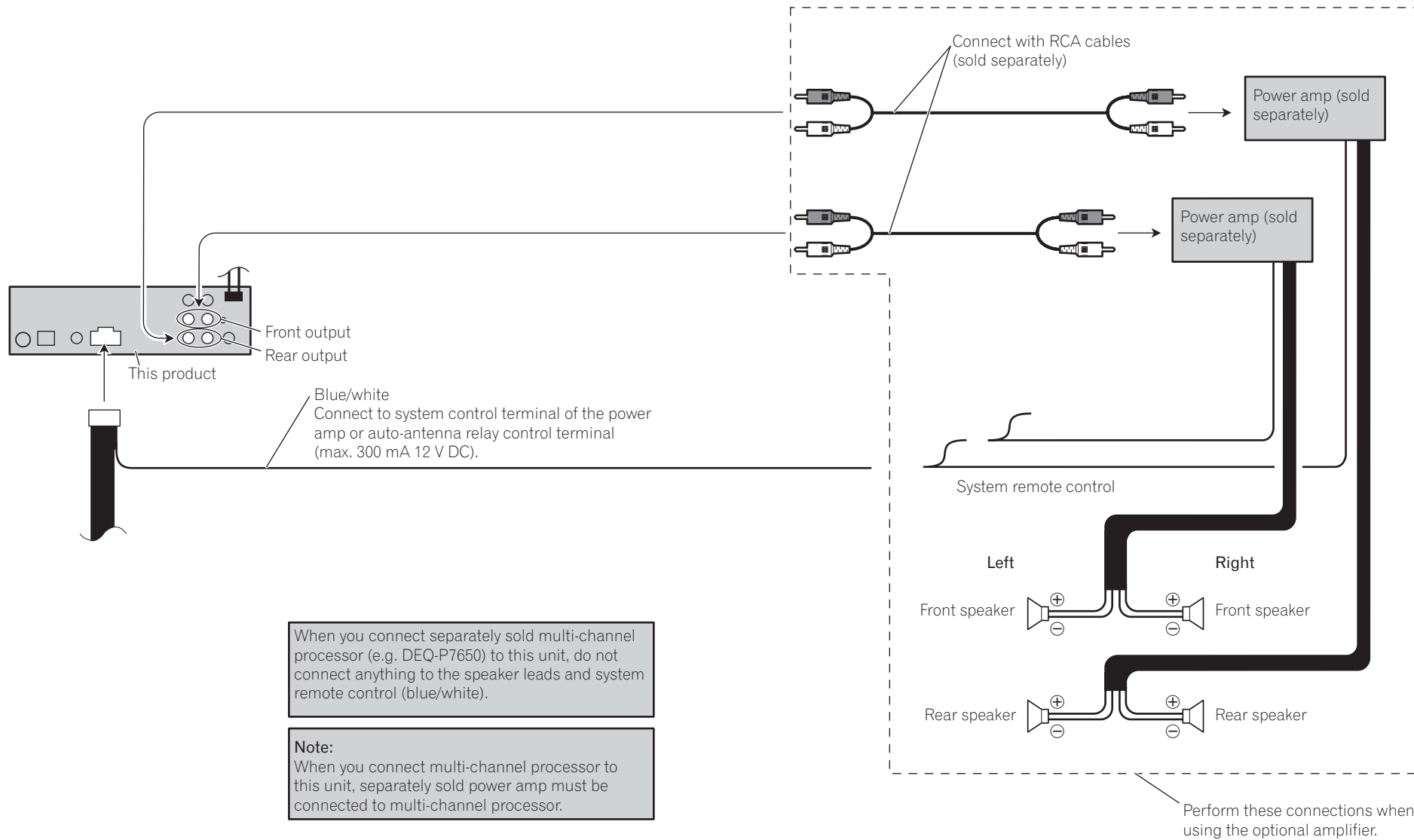
- Do not connect the yellow cable to the battery by passing it through the hole to the engine compartment.
- Cover any disconnected cable connectors with insulating tape.
- Do not shorten any cables.
- Never cut the insulation of the power cable of this unit in order to share the power with other devices. The current capacity of the cable is limited.
- Use a fuse of the rating prescribed.
- Never wire the negative speaker cable directly to ground.
- Never band together negative cables of multiple speakers.
- When this unit is on, control signals are sent through the blue/white cable. Connect this cable to the system remote control of an external power amp or the vehicle's auto-antenna relay control terminal (max. 300 mA 12 V DC). If the vehicle is equipped with a glass antenna, connect it to the antenna booster power supply terminal.
- Never connect the blue/white cable to the power terminal of an external power amp. Also, never connect it to the power terminal of the auto antenna. Doing so may result in battery drain or a malfunction.
- IP-BUS connectors are color-coded. Be sure to connect connectors of the same color.

