Operation Manual

7 inch Wide Fully Motorized LCD Color Display with 5-Channel High-Power DVD/VCD/CD Receiver

AVH-P7550DVD



Contents

Thank you for buying this Pioneer product.

Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.

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Precautions

IMPORTANT SAFEGUARDS

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

- 1 Read this manual fully and carefully before operating your display.
- 2 Keep this manual handy for future reference.
- 3 Pay close attention to all warnings in this manual and follow the instructions carefully.
- 4 Do not allow other persons to use this system until they have read and understood the operating instructions.
- 5 Do not install the display where it may (i) obstruct the driver's vision, (ii) impair the performance of any of the vehicle's operating systems or safety features, including air bags, or (iii) impair the driver's ability to safely operate the vehicle.
- 6 As with any accessory in your vehicle's interior, the display should not divert your attention from the safe operation of your vehicle. If you experience difficulty in operating the system or reading the display, please park safely before making adjustments.
- 7 Do not attempt to install or service your display by yourself. Installation or servicing of the display by persons without training and experience in electronic equipment and automotive accessories may be dangerous and could expose you to the risk of electric shock or other hazards.
- 8 Please remember to wear your seat belt at all times while operating your vehicle. If you are ever in an accident, your injuries can be considerably more severe if your seat belt is not properly buckled.

To ensure safe driving



WARNING

- To avoid the risk of accident and the potential violation of applicable laws, this unit is not for use with a video screen that is visible 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 obeved.

This unit detects whether your car's parking brake is engaged or not, and prevents you from watching a DVD or TV on this display while driving. When you attempt to watch a DVD or TV, the warning **VIDEO VIEWING IS** NOT AVAILABLE WHILE DRIVING will appear on the screen.

To watch a DVD or TV on this display, park your car in a safe place and apply the parking brake.

When using a display connected to REAR MONITOR OUT

This unit's **REAR MONITOR OUT** is for connection of a display to enable passengers in the rear seats to watch the DVD or TV.



WARNING

NEVER install the display in a location that en ables the driver to watch the DVD or TV while driving.

To avoid battery exhaustion

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



WARNING

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

About this unit

Playable discs

DVD, Video CD and CD discs that display the logos shown below can be played back on this player.

DVD audio





DVD video





Video CD



CD



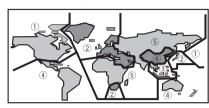




This player can only playback discs bearing the marks shown above.

DVD video disc region numbers

DVD video discs that have incompatible region numbers cannot be played on this player. The region number of the player can be found on the bottom of this unit. The illustration below shows the regions and corresponding region numbers.



About this manual

This unit features a number of sophisticated functions ensuring superior reception and op eration. All the functions have been designed for the easiest possible use, but many are not self explanatory. This operation manual will help you benefit fully from this unit's potential and to maximize your listening enjoyment. We recommend that you familiarize yourself with the functions and their operation by read ing through the manual before you begin using this unit. It is especially important that you read and observe precautions on this page and in other sections.

Precautions

CAUTION:

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

CAUTION:

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

- Keep this manual handy as a reference for operating procedures and precautions.
- Always keep the volume low enough so you can hear sounds outside of the car.
- Protect this unit from moisture.
- If the battery is disconnected or dis charged, the preset memory will be erased and must be reprogrammed.
- If this unit does not operate properly, con tact your dealer or nearest authorized Pio neer Service Station.

Features

Touch panel key operation

It is possible to operate this unit by using touch panel key.

DVD audio playback

It is possible to play back DVD audio.

DVD video playback

It is possible to play back DVD video, DVD R (video mode) and DVD RW (video mode).

Video CDs featuring PBC compatibility

It is possible to play back Video CDs featuring PBC (playback control).

CD playback

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

MP3 file playback

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

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

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

NTSC/PAL compatibility

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

Dolby Digital/DTS compatibility

You can enjoy the atmosphere and excitement provided by DVD movie and music software featuring 5.1 channel recordings.

 Manufactured under license from Dolby La boratories. "Dolby", "Pro Logic", and the double D symbol are trademarks of Dolby Laboratories.



 "DTS" and "DTS Digital Surround" are regis tered trademarks of Digital Theater Sys tems. Inc.



Multi-aspect

Switching between wide screen, letter box and panscan display is possible.

Multi-audio

You can switch between multiple audio sys tems recorded on a DVD as desired.

Multi-subtitle

You can switch between multiple subtitle lan guages recorded on a DVD as desired.

Multi-angle

You can switch between multiple viewing an gles of a scene recorded on a DVD as desired.



This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

To protect the LCD screen

- Do not allow direct sunlight to fall on the display when this unit is not being used.
 Extended exposure to direct sunlight can result in LCD screen malfunction due to the resulting high temperatures.
- When using a portable phone, keep the an tenna of the portable phone away from the display to prevent disruption of the video by the appearance of spots, colored stripes, etc.

For viewing LCD comfortably

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

Condition memory

This function memorizes audio language, sub title language, angle number and aspect ratio made during disc playback for up to 30 discs. Without any special operations, the final set ting details during playback of a disc are memorized. The next time a disc is played, the previous settings are automatically applied.

- With some discs, audio language and sub title language are automatically specified, in which case condition memory does not function.
- When the number of discs exceeds 30, set tings for the latest disc replace those for the least recent disc.

What the marks on DVDs indicate

The marks below may be found on DVD disc labels and packages. They indicate the type of images and audio recorded on the disc, and the functions you can use.

Mark	Meaning
②))	Indicates the number of audio sys tems.
2	Indicates the number of subtitle lan guages.
<u>∞</u> 31	Indicates the number of viewing an gles.
16:9 LB	Indicates the picture size (aspect ratio: screen width to height ratio) type.
	Indicates the number of the region where playback is possible.

When an operation is prohibited

When you are watching a DVD and attempt to perform an operation, it may not be performed by the programming on the disc. When this happens, this unit indicates the icon \bigcirc on the screen.

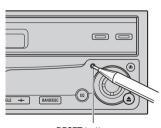
Resetting the microprocessor

Pressing **RESET** lets you reset the micropro cessor to its initial settings without changing the condition memory.

The microprocessor must be reset under the following conditions:

- Prior to using this unit for the first time after installation
- If the unit fails to operate properly
- When strange or incorrect messages ap pear on the display
- 1 Turn the ignition switch OFF.

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



RESET button



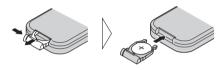
After completing connections or when you want to erase all memorized settings or return the unit to its initial (factory) settings, switch your engine ON or set the ignition switch to ACC ON before pressing **RESET**.

Use and care of the remote control

Installing the battery

Slide the tray out on the back of the remote control and insert the battery with the plus (+) and minus (–) poles pointing in the proper di rection.

• When using for the first time, pull out the film protruding from the tray.





WARNING

Keep the battery out of the reach of children. Should the battery be swallowed, immediately consult a doctor.



CAUTION

- Use only one CR2025 (3 V) lithium battery.
- Remove the battery if the remote control is not used for a month or longer.
- Do not recharge, disassemble, heat or dispose of the battery in fire.
- Do not handle the battery with metallic tools.
- Do not store the battery with metallic materials
- In the event of battery leakage, wipe the re mote control completely clean and install a new battery.
- When disposing of used batteries, please comply with governmental regulations or en vironmental public institution's rules that apply in your country/area.

Using the remote control

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

· The remote control may not function prop erly in direct sunlight.