## Power cable connection

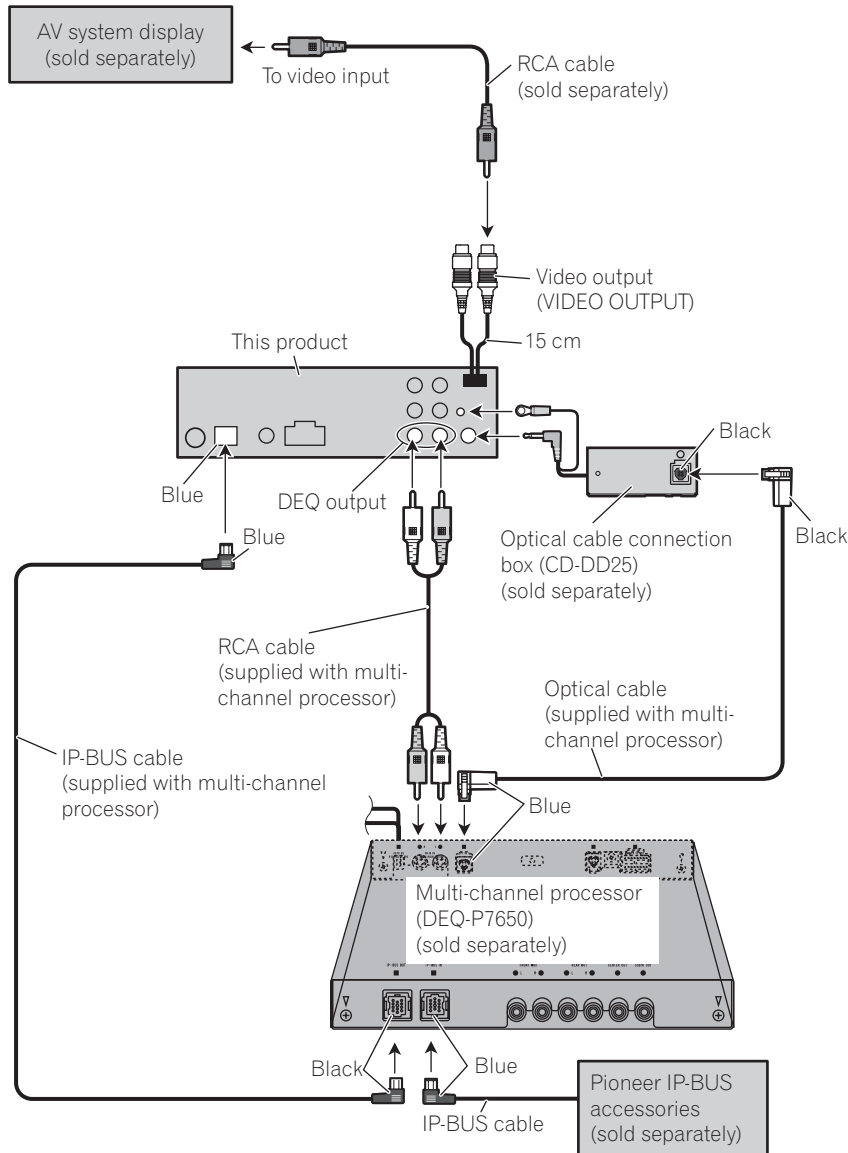




## When connecting to separately sold power amp



## When connecting with a multi-channel processor



## Connecting and installing the optical cable connection box

### ⚠ WARNING

- Avoid installing the optical cable connection box in locations where the operation of safety devices such as airbags is prevented by this unit. Otherwise, there is a danger of a fatal accident.
- Avoid installing the optical cable connection box in locations where the operation of the brake may be prevented. Otherwise, it may result in a traffic accident.
- Fix the optical cable connection box securely with the hook and loop fastener or lock tie. If the unit is loose, it disturbs driving stability, which may result in a traffic accident.

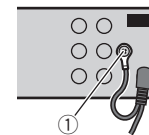
### ⚠ CAUTION

- Install this unit using only the parts supplied with this unit. If other parts are used, this unit may be damaged or could dismount itself, which leads to an accident or other problems.
- Do not install this unit near the doors where rainwater is likely to be spilled on the unit. In-cursion of water into the unit may cause smoke or fire.

## Connecting the optical cable

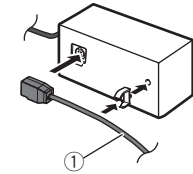
### 1 Connect the optical cable and ground lead to the main unit.

Connect the optical cable so that it does not protrude from the main unit, as shown in the illustration. Fasten the ground lead to the protrusion on the back of the main unit.



① Screw

### 2 Connect the optical cable to the optical cable connection box.

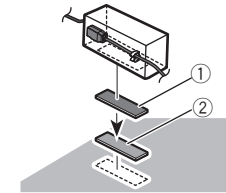


① Optical cable

## Installing the optical cable connection box

- **When installing the optical cable connection box with the hook and loop fastener.**

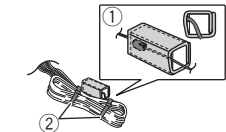
Install the optical cable connection box using the hook and loop fastener in the ample space of the console box.



① Hook fastener  
② Loop fastener

- **When installing the optical cable connection box with the lock tie.**

Wrap the optical cable and connection box with the protection tape and fasten with the power code using the lock tie.