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

Feature demo

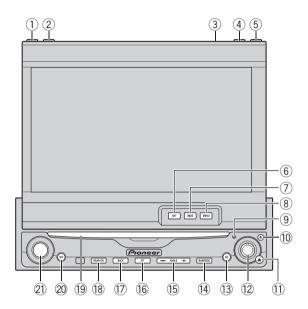


Important

The red lead (ACC) of this unit should be con nected to a terminal coupled with ignition switch on/off operations. If this is not done, the vehicle battery may be drained.

The feature demo automatically starts when power to this unit is turned off while the igni tion switch is set to ACC or ON. Pressing and holding **ATT** during feature demo operation cancels the feature demo mode. Press and hold ATT again to start the feature demo mode. Remember that if the feature demo continues operating when the car engine is turned off, it may drain battery power.

What's What



Head unit

1 DISPLAY button

Press to select different displays.

2 PGM button

Press to operate the preprogrammed func tions for each source. (Refer to Using the PGM button on page 87.)

3 Ambient light sensor

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

(4) FLIP DOWN/CLOCK button

Press to turn the LCD panel horizontal tem porarily when the LCD panel is upright. Press to display the clock for eight seconds when the LCD panel is closed.

⑤ OPEN/CLOSE button

Press to open or close the LCD panel.

6 ENTERTAINMENT button

Press to switch between the background displays.

(7) WIDE button

Press to select a desired mode for enlarging a 4:3 picture to a 16:9 one.

8 MENU button

Press and hold to display the picture adjust ment menu.

RESET button

Press to return to the factory settings (initial settinas).

10 DETACH button

Press to remove the front panel from the head unit.

(1) EJECT button

Press to eject a disc from this unit.

What's What

12 Joystick

Move to do manual seek tuning, fast for ward, reverse and track search controls. Also used for controlling functions.

13 EO button

Press to select various equalizer curves.

(14) BAND/ESC button

Press to select among three FM and one AM bands and cancel the control mode of functions

15 ANGLE (+/-) button

Press to change the LCD panel angle.

16 ATT button

Press to quickly lower the volume level, by about 90%. Press once more to return to the original volume level.

(7) BACK button

Press to return to the previous display.

18 REAR ON button

Press to switch between the video sources (such as **DVD** or **AV**) on rear display.

① Disc loading slot

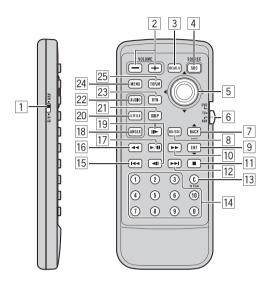
Insert a disc to play.

20 SOURCE button

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

21 VOLUME

Rotate to increase or decrease the volume.



Remote control

Remote control selection switch

Switch to change the setting of the remote control. For details, refer to Setting remote control code type on page 79.

2 VOLUME button

Press to increase or decrease the volume.

3 REAR.S button

Press to switch between the video sources. (such as **DVD** or **AV**) on rear display.

4 SOURCE button

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

5 Jovstick

Move to do manual seek tuning, fast for ward, reverse and track search controls. Also used for controlling functions.

6 Remote control operation mode switch

Switch the operation mode between **AVH**. **DVD** and **TV** modes. Normally, set to **AVH**.

- AVH For common operation of this
- **DVD** Only for DVD player operation
- TV Only for TV tuner operation For details, refer to Switching the remote control operation mode switch on the next page.

7 BACK button

Press to return to the previous display.

8 BAND/ESC button

Press to select among three FM and one AM bands and cancel the control mode of functions.

9 ENTERTAINMENT button

Press to switch between the background displays.

What's What

10 FORWARD (▶▶) button

Press to perform fast forward playback.

III STOP (■) button

Press to stop playback.

12 NEXT (▶►I) button

Press to go to the next track (chapter).

13 CLEAR button

Press to cancel the input number while **0–10** are used.

14 0–10 buttons

Press to directly select the desired track, preset tuning and disc. **1–6** buttons can op erate the preset tuning for the tuner or disc number search for the multi CD player.

15 PREVIOUS (I◄◄) button

Press to return to the previous track (chap ter).

16 REVERSE (◄◄) button

Press to perform fast reverse playback.

17 PLAY/PAUSE (►/II) button

Press to switch sequentially between play back and pause play.

18 ANGLE button

Press to change the viewing angle during DVD playback.

19 STEP (II►/⊲II) button

Press to move ahead one frame at a time during DVD/VideoCD playback. Press and hold for one second to activate slow play back.

20 SUBTITLE (SUB.T) button

Press to change the subtitle language during DVD playback.

21 DISPLAY button

Press to select different displays.

22 AUDIO button

Press to change the audio language during DVD playback.

23 RETURN button

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

24 MENU button

Press to display the DVD menu during DVD playback.

25 TOP MENU (TOP.M) button

Press to return to the top menu during DVD playback.

Switching the remote control operation mode switch

There are three remote control operation modes on the remote control.

AVH mode operation

When operating this unit by remote control, normally switch the mode to **AVH**.

- The joystick on the remote control can per form the same operations as it on the head unit. Furthermore, the joystick can perform the same operations as the touch panel keys ▲, ▼, ◀ and ►.
- 1-6 can perform the same operations as the preset tuning keys P 1—P 6 and the disc selection keys 01—06.
 - If you want to select a disc located at 7 to 12 by using 1-6, press and hold the corresponding numbers such as 1 for disc 7, until the disc number appears in the display.

What's What

DVD mode operation

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

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

- When browsing still pictures by using the joystick. (Refer to *Browsing still pictures* on page 30.)
- When operating the DVD menu by using the joystick. (Refer to Operating the DVD menu on page 35.)
- When operating the PBC menu by using 0-10. (Refer to Watching a Video CD on page 40.)
- When specifying group, title or track by using 0-10. (Refer to Specifying group on page 31, Specifying title on page 38 and Spe cifying track on page 44.)



When switching the mode to **DVD**, you cannot use these buttons; **BACK**, **ENTERTAINMENT** and **DISPLAY**.

TV mode operation

If you use the rear output on TV tuner, you can watch the TV picture on the rear display inde pendently. To operate the TV on the rear display independently, switch the mode to **TV**. In this case, the joystick operation is changed for TV.

 For details concerning operation, refer to the TV tuner's operation manuals.

When you want to operate the following functions only on the rear display, switch the mode to TV:

- When performing manual or seek tuning by moving the joystick left or right.
- When recalling preset stations by moving the joystick up or down.

 When selecting the country group by click ing joystick and then moving it left or right. (This function can be operated only when connecting a TV tuner (e.g. GEX P6450TVP) featuring the country setting.)



When switching the mode to **TV**, you cannot use except the joystick, **SOURCE** and **VOLUME**.

Turning the unit on and selecting a source



Source icon

Shows what the source has been selected.

You can select a source you want to listen to. If **DVD AUTO PLAY** is turned on, load a disc in this unit to switch to **DVD** (refer to *Switching the automatic disc playback* on page 82).

• When using the touch panel keys, touch the source icon and then touch the desired source name.

The source names are displayed and select able ones are highlighted.

- **DVD** Built in DVD player
- S-DVD DVD player/multi DVD player
- M-CD Multi CD player
- TUNER Tuner
- TV Television
- AV Video input
- EXT1 External unit 1
- EXT2 External unit 2
- AUX AUX
- OFF Turn the unit off
- When the source icon is not displayed, you can display it by touching the screen.
- Even if you touch the source icon while oper ating the menu, you cannot select a source.
- To return to the playback display, touch **ESC**.

When using the button, press SOURCE to select a source.