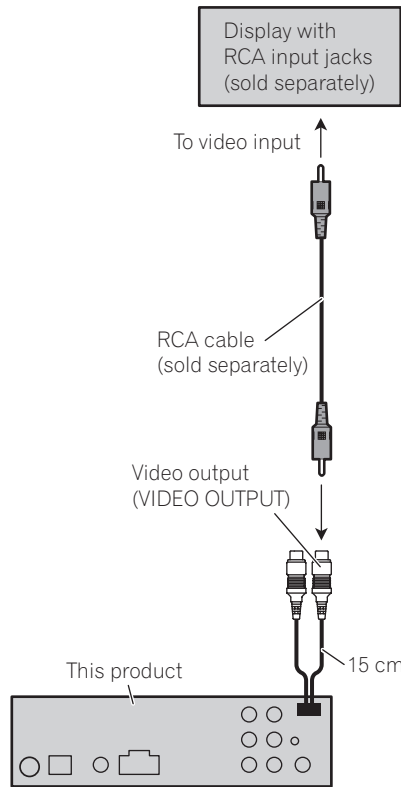


① Wrap with the protection tape  
② Fasten with the lock tie

## When using a display connected to video outputs

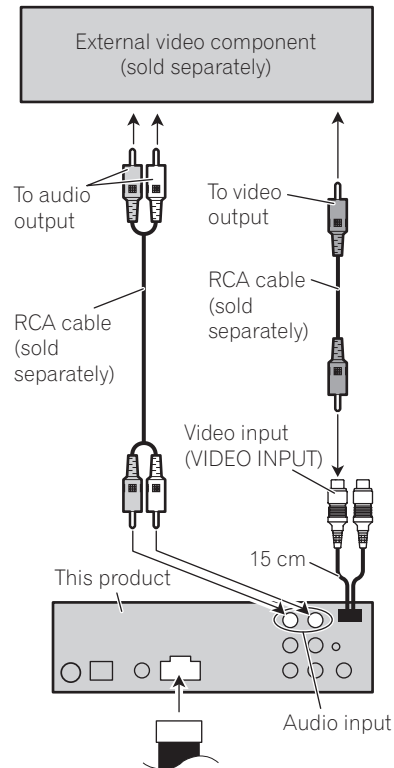
### ⚠ WARNING

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



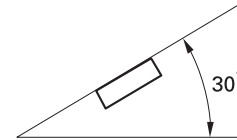
## When connecting the external video component

It is necessary to set **VIDEO IN** to **AUX** in initial settings when connecting the external video component.



### ⚠ Important

- Check all connections and systems before final installation.
- Do not use unauthorized parts as this may cause malfunctions.
- Consult your dealer if installation requires drilling of holes or other modifications to the vehicle.
- Do not install this unit where:
  - it may interfere with operation of the vehicle.
  - it may cause injury to a passenger as a result of a sudden stop.
- The semiconductor laser will be damaged if it overheats. Install this unit away from hot places such as near the heater outlet.
- Optimum performance is obtained when the unit is installed at an angle of less than 30°.



- 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.

## DIN front/rear mount

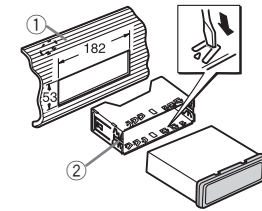
This unit can be properly installed using either front-mount or rear-mount installation.

### DIN Front-mount

#### 1 Insert the mounting sleeve into the dashboard.

For installation in shallow spaces, use the supplied mounting sleeve. If there is enough space, use the mounting sleeve that came with the vehicle.

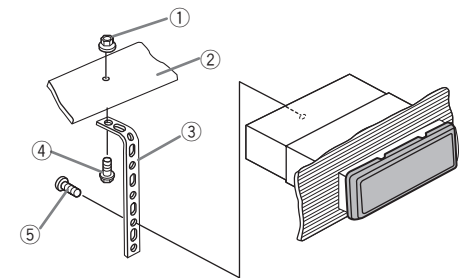
#### 2 Secure the mounting sleeve by using a screwdriver to bend the metal tabs (90°) into place.



- 1 Dashboard
- 2 Mounting sleeve

#### 3 Install the unit as illustrated.

Use commercially available parts when installing.

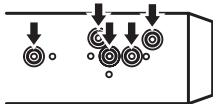


- 1 Nut
- 2 Firewall or metal support
- 3 Metal strap
- 4 Screw
- 5 Screw (M4 × 8)

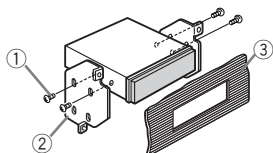
- Make sure that the unit is installed securely in place. An unstable installation may cause skipping or other malfunctions.

## DIN Rear-mount

1 Determine the appropriate position where the holes on the bracket and the side of the unit match.



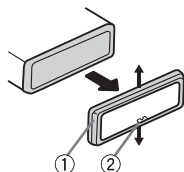
2 Tighten two screws on each side.



- ① Truss screw (5 mm × 8 mm)
- ② Mounting bracket
- ③ Dashboard or console

## Removing the unit

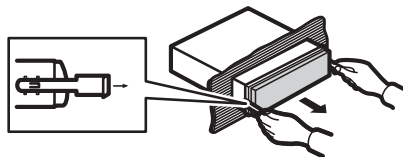
1 Remove the trim ring.



- ① Trim ring
- ② Notched tab
- Releasing the front panel allows easier access to the trim ring.
- When reattaching the trim ring, point the side with the notched tab down.

2 Insert the supplied extraction keys into both sides of the unit until they click into place.

3 Pull the unit out of the dashboard.



## Removing and re-attaching the front panel

You can remove the front panel to protect your unit from theft.

For details, refer to *Removing the front panel to protect your unit from theft* and *Re-attaching the front panel* on page 9.

## Troubleshooting

### Common

Symptom	Cause	Action (Reference page)
The power will not turn on. The unit will not operate.	Leads and connectors are incorrectly connected. The fuse is blown.	Confirm once more that all connections are correct. 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.	Turn the unit off and then on. (Page 9)
Operation with the remote control is not possible. The unit does not operate correctly even when the appropriate remote control buttons are pressed.	The remote control operation mode is incorrect. Battery power is low.	Switch to the correct remote control mode. (Page 8) Load a new battery.
Playback is not possible.	Some operations are prohibited with certain discs. The disc is dirty. The type of disc loaded cannot be played on this unit. The disc loaded is not compatible with this video system.	Try operating with another disc. Clean the disc. (Page 60) Check the disc type. 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. The unit is performing still, slow motion or frame-by-frame playback.	Connect the cables correctly. There is no sound during still, slow motion or frame-by-frame playback.
The  icon is displayed, and operation is not possible.	The operation is prohibited for the disc. The operation is not compatible with the configuration of the disc.	This operation is not possible. 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. The attenuator is on.	Adjust the volume level. Turn the attenuator off.
The sound and video skip.	The unit is not firmly secured. File size and transmission rate are above recommended rates.	Firmly secure the unit. 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 26)
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.
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.

## Additional Information

Symptom	Cause	Action (Reference page)
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 27)
Parental lock cannot be canceled.	The code number is incorrect.	Enter the correct code number. (Page 27)
	You have forgotten your code number.	Press <b>CLEAR</b> 10 times to cancel the code number. (Page 28)
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 <b>SETUP</b> .	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.
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.

## Additional Information

### iPod

Symptom	Cause	Action
The iPod does not operate correctly.	The cables are incorrectly connected.	Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.
	The iPod version is old.	Update the iPod version.

### Multi-channel processor

Symptom	Cause	Action (Reference page)
There is no sound. The volume level will not rise.	The optical cables are not connected correctly.	Connect the cables correctly.
Audio output is 2-channel audio even though multi-channel audio is selected.	The digital output setting is set to <b>Linear PCM</b> .	Normally, set the digital output setting to <b>STREAM</b> . (Page 28)

## Error messages

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

### DVD

Message	Cause	Action
<b>REGION ERR (DIFFERENT REGION DISC)</b>	The disc does not have the same region number as this unit.	Replace the DVD with one bearing the correct region number.
<b>FRMT READ (FORMAT READ)</b>	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.
<b>ERROR-02-XX</b>	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.
<b>PROTECT (PROTECTED DISC)</b>	All the files on the inserted disc are embedded with DRM.	Replace the disc.
<b>SKIPPED (FILE SKIPPED)</b>	The inserted disc contains DRM protected files.	Select the playable file.
<b>HEAT (THERMAL PROTECTION IN MOTION)</b>	The temperature of the unit is outside the normal operating range.	Wait until the unit returns to a temperature within the normal operating limits.
<b>EXPIRED (THIS DivX RENTAL HAS EXPIRED.)</b>	The inserted disc contains expired DivX VOD content.	Select the playable file.
<b>WRITE FAIL (CAN NOT SAVE DATA)</b>	This unit's flash memory used as the temporary storage area is full.	Select the playable file.
<b>ERROR (YOUR DEVICE IS NOT AUTHORIZED TO PLAY THIS DivX PROTECTED VIDEO)</b>	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.

## Additional Information

Message	Cause	Action
<b>NON-PLAY (UNPLAYABLE DISC)</b>	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.
<b>NON-PLAY (VIDEO RESOLUTION NOT SUPPORTED)</b>	The inserted disc contains a high definition DivX file.	Select a file that can be played.
<b>NON-PLAY (UNPLAYABLE FILE)</b>	This type of file cannot be played on this unit.	Select a file that can be played.
<b>NON-PLAY (VIDEO FRAME-RATE NOT SUPPORTED)</b>	DivX file's frame rate is more than 30 fps.	Select a file that can be played.
<b>NO AUDIO (AUDIO FORMAT NOT SUPPORTED)</b>	This type of file is not supported on this unit.	Select a file that can be played.