Press **SOURCE** repeatedly to switch between the following sources:

TUNER (tuner)—TV (television)—AV (video input)—DVD (built in DVD player)—S-DVD (DVD player/multi DVD player)—M-CD (multi CD player)—EXT1 (external unit 1)—EXT2 (external unit 2)—AUX (AUX)



- In the following cases, the sound source will not change:
 - When a unit corresponding to each source is not connected to this unit.
 - When no disc is set in this unit.
 - When no disc is set in the DVD player.
 - When no magazine is set in the multi CD player.
 - When no magazine is set in the multi DVD player.
 - When the AUX (auxiliary input) is set to off (refer to page 82).
 - When the AV (video input) is not set to
 VIDEO (refer to page 84).
- External unit refers to a Pioneer product (such as one available in the future) that, although incompatible as a source, enables control of basic functions by this unit. Two external units can be controlled by this unit. When two external units are connected, the allocation of them to external unit 1 or external unit 2 is automatically set by this unit.
- When this unit's blue/white lead is connected to the car's auto antenna relay control term inal, the car's antenna extends when this unit's source is turned on. To retract the an tenna, turn the source off.

Loading a disc

- Insert a disc into the disc loading slot.
 Playback will automatically start.
- If **DVD AUTO PLAY** is turned off, touch the source icon and then touch **DVD** to select **DVD** (refer to the previous page).
- When a disc is loaded in this unit, touch the source icon and then touch **DVD** to select **DVD**.
- To eject a disc, press EJECT.

Notes

- The DVD player plays one, standard, 12 cm or 8 cm (single) disc at a time. Do not use an adapter when playing 8 cm discs.
- Do not insert anything other than a disc into the disc loading slot. Discs which can be played back are listed on *Playable discs* on page 6.
- If you cannot insert a disc completely or if after you insert a disc the disc does not play, check that the label side of the disc is up.
 Press EJECT to eject the disc, and check the disc for damage before inserting the disc again.
- If the DVD player does not operate properly, an error message such as ERROR-02 may be displayed. Refer to Error messages on page 90.

Adjusting the volume

• Use VOLUME to adjust the sound level.

With the head unit, rotate **VOLUME** to in crease or decrease the volume.

With the remote control, press **VOLUME** to in crease or decrease the volume. ■

Turning the unit off

- When using the touch panel keys, touch the source icon and then touch OFF.
- When the source icon is not displayed, you can display it by touching the screen.
- When using the button, press SOURCE and hold until the unit turns off.

Using the rear display

You can watch the video sources (such as **DVD** or **AV**) on rear display independently of front display.

 If you watch a DVD/Video CD on the rear display only, switch the operation mode on the remote control to DVD. And you can operate the DVD/Video CD playback on the rear display independently by the remote control. (Refer to page 14.)



CAUTION

When you have turned the rear display output on by pressing **REAR ON**, you cannot turn it off even if you press **SOURCE** and hold. In this case, press **REAR ON** and hold to turn the rear display output off.

Press REAR ON to select the video source on the rear display.

Press **REAR ON** repeatedly to switch between the following video sources:

F. SOURCE (same source as the front display)
—**DVD** (built in DVD player)—**AV** (video input)
Rear display output is turned on and the illu
mination color of **REAR ON** changes into the
different color than the other buttons.

- You can also perform this operation by pressing REAR.S on the remote control.
- To turn the rear display output off, press
 REAR ON and hold.

- When selecting F. SOURCE, when the selected source is an audio source, nothing is displayed on rear display.
- When you watch **DVD** (built in DVD player) on both the front and the rear display, audio is not output from **REAR MONITOR OUT**.
- When selecting **FRONT SOURCE** in **REAR MODE**, audio is not output from **REAR MONITOR OUT**. (Refer to *Setting the video of rear display* on page 86.)
- When selecting **FRONT SOURCE** in **REAR MODE**, you can select **F. SOURCE** only. (Refer to *Setting the video of rear display* on page 86.)

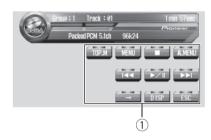


In the following cases, the sound source will not change:

- . When no disc is set in this unit.
- When the AV (video input) is not set to **VIDEO** (refer to page 84).

Touch panel key basic operation

Activating the touch panel keys



1 Touch panel keys

Touch to do various operations.

1 Touch the screen to activate the touch panel keys corresponding to each source.

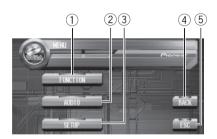
The touch panel keys appear on the display.

- To go to the next group of touch panel keys, touch \rightarrow .
- 2 Touch ESC to hide the touch panel keys.
- You can also hide the touch panel keys by pressing BAND/ESC.



If you do not use the touch panel keys for 30 sec onds, they will be hidden automatically.

Operating the menu



1 FUNCTION key

Touch to select functions for each source.

2 AUDIO key

Touch to select various sound quality controls.

3 SETUP key

Touch to select various setup functions.

(4) BACK key

Touch to return to the previous display.

5 ESC key

Touch to cancel the control mode of functions.

1 Touch A.MENU to display MENU.

MENU appears on the display.

■ When **A.MENU** is not displayed, you can display it by touching the screen.

2 Touch the desired key to display the function names you want to operate.

- To go to the next group of function names, touch **NEXT**.
- To return to the previous group of function names, touch **PREV**.

3 Touch ESC to return to the display of each source.

Note

If you do not operate the function within about 30 seconds, the display is automatically returned to the playback display.

Operating the menu by using the joystick

You can also perform most of the menu items by using the joystick.

 Switch the remote control operation mode to AVH to operate the menu by using the joystick on the remote control. (Refer to page 14.)

1 Click the joystick during display of each source to display MENU.

MENU appears on the display.

2 Move the joystick up or down and then click it to display the function names you want to operate.

- To go to the next group of function names, move the joystick to **NEXT** and click it.
- To return to the previous group of function names, move the joystick to **PREV** and click it.

3 Press BAND/ESC to return to the display of each source.

■ You can return to the previous display by pressing **BACK**. ■

Opening and closing the LCD panel

The LCD panel will be opened or closed auto matically with the turning of the ignition switch on or off. You can turn off the automatic close/open function. (Refer to page 85.)

• The automatic close/open function will op erate the display as follows.

- When the ignition switch is turned OFF while the LCD panel is opened, the LCD panel will close after six seconds.
- When the ignition switch is turned ON again (or turned to ACC), the LCD panel will be opened automatically.
- Removing or attaching the front panel will automatically close or open the LCD panel. (Refer to page 22.)
- When the ignition switch is turned OFF after the LCD panel has been closed, turn ing the ignition switch ON again (or turning it to ACC) will not open the LCD panel. In this case, press **OPEN/CLOSE** to open the LCD panel.
- When closing the LCD panel, check to make sure that it has closed completely. If the LCD panel has stopped halfway, leaving it like this could result in damage.

Press OPEN/CLOSE to open the LCD panel.

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

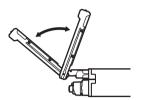
Adjusting the LCD panel angle



- If you can hear the LCD panel knocking against your vehicle's console or dashboard. press ANGLE (-) to move the LCD panel a lit tle forward.
- When adjusting the LCD panel angle, be sure to press ANGLE (+/-). Forcibly adjusting the LCD panel by hand may damage it.

Press ANGLE (+/-) to adjust the LCD panel to an easily viewable angle.

The LCD panel angle continues changing as long as you press **ANGLE** (+/-) and hold.



 The adjusted the LCD panel angle will be memorized and automatically returned to the next time the LCD panel is opened.

Turning the LCD panel horizontal

When the LCD panel is upright and it hinders the operation of the air conditioner, the position of the panel can be turned horizontal tem porarily.

Press FLIP DOWN/CLOCK to turn the LCD panel horizontal.

To return to original position, press

FLIP DOWN/CLOCK again.

 The LCD panel returns to the original position. automatically with beep sounds 10 seconds after operation.

Changing the wide screen mode

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

Press WIDE to select the desired set-

Press **WIDE** repeatedly to switch between the following settings:

FULL (full)—**JUST** (just)—**CINEMA** (cinema) —**ZOOM** (zoom)—**NORMAL** (normal)

FULL (full)

A 4:3 picture is enlarged in the horizontal direc tion only, enabling you to enjoy a 4:3 TV picture (normal picture) without any omissions.

JUST (just)

The picture is enlarged slightly at the center and the amount of enlargement increases horizontally to the ends, enabling you to enjoy a 4:3 picture without sensing any disparity even on a wide screen.

CINEMA (cinema)

A picture is enlarged by the same proportion as **FULL** or **ZOOM** in the horizontal direction and by an intermediate proportion between **FULL** and **ZOOM** in the vertical direction; ideal for a cine ma sized picture (wide screen picture) where cap tions lie outside.

ZOOM (zoom)

A 4:3 picture is enlarged in the same proportion both vertically and horizontally; ideal for a cine ma sized picture (wide screen picture).

NORMAL (normal)

A 4:3 picture is displayed as it is, giving you no sense of disparity since its proportions are the same as that of the normal picture.

Notes

- Different settings can be memorized for each video source.
- When video is viewed in a wide screen mode that does not match its original aspect ratio, it may appear differently.
- Remember that using the wide mode feature
 of this system for commercial or public view
 ing purposes may constitute an infringement
 on the author's rights protected by the Copy
 right Law.
- Video will appear grainy when viewed in CINEMA or ZOOM mode.
- The backup camera picture is always FULL.

Adjusting the picture adjustment

You can adjust **BRIGHT** (brightness), **CONTRAST** (contrast), **COLOR** (color) and **HUE** (hue) for each source and back up camera

- The adjustments of BRIGHT and CONTRAST are stored separately for light ambient (daytime) and dark ambient (night time). A sun ★ or moon → is displayed to the left of BRIGHT and CONTRAST, respectively, as the ambient light sensor determines brightness or darkness.
- You cannot adjust **HUE** for PAL video.
- You cannot adjust COLOR and HUE for the audio source.

1 Press MENU on the head unit and hold to display PICTURE ADJUST.

Press **MENU** until **PICTURE ADJUST** appears in the display.

You cannot use MENU on the remote control.

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

The adjustment function names are displayed and adjustable ones are highlighted.

- **BRIGHT** Adjust the black intensity
- CONTRAST Adjust the contrast
- **COLOR** Adjust the color saturation
- HUE Adjust the tone of color (red is em phasized or green is emphasized)
- DIMMER Adjust the brightness of display
- B.Camera Switch to the picture adjust ment display for the back up camera
- SOURCE Return to the picture adjustment display for each source
- You can adjust the picture adjustment for back up camera only when BACK UP CAMERA is turned on. (Refer to Setting for back up camera on page 84.)
- **SOURCE** will appear in the display instead of **B.Camera** when you touch **B.Camera**.

• With some back up camera, the picture ad justment may not be able to use.

3 Touch ◀ or ▶ to adjust the selected item.

Each time you touch ◀ or ▶ increases or de creases the level of selected item. +24 - -24 is displayed as the level is increased or de creased.

4 Touch ESC to hide the touch panel keys.

Adjusting the dimmer

The adjustment of **DIMMER** is stored sepa rately for each ambient light; daytime, evening and nighttime. The brightness of LCD screen will be adjusted optimum level automatically in accordance with the ambient light based on the setting values.

1 Press MENU on the head unit and hold to display PICTURE ADJUST.

Press **MENU** until **PICTURE ADJUST** appears in the display.

2 Touch DIMMER.

The ambient light level used as the standard for adjusting **DIMMER** appears above the level bar.

- Orange sun Adjust the brightness for bright ambient light (daytime)

3 Touch ◀ or ▶ to adjust the brightness.

Each time you touch ◀ or ▶ moves red to wards the left or the right.

The level indicates the brightness of the screen being adjusted. The farther red moves to the right, the brighter the screen.

4 Touch ESC to hide the touch panel keys.



The icons indicating the current ambient bright ness used for adjusting **BRIGHT** and **CONTRAST** may differ from **DIMMER** slightly.

Protecting your unit from theft

The front panel can be detached from the head unit to discourage theft.

- If the front panel is not detached from the head unit within five seconds of turning off the ignition, a warning tone will sound.
- You can turn off the warning tone. See *Switching the warning tone* on page 82.

Important

- Never use force or grip the display and the buttons tightly when removing or attaching.
- Avoid subjecting the front panel to excessive shocks.
- Keep the front panel out of direct sunlight and high temperatures.
- Attach the front panel while driving, or else may result in scratching or damage.

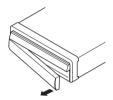
Removing the front panel

1 Press DETACH to remove the front panel.

Press **DETACH** and the right side of the front panel is removed from the head unit.

2 Grip the right side of the front panel and pull it gently outward.

Take care not to grip it tightly or to drop it.

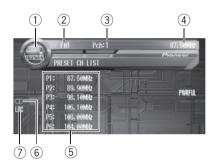


Attaching the front panel

• Replace the front panel by holding it upright to this unit and clipping it securely into the mounting hooks.

Tuner

Listening to the radio



These are the basic steps necessary to operate the radio. More advanced tuner operation is explained starting on the next page.

[Important

If you are using this unit in North, Central or South America, reset the AM tuning step (see Setting the AM tuning step on page 81).

1 Source icon

Shows what the source has been selected.

② Band indicator

Shows which band the radio is tuned to, AM or FM.

③ Preset number indicator

Shows what preset has been selected.

4 Frequency indicator

Shows to which frequency the tuner is tuned.

⑤ Preset list display

Shows the preset list.

6 Stereo (3) indicator

Shows that the frequency selected is being broadcast in stereo.

7 LOC indicator

Shows when local seek tuning is on.

1 Touch the source icon and then touch TUNER to select the tuner.

• When the source icon is not displayed, you can display it by touching the screen.

2 Touch the screen to display the touch panel keys.

3 Touch BAND to select a band.

Touch **BAND** repeatedly until the desired band is displayed, **FM1**, **FM2**, **FM3** for FM or **AM**.

4 To perform manual tuning, touch ◀ or ► shortly.

The frequencies move up or down step by step.

• You can also perform manual tuning by moving the joystick left or right.

The tuner will scan the frequencies until a broadcast strong enough for good reception is found.

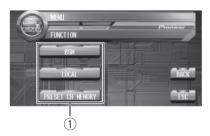
- You can cancel seek tuning by touching either
- ✓ or

 ✓ shortly.
- You can also perform seek tuning by holding the joystick left or right.



If you do not use the touch panel keys for 30 sec onds, they will be hidden automatically.

Introduction of advanced tuner operation



1 Function display

Shows the function names.

• Touch A.MENU and then touch FUNCTION to display the function names.

The function names are displayed and oper able ones are highlighted.

- When **A.MENU** is not displayed, you can display it by touching the screen.
- You can also display **MENU** by clicking the jovstick.
- To return to the previous display, touch **BACK**.
- To return to the frequency display, touch **ESC**.



If you do not operate the function within about 30 seconds, the display is automatically returned to the frequency display.

Storing and recalling broadcast frequencies

If you touch any of the preset tuning keys **P 1—P 6** you can easily store up to six broad cast frequencies for later recall with the touch of a key.

• When you find a frequency that you want to store in memory keep touching a preset tuning key P 1—P 6 until the preset number stops flashing.

The number you have touched will flash in the preset number indicator and then remain lit. The selected radio station frequency has been stored in memory.