### USB audio player/USB memory

Message	Cause	Action
<b>FRMT READ (FORMAT READ)</b>	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.
<b>SKIPPED (FILE SKIPPED)</b>	The connected USB portable audio player/USB memory contains WMA files that are protected by Windows Media™ DRM 9/10.	Play an audio file not embedded with Windows Media DRM 9/10.
<b>PROTECT (NO ACCESSIBLE DATA AVAILABLE)</b>	All the files on the connected USB portable audio player/USB memory are protected by Windows Media DRM 9/10.	Transfer audio files not protected by Windows Media DRM 9/10 to the USB portable audio player/USB memory and connect.
<b>N/A USB (INCOMPATIBLE DEVICE)</b>	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.
<b>CHECK USB</b>	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 500 mA (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.
<b>ERROR-02-DX</b>	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.
<b>EXPIRED (THIS DivX RENTAL HAS EXPIRED.)</b>	The inserted external storage device contains expired DivX VOD content.	Select a file that can be played.

## Additional Information

Message	Cause	Action
<b>WRITE FAIL (CAN NOT SAVE DATA)</b>	This unit's flash memory used as the temporary storage area is full.	Select a file that can be played.
<b>ERROR (YOUR DEVICE IS NOT AUTHORIZED TO PLAY THIS DivX PROTECTED VIDEO)</b>	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.
<b>NON-PLAY (UNPLAYABLE FILE)</b>	This type of file cannot be played on this unit.	Select the playable file.
	There are no songs.	Transfer the audio files to the USB portable audio player/USB memory and connect.
	Security for the connected USB memory is enabled.	Follow the USB memory instructions to disable security.
<b>NON-PLAY (VIDEO RESOLUTION NOT SUPPORTED)</b>	The inserted external storage device contains a high definition DivX file.	Select a file that can be played.
<b>NON-PLAY (VIDEO FRAME-RATE NOT SUPPORTED)</b>	DivX file's frame rate is more than 30 fps.	Select a file that can be played.
<b>NO AUDIO (AUDIO FORMAT NOT SUPPORTED)</b>	This type of file is not supported on this unit.	Select a file that can be played.

### iPod

Message	Cause	Action
<b>FRMT READ (FORMAT READ)/Ready</b>	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.
<b>ERROR-02-6X</b>	Communication failed.	Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.
	iPod failure.	Reset the iPod.
<b>ERROR-02-67</b>	The iPod firmware version is old.	Update the iPod version.
<b>N/A USB (INCOMPATIBLE DEVICE)</b>	Non-compatible iPod	Disconnect your device and replace it with a compatible iPod.
<b>STOP</b>	There are no songs.	Transfer songs to the iPod.
	There are no songs in the current list.	Select a list that contains songs.
<b>NOT FOUND</b>	No related songs.	Transfer songs to the iPod.

## Auto TA and EQ error messages

When correct measurement of car's interior acoustic characteristics is not possible using auto TA and 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.

## Additional Information

Message	Cause	Action
<b>ERROR-MIC</b>	The microphone is not connected.	Plug the optional microphone securely into the jack.
<b>ERROR-FSP, ERROR-FLSP, ERROR-FRSP, ERROR-CSP, ERROR-RSP, ERROR-RLSP, ERROR-RRSP, ERROR-SW</b>	The microphone cannot pick up the measuring tone of a speaker.	<ul style="list-style-type: none"> <li>Confirm that the speakers are connected correctly.</li> <li>Correct the input level setting of the power amp connected to the speakers.</li> <li>Set the microphone correctly.</li> </ul>
<b>ERROR-NOIS</b>	The surrounding noise level is too high.	<ul style="list-style-type: none"> <li>Stop your car in a place that is quiet, and switch off the engine, air conditioner and heater.</li> <li>Set the microphone correctly.</li> </ul>



## 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.

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.

## Additional Information

### USB storage device

Depending on the external storage device (USB), the following problems may occur.

- Operations may vary.
- The storage device may not be recognized.
- Files may not be played back properly.

### USB storage device

Connections via USB hub are not supported.

Do not connect anything other than a USB storage device.

Firmly secure the USB storage device when driving. Do not let the USB storage device fall onto the floor, where it may become jammed under the brake or accelerator pedal.

Depending on the USB storage device, the device may cause noise to occur in the radio.

Copyright protected files that are stored in the USB devices cannot be played back.

You cannot connect a USB portable audio player/USB memory to this unit via USB hub.

Partitioned USB memory is not compatible with this unit.

Depending on the kind of USB portable audio player/USB memory you use, the device may not be recognized or audio files may not be played back properly.

Do not leave the USB portable audio player/USB memory in direct sunlight for extended amounts of time. Doing so may cause the device to malfunction from the extreme rise in temperature.

### iPod

To ensure proper operation, connect the dock connector cable from the iPod directly to this unit.

Firmly secure the iPod when driving. Do not let the iPod fall onto the floor, where it may become jammed under the brake or accelerator pedal.

About iPod settings

- When an iPod is connected, this unit changes the EQ (equalizer) setting of the iPod to off in order to optimize the acoustics. When you disconnect the iPod, the EQ returns to the original setting.
- You cannot set Repeat to off on the iPod when using this unit. Repeat is automatically changed to All when the iPod is connected to this unit.