The next time you touch the same preset tuning key **P 1—P 6** the radio station frequency is recalled from memory.

- When the touch panel keys are not displayed, you can display them by touching the screen.
- When **P 1—P 6** are not displayed, you can display them by touching **DISP**.



- Up to 18 FM stations, 6 for each of the three FM bands, and 6 AM stations can be stored in memory.
- You can also use ▲ and ▼ to recall radio sta tion frequencies assigned to preset tuning keys P 1—P 6.
- You can also perform the same operations using PRESET CH MEMORY. To display PRESET CH MEMORY, touch A.MENU and then touch FUNCTION IN

Tuning in strong signals

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

1 Touch A.MENU and FUNCTION and then touch LOCAL.

- 2 Touch ▲ to turn local seek tuning on.
- To turn local seek tuning off, touch ▼.

Tuner

3 Touch ◀ or ▶ to set the sensitivity.

There are four levels of sensitivity for FM and two levels for AM:

FM: LEVEL 1—LEVEL 2—LEVEL 3—LEVEL 4

AM: LEVEL 1—LEVEL 2

The **LEVEL 4** setting allows reception of only the strongest stations, while lower settings let you receive progressively weaker stations.

Storing the strongest broadcast frequencies

BSM (best stations memory) lets you automa tically store the six strongest broadcast fre quencies under preset tuning keys **P 1—P 6** and once stored there you can tune in to those frequencies with the touch of a key.

1 Touch A.MENU and FUNCTION and then touch BSM.

2 Touch ▲ to turn BSM on.

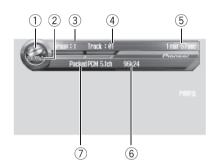
BSM begins to flash. While **BSM** is flashing the six strongest broadcast frequencies will be stored under preset tuning keys **P 1—P 6** in order of their signal strength. When finished, **BSM** stops flashing.

To cancel the storage process, touch ▼.



Storing broadcast frequencies with BSM may re place broadcast frequencies you have saved using **P 1—P 6.**

Listening a DVD audio



These are the basic steps necessary to play a DVD audio with your DVD player. More ad vanced DVD audio operation is explained starting on page 29.

1 Source icon

Shows what the source has been selected.

② DVD-A indicator

Shows when a DVD audio is playing.

3 Group number indicator

Shows the group currently playing.

(4) Track number indicator

Shows the track currently playing.

5 Play time indicator

Shows the elapsed playing time of the cur rent track.

© Sampling frequency and number of quantization bits indicator

Shows the sampling frequency and number of quantization bits of the current track.

7 Audio system indicator

Shows what audio system has been se lected.

1 Touch the source icon and then touch DVD to select the DVD player.

- When the source icon is not displayed, you can display it by touching the screen.
- If no disc is loaded in this unit, you cannot se lect **DVD** (DVD player). Insert a disc in this unit. (Refer to page 17.)
- With some discs, a menu may be displayed.
 (Refer to Operating the DVD menu on the next page.)

2 Touch the screen to display the touch panel keys.

3 To skip back or forward to another track, touch |◄◄ or ▶►|.

Touching ► skips to the start of the next track. Touching I once skips to the start of the current track. Touching again will skip to the previous track.

Track numbers are displayed for eight seconds.

 You can also skip back or forward to another track by moving the joystick left or right.

4 Touch \rightarrow to display $\blacktriangleleft \blacktriangleleft$ and $\blacktriangleright \blacktriangleright$.

Touch → until $\triangleleft \triangleleft$ and $\triangleright \triangleright$ appear in the display.

5 To perform fast forward or reverse, keep touching ◄ or ▶ ▶.

If you keep touching ◀◀ or ▶► for five sec onds, the icon ◀◀ or ▶► changes into rever sal indication. When this happens, fast reverse/fast forward continues even if you re lease ◀◀ or ▶►. To resume playback at a de sired point, touch ▶/Ⅱ.

- You can also perform fast reverse/fast forward by holding the joystick left or right.
- Fast forward/fast reverse may not be possible at certain locations on some discs. If this hap pens, normal playback automatically resumes.

Notes

- You can display the repeat range selected cur rently by touching DISP.
- If you do not use the touch panel keys for 30 seconds, they will be hidden automatically.

Operating the DVD menu

Some DVDs allow you to select the disc contents using a menu.

You can display the menu by touching
 MENU or TOP.M while a disc is playing.
 Touching either of these keys again lets you
 start playback from the location selected
 from the menu. For details, refer to the in
 structions provided with the disc.

1 Touch ← to display touch panel keys to operate the DVD menu.

 When the touch panel keys are not displayed, you can display them by touching the screen.

2 Touch ▲, ▼, ◀ or ▶ to select the desired menu item.

3 Touch ENTER.

Playback starts from the selected menu item.

- If you switch the remote control operation mode to **DVD**, the joystick on the remote control can also operate the DVD menu. (Refer to page 14.)
- You cannot operate the DVD menu by the joy stick on the head unit.
- The way to display the menu differs depending on the disc. ■

Skipping back or forward to another group

To skip back or forward to another group, touch ▲ or ▼.

Touching ▲ skips to the start of the next group. Touching ▼ skips to the start of the pre vious group.

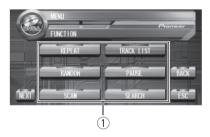
Group numbers are displayed for eight sec onds.

- You can also skip back or forward to another group by moving the joystick up or down.
- If you select bonus groups, you will have to enter a four digit password, which you can find on the disc's packaging. (Refer to *To play back bonus groups* on page 79.) ■

Stopping playback

- Touch ■.
- When you stop DVD playback by touching ■, that location on the disc is memorized enabling playback from that point when you play the disc again.
- To play back the disc again, touch ►/II.

Introduction of advanced DVD audio operation



1 Function display

Shows the function names.

• Touch A.MENU and then touch FUNCTION to display the function names.

The function names are displayed and oper able ones are highlighted.

- When **A.MENU** is not displayed, you can display it by touching the screen.
- You can also display MENU by clicking the iovstick.
- To go to the next group of function names, touch **NEXT**.
- To return to the previous group of function names, touch **PREV**.
- To return to the previous display, touch **BACK**.
- To return to the playback display, touch ESC.



If you do not operate the function within about 30 seconds, the display is automatically returned to the playback display.

Repeating play

There are three repeat play ranges for the DVD playback: **DISC** (disc repeat), **GROUP** (group repeat) and **TRACK** (track repeat).

1 Touch A.MENU and FUNCTION and then touch REPEAT.

- 2 Touch any of the following touch panel keys to select the repeat range.
 - DISC Play throughout the current disc
 - GROUP Repeat just the current group
 - TRACK Repeat just the current track



If you perform track search or fast forward/re verse, the repeat play range changes to **DISC**.

Playing tracks in a random order

Random play lets you play back tracks in a random order within the current group.

- 1 Touch A.MENU and FUNCTION and then touch RANDOM.
- 2 Touch ▲ to turn random play on.

Tracks will play in a random order within the current group.

To turn random play off, touch ▼.

Scanning tracks

Scan play lets you hear the first 10 seconds of each track in the current group.

- 1 Touch A.MENU and FUNCTION and then touch SCAN.
- 2 Touch ▲ to turn scan play on.

The first 10 seconds of each track of the cur rent group is played.

3 When you find the desired track touch ▼ to turn scan play off.



After scanning is finished, normal playback of the tracks will begin again. ■

Pausing DVD audio playback

Pause lets you temporarily stop disc playback.

Touch ►/II during playback.

The icon **II** is displayed for four seconds and playback is paused.

■ To resume playback at the same point that you turned pause on, touch ►/II again.