Incompatible text saved on the iPod will not be displayed by the unit.

### DVD-R/DVD-RW discs

Unfinalized DVD-R/DVD-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.

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.

## Additional Information

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 guaranteed for proper operation. Unauthorized DivX files may not operate properly.

DRM rental files cannot be operated until playback is started.


This unit corresponds to a DivX file display of up to 1 590 minutes 43 seconds. Search operation beyond this time limit is prohibited.

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 28.

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 and DivX compatibility (disc, USB)

### 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 (CBR), VBR

Sampling frequency: 8 kHz to 48 kHz (32 kHz, 44.1 kHz, 48 kHz for emphasis)

Compatible ID3 tag version: 1.0, 1.1, 2.2, 2.3 (ID3 tag Version 2.x is given priority than Version 1.x.)

M3u playlist: Not compatible

MP3i (MP3 interactive), mp3 PRO: Not compatible

### AAC

Compatible format: AAC encoded by iTunes

File extension: .m4a

Sampling frequency: 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

## Additional Information

### 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

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

DivX plus HD format: Not compatible

### Supplemental information

Only the first 32 characters can be displayed as a file name (including the file extension) or a folder name.

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 a USB storage device that has numerous folder hierarchies.

### Disc

Playable folder hierarchy: up to eight tiers (A practical hierarchy is less than two tiers).

Playable folders: up to 700

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

Playable files: up to 3500 for DVD-R/DVD-RW

File system: ISO 9660 Level 1 and 2, Romeo, Joliet, UDF 1.02, 1.50, 2.00, 2.01, 2.50 (CD-R/DVD-R)

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.

### USB storage device

Playable folder hierarchy: up to eight tiers (A practical hierarchy is less than two tiers).


Playable folders: up to 6 000 (up to 700 for DivX)

Playable files: up to 65 535

Playback of copyright-protected files: Not compatible

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

### CAUTION

- Pioneer accepts no responsibility for data lost on the USB memory/USB portable audio player even if that data is lost while using this unit.
- Do not leave the discs/external storage device (USB) or iPod in places with high temperatures. 

## iPod compatibility

This unit supports only the following iPod models. Supported iPod software versions are shown below. Older versions may not be supported.

- iPhone 4 (software version 4.0.1)
- iPhone 3GS (software version 4.0.1)
- iPhone 3G (software version 4.0.1)
- iPod nano 6th generation (software version 1.0)
- iPod nano 5th generation (software version 1.0.1)
- iPod nano 4th generation (software version 1.0.4)
- iPod nano 3rd generation (software version 1.1.3)
- iPod nano 2nd generation (software version 1.1.3)
- iPod nano 1st generation (software version 1.3.1)
- iPod touch 4th generation (software version 4.1)
- iPod touch 3rd generation (software version 3.1.2)
- iPod touch 2nd generation (software version 3.1.3)
- iPod touch 1st generation (software version 2.2.1)
- iPod classic 160GB (software version 2.0.4)
- iPod classic 120GB (software version 2.0.1)
- iPod classic (software version 1.1.2)
- iPod 5th generation (software version 1.3)

Depending on the generation or version of the iPod, some functions may not be available.

Operations may vary depending on the software version of iPod.



## Additional Information


When using an iPod, an iPod Dock Connector to USB Cable is required.

When you use Pioneer CD-IU50/CD-IU50V interface cable, consult your dealer for details.

About the file/format compatibility, refer to the iPod manuals.

Audio Book, Podcast: Compatible

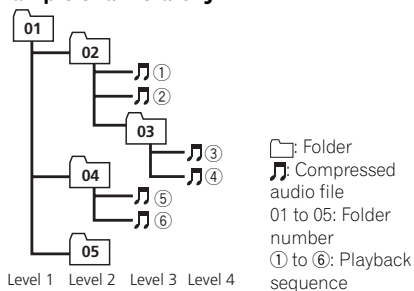
### CAUTION

Pioneer accepts no responsibility for data lost on the iPod, even if that data is lost while this unit is used. 

## Sequence of audio files

The user cannot assign folder numbers and specify playback sequences with this unit.

### Example of a hierarchy



### Disc

Folder selection sequence or other operation may differ depending on the encoding or writing software.


### USB storage device

Playback sequence is the same as recorded sequence in the USB storage device. 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 009yyy.mp3).
- 2 Put those files into a folder.

- 3 Save the folder containing files on the USB storage device.


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. 