Notes

- You can also turn on or off pause function using PAUSE. To display PAUSE, touch A.MENU and then touch FUNCTION.
- Depending on the disc and the playback loca tion on the disc, the icon on may be displayed indicating that still playback is not possi ble.

Browsing still pictures

You can browse still pictures recorded on the disc while the audio is played back.

- You cannot operate Slideshow. (Refer to Slideshow on page 99.)
- 1 Touch BROWSE to browse still pictures during playback.

2 Touch PAGE – or PAGE + to switch still pictures.

Touching **PAGE** + goes to the next still picture. Touching **PAGE** - returns to the previous still picture.

- You can also go to the next still picture by touching **II** during playback.
- To return to the initial still picture, touch **HOME**.
- If you switch the remote control operation mode to **DVD**, the joystick on the remote control can also browse still pictures. (Refer to page 14.)
- You cannot browse still pictures by the joystick on the head unit.



Depending on the disc and the playback location on the disc, the icon \odot may be displayed indicat ing that browsing still pictures is not possible. \blacksquare

Frame-by-frame playback

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

 This function can be operated only on the moving picture parts of DVD audio disc.

Touch II► during playback.

Each time you touch **II►**, you move ahead one frame.

To return to normal playback, touch ►/II.



- Depending on the disc and the playback loca tion on the disc, the icon on may be displayed indicating that frame by frame playback is not possible.
- With some discs, images may be unclear dur ing frame by frame playback.

Slow motion playback

This lets you slow down playback speed.

• This function can be operated only on the moving picture parts of DVD audio disc.

1 Keep touching II► until I► is displayed during playback.

The icon **▶** is displayed, forward slow motion playback begins.

To return to normal playback, touch ►/II.

2 Press **◄**|| or || ► to adjust playback speed during slow motion playback.

Each time you press **◄II** or **II▶** changes the speed in four steps in the following order: 1/16—1/8—1/4—1/2

Notes

- There is no sound during slow motion play back.
- Depending on the disc and the playback loca tion on the disc, the icon may be displayed indicating that slow motion playback is not possible.
- With some discs, images may be unclear dur ing slow motion playback.
- Reverse slow motion playback is not possible.

Searching for a desired track or group

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

- Track search is not possible when disc play back has been stopped.
- 1 Touch SEARCH and then touch GROUP (group) or TRACK (track).

2 Touch 0—9 to input the desired number.

- To select 3, touch 3.
- To select 10, touch 1 and 0 in order.
- To select 23, touch 2 and 3 in order.
- To cancel the input numbers, touch C.
- You can also input the desired number by using the joystick and 0-9.

3 While the input number is displayed, touch ENTER

This starts playback from the selected group or track.



- You can also perform the same operations using SEARCH. To display SEARCH, touch A.MENU and then touch FUNCTION.
- With discs featuring a menu, you can also touch MENU or TOP.M and then make selec tions from the displayed menu.
- With some discs, the icon on may be displayed, indicating that groups and tracks cannot be specified.

Specifying group

You can use the direct search function to search for a desired group by specifying a group.

- Only the remote control can operate this function. To perform this function, switch the remote control operation mode to **DVD**. (Refer to page 14.)
- Press 0–10 corresponding to a desired group number when the disc is stopped.

Group number is displayed for eight seconds and playback starts from the selected group.

- To select 3, press 3.
- To select 10, press 10 and 0 in order.
- To select 23, press 10, 10 and 3 in order.

Changing audio language during playback (Multi-audio)

DVDs can provide audio playback with differ ent languages and different systems (Dolby Di gital, DTS etc.). With DVDs featuring multi audio recordings, you can switch between lan guages/audio systems during playback.

Touch AUDIO during playback.

Each time you touch **AUDIO** switches be tween audio.



- The number in the (a)) mark on a DVD's pack age indicates the number of recorded lan guages/audio systems.
- With some DVDs, switching between lan guages/audio systems may only be possible using a menu display.
- You can also switch between languages/audio systems using **DVD SETUP MENU**. For de tails, refer to Setting the audio language on page 77.
- Display indications such as **Dolby D** and
 5.1ch indicate the audio system recorded on the DVD. Depending on the setting, playback may not be with the same audio system as that indicated.
- Touching AUDIO during fast forward/fast re verse, 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.

Touch SUB.T during playback.

Each time you touch **SUB.T** switches between subtitle language.



- The number in the mark on a DVD's pack age indicates the number of recorded subtitle languages.
- With some DVDs, switching between subtitle languages may only be possible using a menu display.
- You can also switch between subtitle lan guages using **DVD SETUP MENU**. For details, refer to Setting the subtitle language on page 76.
- Touching SUB.T during fast forward/fast re verse, 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 play back.

- During playback of a scene shot from mul tiple angles on this unit, the angle icon
 is displayed. Turn angle icon display on or off using **DVD SETUP MENU**. For de tails, refer to Setting angle icon display on page 78.
- Touch ANGLE during playback of a scene shot from multiple angles.

Each time you touch **ANGLE** switches be tween angle.



 The mark on a DVD's package indicates it features multi angle scenes. The number in

the $\frac{\infty}{3.1}$ mark indicates the number of angles from which scenes were shot.

Touching ANGLE during fast forward/fast reverse, pause or slow motion playback returns you to normal playback.

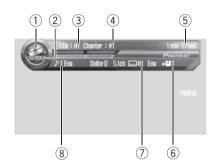
Using the dynamic range control

The dynamic range refers to the difference be tween the largest and softest sounds. The dy namic range control compresses this difference so that you can clearly hear sounds even at low volume levels.

- The dynamic range control is effective only on Dolby Digital sounds.
- The dynamic range control may produce lit tle effect on certain discs.
- 1 Touch A.MENU and FUNCTION and then touch NEXT.
- 2 Touch D. R. C.
- 3 Touch ▲ to turn the dynamic range control on.
- To turn dynamic range control off, touch ▼. ■

Playing DVD video discs

Watching a DVD video



These are the basic steps necessary to play a DVD video with your DVD player. More ad vanced DVD video operation is explained start ing on page 36.

Source icon

Shows what the source has been selected.

2 DVD-V indicator

Shows when a DVD video is playing.

③ Title number indicator

Shows the title currently playing.

4 Chapter number indicator

Shows the chapter currently playing.

5 Play time indicator

Shows the elapsed playing time of the cur rent chapter.

6 Viewing angle indicator

Shows what viewing angle has been se lected.

③ Subtitle language indicator

Shows what subtitle language has been se lected.

8 Audio language indicator

Shows what audio language has been se lected.

1 Touch the source icon and then touch DVD to select the DVD player.

- When the source icon is not displayed, you can display it by touching the screen.
- If no disc is loaded in this unit, you cannot se lect **DVD** (DVD player). Insert a disc in this unit. (Refer to page 17.)
- With some discs, a menu may be displayed. (Refer to Operating the DVD menu on the next page.)

2 Touch the screen to display the touch panel keys.

3 To skip back or forward to another chapter, touch |◄◄ or ▶►|.

Touching ►►I skips to the start of the next chapter. Touching I◄¬ once skips to the start of the current chapter. Touching again will skip to the previous chapter.

Chapter numbers are displayed for eight sec onds.

• You can also skip back or forward to another chapter by moving the joystick left or right.

4 Touch → to display ◄ and ▶▶.

Touch → until $\triangleleft \triangleleft$ and $\blacktriangleright \blacktriangleright$ appear in the display.

5 To perform fast forward or reverse, keep touching ◀◀ or ▶▶.

If you keep touching ◄◄ or ►► for five sec onds, the icon ◄◄ or ►► changes into rever sal indication. When this happens, fast reverse/fast forward continues even if you re lease ◄◄ or ►►. To resume playback at a de sired point, touch ►/II.