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## Additional Information

### Language code chart for DVD

#### Language (code), input code

Japanese (ja), <b>1001</b>	Dzongkha (dz), <b>0426</b>	Kurdish (ku), <b>1121</b>	Kinyarwanda (rw), <b>1823</b>
English (en), <b>0514</b>	Ewe (ee), <b>0505</b>	Komi (kv), <b>1122</b>	Sanskrit (sa), <b>1901</b>
French (fr), <b>0618</b>	Esperanto (eo), <b>0515</b>	Cornish (kw), <b>1123</b>	Sardinian (sc), <b>1903</b>
Spanish (es), <b>0519</b>	Estonian (et), <b>0520</b>	Kirghiz, Kyrgyz (ky), <b>1125</b>	Sindhi (sd), <b>1904</b>
German (de), <b>0405</b>	Basque (eu), <b>0521</b>	Latin (la), <b>1201</b>	Northern Sami (se), <b>1905</b>
Italian (it), <b>0920</b>	Persian (fa), <b>0601</b>	Luxembourgish (lb), <b>1202</b>	Sangho (sg), <b>1907</b>
Chinese (zh), <b>2608</b>	Fulah (ff), <b>0606</b>	Ganda (lg), <b>1207</b>	Sinhala (si), <b>1909</b>
Dutch, Flemish (nl), <b>1412</b>	Finnish (fi), <b>0609</b>	Limburgan (li), <b>1209</b>	Slovak (sk), <b>1911</b>
Portuguese (pt), <b>1620</b>	Fijian (fj), <b>0610</b>	Lingala (ln), <b>1214</b>	Slovenian (sl), <b>1912</b>
Swedish (sv), <b>1922</b>	Faroese (fo), <b>0615</b>	Lao (lo), <b>1215</b>	Samoa (sm), <b>1913</b>
Russian (ru), <b>1821</b>	Western Frisian (fy), <b>0625</b>	Lithuanian (lt), <b>1220</b>	Shona (sn), <b>1914</b>
Korean (ko), <b>1115</b>	Irish (ga), <b>0701</b>	Luba-Katanga (lu), <b>1221</b>	Somali (so), <b>1915</b>
Greek (el), <b>0512</b>	Gaelic (gd), <b>0704</b>	Latvian (lv), <b>1222</b>	Albanian (sq), <b>1917</b>
Afar (aa), <b>0101</b>	Galician (gl), <b>0712</b>	Malagasy (mg), <b>1307</b>	Serbian (sr), <b>1918</b>
Abkhazian (ab), <b>0102</b>	Guarani (gn), <b>0714</b>	Marshallese (mh), <b>1308</b>	Swati (ss), <b>1919</b>
Avestan (ae), <b>0105</b>	Gujarati (gu), <b>0721</b>	Maori (mi), <b>1309</b>	Sotho, Southern (st), <b>1920</b>
Afrikaans (af), <b>0106</b>	Manx (gv), <b>0722</b>	Macedonian (mk), <b>1311</b>	Sundanese (su), <b>1921</b>
Akan (ak), <b>0111</b>	Hausa (ha), <b>0801</b>	Malayalam (ml), <b>1312</b>	Swahili (sw), <b>1923</b>
Amharic (am), <b>0113</b>	Hebrew (he), <b>0805</b>	Mongolian (mn), <b>1314</b>	Tamil (ta), <b>2001</b>
Aragonese (an), <b>0114</b>	Hindi (hi), <b>0809</b>	Marathi (mr), <b>1318</b>	Telugu (te), <b>2005</b>
Arabic (ar), <b>0118</b>	Hiri Motu (ho), <b>0815</b>	Malay (ms), <b>1319</b>	Tajik (tg), <b>2007</b>
Assamese (as), <b>0119</b>	Croatian (hr), <b>0818</b>	Maltese (mt), <b>1320</b>	Thai (th), <b>2008</b>
Avaric (av), <b>0122</b>	Haitian (ht), <b>0820</b>	Burmese (my), <b>1325</b>	Tigrinya (ti), <b>2009</b>
Aymara (ay), <b>0125</b>	Hungarian (hu), <b>0821</b>	Nauru (na), <b>1401</b>	Turkmen (tk), <b>2011</b>
Azerbaijani (az), <b>0126</b>	Armenian (hy), <b>0825</b>	Bokmal (nb), <b>1402</b>	Turkmen (tk), <b>2011</b>
Bashkir (ba), <b>0201</b>	Herero (hz), <b>0826</b>	Ndebele, North (nd), <b>1404</b>	Tagalog (tl), <b>2012</b>
Belarusian (be), <b>0205</b>	Interlingua (ia), <b>0901</b>	Nepali (ne), <b>1405</b>	Tswana (tn), <b>2014</b>
Bulgarian (bg), <b>0207</b>	Indonesian (id), <b>0904</b>	Ndonga (ng), <b>1407</b>	Tonga (to), <b>2015</b>
Bihari (bh), <b>0208</b>	Interlingue (ie), <b>0905</b>	Nynorsk (nn), <b>1414</b>	Turkish (tr), <b>2018</b>
Bislama (bi), <b>0209</b>	Igbo (ig), <b>0907</b>	Norwegian (no), <b>1415</b>	Tsonga (ts), <b>2019</b>
Bambara (bm), <b>0213</b>	Sichuan Yi (ii), <b>0909</b>	Ndebele, South (nr), <b>1418</b>	Tatar (tt), <b>2020</b>
Bengali (bn), <b>0214</b>	Inupiaq (ik), <b>0911</b>	Navajo, Navaho (nv), <b>1422</b>	Twi (tw), <b>2023</b>
Tibetan (bo), <b>0215</b>	Ido (io), <b>0915</b>	Chichewa (ny), <b>1425</b>	Tahitian (ty), <b>2025</b>
Breton (br), <b>0218</b>	Icelandic (is), <b>0919</b>	Occitan (oc), <b>1503</b>	Uighur, Uyghur (ug), <b>2107</b>
Bosnian (bs), <b>0219</b>	Inuktitut (iu), <b>0921</b>	Ojibwa (oj), <b>1510</b>	Ukrainian (uk), <b>2111</b>
Catalan (ca), <b>0301</b>	Javanese (jv), <b>1022</b>	Oromo (om), <b>1513</b>	Urdu (ur), <b>2118</b>
Chechen (ce), <b>0305</b>	Georgian (ka), <b>1101</b>	Oriya (or), <b>1518</b>	Uzbek (uz), <b>2126</b>
Chamorro (ch), <b>0308</b>	Kongo (kg), <b>1107</b>	Ossetian (os), <b>1519</b>	Venda (ve), <b>2205</b>
Corsican (co), <b>0315</b>	Kikuyu, Gikuyu (ki), <b>1109</b>	Panjabi, Punjabi (pa), <b>1601</b>	Vietnamese (vi), <b>2209</b>
Cree (cr), <b>0318</b>	Kuanyama (kj), <b>1110</b>	Pali (pi), <b>1609</b>	Volapük (vo), <b>2215</b>
Czech (cs), <b>0319</b>	Kazakh (kk), <b>1111</b>	Polish (pl), <b>1612</b>	Walloon (wa), <b>2301</b>
Church Slavonic (cu), <b>0321</b>	Kalaallisut (kl), <b>1112</b>	Pashto, Pushto (ps), <b>1619</b>	Wolof (wo), <b>2315</b>
Chuvash (cv), <b>0322</b>	Central Khmer (km), <b>1113</b>	Quechua (qu), <b>1721</b>	Xhosa (xh), <b>2408</b>
Welsh (cy), <b>0325</b>	Kannada (kn), <b>1114</b>	Romansh (rm), <b>1813</b>	Yiddish (yi), <b>2509</b>
Danish (da), <b>0401</b>	Kanuri (kr), <b>1118</b>	Rundi (rn), <b>1814</b>	Yoruba (yo), <b>2515</b>
Divehi (dv), <b>0422</b>	Kashmiri (ks), <b>1119</b>	Romanian (ro), <b>1815</b>	Zhuang, Chuang (za), <b>2601</b>
			Zulu (zu), <b>2621</b>



## Additional Information

### Specifications

#### General

Rated power source .....	14.4 V DC (allowable voltage range: 12.0 V to 14.4 V DC)
Grounding system .....	Negative type
Maximum current consumption .....	10.0 A
Dimensions (W × H × D): DIN	
Chassis .....	178 mm × 50 mm × 163 mm
Nose .....	188 mm × 58 mm × 23 mm
D	
Chassis .....	178 mm × 50 mm × 163 mm
Nose .....	170 mm × 46 mm × 23 mm
Weight .....	1.4 kg

#### Audio

Maximum power output .....	50 W × 4
Continuous power output ...	22 W × 4 (50 Hz to 15 000 Hz, 5% THD, 4 Ω load, both channels dri- ven)
Load impedance .....	4 Ω (4 Ω to 8 Ω allowable)
Preout maximum output level .....	2.0 V
Tone controls:	
Bass	
Frequency .....	100 Hz
Gain .....	±12 dB
Mid	
Frequency .....	1 kHz
Gain .....	±12 dB
Treble	
Frequency .....	10 kHz
Gain .....	±12 dB

#### DVD Player

System .....	DVD video, Video CD, CD, WMA, MP3, AAC, DivX, JPEG system
Region number .....	5
Usable discs .....	DVD video, Video CD, CD, CD-R/RW, DVD-R/RW/R DL
Frequency response .....	5 Hz to 44 000 Hz (with DVD, at sampling frequency 96 kHz)
Signal-to-noise ratio .....	96 dB (1 kHz) (IEC-A net- work) (RCA level)
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) (coded only) (.m4a)
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 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 (2 ch audio) (Windows Media Player) (coded only) (.m4a)
WMA decoding format .....	Ver. 7, 7.1, 8, 9, 10, 11, 12 (2 ch audio) (Windows Media Player) (coded only) (.m4a)
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)

#### FM tuner

Frequency range .....	87.5 MHz to 108.0 MHz
Usable sensitivity .....	9 dBf (0.8 μV/75 Ω, mono, S/N: 30 dB)
Signal-to-noise ratio .....	72 dB (IEC-A network)

#### AM tuner

Frequency range .....	531 kHz to 1 602 kHz (9 kHz) 530 kHz to 1 640 kHz (10 kHz)
Usable sensitivity .....	25 μV (S/N: 20 dB)
Signal-to-noise ratio .....	62 dB (IEC-A network)

#### Note

Specifications and the design are subject to mod-  
ifications without notice.



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