 You can also perform fast reverse/fast forward by holding the joystick left or right.

Playing DVD video discs

 Fast forward/fast reverse may not be possible at certain locations on some discs. If this hap pens, normal playback automatically resumes.

Motes

- You can display the repeat range selected cur rently by touching DISP.
- If you do not use the touch panel keys for 30 seconds, they will be hidden automatically.

Operating the DVD menu

Some DVDs allow you to select the disc contents using a menu.

 You can display the menu by touching MENU or TOP.M while a disc is playing. Touching either of these keys again lets you start playback from the location selected from the menu. For details, refer to the in structions provided with the disc.

1 Touch ♠ to display touch panel keys to operate the DVD menu.

 When the touch panel keys are not displayed, you can display them by touching the screen.

2 Touch ▲, ▼, ◀ or ▶ to select the desired menu item

3 Touch ENTER.

Playback starts from the selected menu item.

- If you switch the remote control operation mode to **DVD**, the joystick on the remote control can also operate the DVD menu. (Refer to page 14.)
- You cannot operate the DVD menu by the joy stick on the head unit.
- \blacksquare The way to display the menu differs depending on the disc. \blacksquare

Skipping back or forward to another title

To skip back or forward to another title, touch ▲ or ▼.

Touching ▲ skips to the start of the next title.

Touching ▼ skips to the start of the previous title.

Title numbers are displayed for eight seconds.

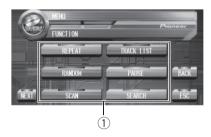
■ You can also skip back or forward to another title by moving the joystick up or down. ■

Stopping playback

- Touch ■.
- When you stop DVD playback by touching ■, that location on the disc is memorized enabling playback from that point when you play the disc again.
- To play back the disc again, touch ►/II.

Playing DVD video discs

Introduction of advanced DVD video operation



① Function display

Shows the function names.

• Touch A.MENU and then touch FUNCTION to display the function names.

The function names are displayed and oper able ones are highlighted.

- When **A.MENU** is not displayed, you can display it by touching the screen.
- You can also display **MENU** by clicking the iovstick.
- To go to the next group of function names, touch **NEXT**.
- To return to the previous group of function names, touch **PREV**.
- To return to the previous display, touch **BACK**.
- To return to the playback display, touch **ESC**.



If you do not operate the function within about 30 seconds, the display is automatically returned to the playback display.

Repeating play

There are three repeat play ranges for the DVD playback: **DISC** (disc repeat), **TITLE** (title re peat) and **CHAPTER** (chapter repeat).

1 Touch A.MENU and FUNCTION and then touch REPEAT.

2 Touch any of the following touch panel keys to select the repeat range.

- DISC Play throughout the current disc
- TITLE Repeat just the current title
- CHAPTER Repeat just the current chapter



If you perform chapter search or fast forward/re verse, the repeat play range changes to **DISC**.

Pausing DVD video playback

Pause lets you temporarily stop disc playback.

Touch ►/II during playback.

The icon **II** is displayed for four seconds and playback is paused letting you view a still image.

■ To resume playback at the same point that you turned pause on, touch ►/II again.



- You can also turn on or off pause function using PAUSE. To display PAUSE, touch A.MENU and then touch FUNCTION.
- Depending on the disc and the playback loca tion on the disc, the icon may be displayed indicating that still playback is not possi ble.

Frame-by-frame playback

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

Playing DVD video discs

Touch II► during playback.

Each time you touch **II►**, you move ahead one frame.

To return to normal playback, touch ►/II.

Notes

- Depending on the disc and the playback loca tion on the disc, the icon may be displayed indicating that frame by frame playback is not possible.
- With some discs, images may be unclear dur ing frame by frame playback.

Slow motion playback

This lets you slow down playback speed.

1 Keep touching II► until I► is displayed during playback.

The icon **▶** is displayed, forward slow motion playback begins.

To return to normal playback, touch ►/II.

2 Press **◄**|| or ||**▶** to adjust playback speed during slow motion playback.

Each time you press **◄II** or **II▶** changes the speed in four steps in the following order: 1/16—1/8—1/4—1/2

Notes

- There is no sound during slow motion play back.
- Depending on the disc and the playback loca tion on the disc, the icon on may be displayed indicating that slow motion playback is not possible.
- With some discs, images may be unclear dur ing slow motion playback.
- Reverse slow motion playback is not possi ble.

Searching for a desired scene, starting playback from a specified time

You can use the search function to search for a desired scene by specifying a title or chapter, and the time search function to specify the time on a disc at which play starts.

- Chapter search and time search are not possible when disc playback has been stopped.
- 1 Touch SEARCH and then touch TITLE (title), CHAPTER (chapter) or TIME (time).

2 Touch 0—9 to input the desired number.

For titles and chapters

- To select 3, touch 3.
- To select 10, touch 1 and 0 in order.
- To select 23, touch 2 and 3 in order.

For time (time search)

- To select 21 minutes 43 seconds, touch 2,
 1. 4 and 3 in order.
- To select 1 hour 11 minutes, convert the time into 71 minutes 00 seconds and touch
 7. 1. 0 and 0 in order.
- To cancel the input numbers, touch C.
- You can also input the desired number by using the joystick and 0-9.

3 While the input number is displayed, touch ENTER.

This starts playback from the selected scene.

Notes

- You can also perform the same operations using SEARCH. To display SEARCH, touch A.MENU and then touch FUNCTION.
- With discs featuring a menu, you can also touch MENU or TOP.M and then make selec tions from the displayed menu.

Playing DVD video discs

 With some discs, the icon may be dis played, indicating that titles, chapters and time cannot be specified.

Specifying title

You can use the direct search function to search for a desired scene by specifying a title.

 Only the remote control can operate this function. To perform this function, switch the remote control operation mode to **DVD**. (Refer to page 14.)

• Press 0–10 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 order.
- To select 23, press 10, 10 and 3 in order.

Changing audio language during playback (Multi-audio)

DVDs can provide audio playback with differ ent languages and different systems (Dolby Di gital, DTS etc.). With DVDs featuring multi audio recordings, you can switch between lan guages/audio systems during playback.

• Touch AUDIO during playback.

Each time you touch **AUDIO** switches be tween audio.

Notes

- The number in the (3)) mark on a DVD's pack age indicates the number of recorded lan guages/audio systems.
- With some DVDs, switching between lan guages/audio systems may only be possible using a menu display.

- You can also switch between languages/audio systems using **DVD SETUP MENU**. For de tails, refer to Setting the audio language on page 77.
- Display indications such as **Dolby D** and **5.1ch** indicate the audio system recorded on the DVD. Depending on the setting, playback may not be with the same audio system as that indicated.
- Touching AUDIO during fast forward/fast re verse, 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.

Touch SUB.T during playback.

Each time you touch **SUB.T** switches between subtitle language.



- The number in the number of a DVD's pack age indicates the number of recorded subtitle languages.
- With some DVDs, switching between subtitle languages may only be possible using a menu display.
- You can also switch between subtitle lan guages using **DVD SETUP MENU**. For details, refer to Setting the subtitle language on page 76.
- Touching SUB.T during fast forward/fast re verse, pause or slow motion playback returns you to normal playback.

Playing DVD video discs

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 play back.

- During playback of a scene shot from multiple angles on this unit, the angle icon is displayed. Turn angle icon display on or off using DVD SETUP MENU. For details, refer to Setting angle icon display on page 78.
- Touch ANGLE during playback of a scene shot from multiple angles.

Each time you touch **ANGLE** switches be tween angle.



- The
 • mark on a DVD's package indicates it features multi angle scenes. The number in the
 • mark indicates the number of angles from which scenes were shot.
- Touching ANGLE during fast forward/fast reverse, pause or slow motion playback returns you to normal playback.

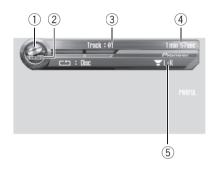
Using the dynamic range control

The dynamic range refers to the difference be tween the largest and softest sounds. The dy namic range control compresses this difference so that you can clearly hear sounds even at low volume levels.

- The dynamic range control is effective only on Dolby Digital sounds.
- The dynamic range control may produce lit tle effect on certain discs.

- 1 Touch A.MENU and FUNCTION and then touch NEXT.
- 2 Touch D. R. C.
- 3 Touch ▲ to turn the dynamic range control on.
- To turn dynamic range control off, touch ▼.

Watching a Video CD



These are the basic steps necessary to play a Video CD with your DVD player. More ad vanced Video CD operation is explained start ing on page 42.

1 Source icon

Shows what the source has been selected.

② VideoCD indicator

Shows when a Video CD is playing.

③ Track number indicator

Shows the track currently playing.

4 Play time indicator

Shows the elapsed playing time of the cur rent track.

5 Audio output indicator

Shows the output channel selected cur rently.

1 Touch the source icon and then touch DVD to select the DVD player.

- When the source icon is not displayed, you can display it by touching the screen.
- If no disc is loaded in this unit, you cannot se lect **DVD** (DVD player). Insert a disc in this unit. (Refer to page 17.)

 With a Video CD featuring the PBC (playback control) function, a menu is displayed.

2 Switch the remote control operation mode to DVD and then press 0–10 to select the desired menu item.

Playback starts from the selected menu item.

- When the menu is two or more pages long, touch I◄◄ or ►►I to switch between displays.
- You can play a disc without using a menu (without PBC playback). (Refer to Specifying track on page 44.) To return to PBC playback, stop play back and touch ►/II.
- You can display the menu by pressing RETURN during PBC playback. For details, refer to the instructions provided with the disc.
- After operating the menu, we recommend that you switch remote control operation mode to AVH. (Refer to page 14.)

3 Touch the screen to display the touch panel keys.

4 To skip back or forward to another track, touch |◀◀ or ▶▶|.

Touching ►►I skips to the start of the next track. Touching I◄◄ once skips to the start of the current track. Touching again will skip to the previous track.

Track numbers are displayed for eight sec onds.

- You can also skip back or forward to another track by moving the joystick left or right.
- During PBC playback, a menu may be dis played if you perform these operations.

5 Touch → to display ◀◀ and ▶▶.

Touch → until ◀◀ and ▶▶ appear in the display.

6 To perform fast forward or reverse, keep touching ◀◀ or ▶▶.

If you keep touching ◄ or ► for five sec onds, the icon ◄ or ► changes into rever sal indication. When this happens, fast

reverse/fast forward continues even if you re lease ◀◀ or ▶▶. To resume playback at a de sired point, touch ▶/Ⅱ.

- You can also perform fast reverse/fast forward by holding the joystick left or right.
- Fast forward/fast reverse may not be possible at certain locations on some discs. If this hap pens, normal playback automatically resumes.



If you do not use the touch panel keys for 30 sec onds, they will be hidden automatically. •

Operating the menu

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

• Switch the remote control operation mode to DVD and then press 0–10 to select the desired menu item.

Playback starts from the selected menu item.

- When the menu is two or more pages long, touch I◄◄ or ►►I to switch between displays.
- You can play a disc without using a menu (without PBC playback). (Refer to Specifying track on page 44.) To return to PBC playback, stop play back and touch ▶/Ⅱ.
- You can display the menu by pressing
 RETURN during PBC playback. For details, refer to the instructions provided with the disc.
- After operating the menu, we recommend that you switch remote control operation mode to AVH. (Refer to page 14.)

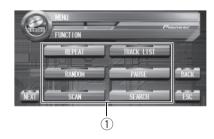
Stopping playback

- Touch ■
- When you stop Video CD playback (during PBC playback only) by touching ■, that location

on the disc is memorized enabling playback from that point when you play the disc again.

To play back the disc again, touch ►/II.

Introduction of advanced Video CD operation



1 Function display

Shows the function names.

• Touch A.MENU and then touch FUNCTION to display the function names.

The function names are displayed and oper able ones are highlighted.

- When **A.MENU** is not displayed, you can display it by touching the screen.
- You can also display MENU by clicking the iovstick.
- To go to the next group of function names, touch **NEXT**.
- To return to the previous group of function names, touch **PREV**.
- To return to the previous display, touch **BACK**.
- To return to the playback display, touch **ESC**.

Notes

- The dynamic range control is effective only on Dolby Digital sounds. (Refer to page 39.)
- If you do not operate the function within about 30 seconds, the display is automatically re turned to the playback display.

Repeating play

There are two repeat play ranges for the Video CD playback: **TRACK** (track repeat) and **DISC** (disc repeat).

- During PBC playback of Video CDs, this function cannot be operated.
- 1 Touch A.MENU and FUNCTION and then touch REPEAT.
- 2 Touch either of the following touch panel keys to select the repeat range.
 - **DISC** Repeat the current disc
 - TRACK Repeat just the current track



If you perform track search or fast forward/re verse, the repeat play range changes to **DISC**.

Pausing Video CD playback

Pause lets you temporarily stop disc playback.

Touch ►/II during playback.

The icon **II** is displayed for four seconds and playback is paused letting you view a still image.

■ To resume playback at the same point that you turned pause on, touch ►/II again.



- You can also turn on or off pause function using PAUSE. To display PAUSE, touch A.MENU and then touch FUNCTION.
- Depending on the disc and the playback loca tion on the disc, the icon on may be displayed indicating that still playback is not possi
 ble.

Frame-by-frame playback

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

Touch II► during playback.

Each time you touch **II►**, you move ahead one frame

To return to normal playback, touch ►/II.

Notes

- Depending on the disc and the playback loca tion on the disc, the icon on may be displayed indicating that frame by frame playback is not possible.
- With some discs, images may be unclear dur ing frame by frame playback.

Slow motion playback

This lets you slow down playback speed.

1 Keep touching II► until I► is displayed during playback.

The icon **▶** is displayed, forward slow motion playback begins.

To return to normal playback, touch ►/II.

2 Press **◄**II or II► to adjust playback speed during slow motion playback.

Each time you press **◄II** or **II▶** changes the speed in four steps in the following order: 1/16—1/8—1/4—1/2

Notes

- There is no sound during slow motion play back.
- Depending on the disc and the playback loca tion on the disc, the icon may be displayed indicating that slow motion playback is not possible.

- With some discs, images may be unclear dur ing slow motion playback.
- Reverse slow motion playback is not possi ble.

Searching for a desired scene, starting playback from a specified time

You can use the search function to search for a desired scene by specifying a track, and the time search function to specify the time on a disc at which play starts.

- During PBC playback of Video CDs, this function cannot be operated.
- Time search is not possible when disc play back has been stopped.

1 Touch SEARCH and then touch TRACK (track) or TIME (time).

2 Touch 0—9 to input the desired number.

For tracks

- To select 3, touch 3.
- To select 10, touch 1 and 0 in order.
- To select 23, touch 2 and 3 in order.

For time (time search)

- To select 21 minutes 43 seconds, touch 2,
 - 1. 4 and 3 in order.
- To select 1 hour 11 minutes, convert the time into 71 minutes 00 seconds and touch
 - 7. 1. 0 and 0 in order.
- To cancel the input numbers, touch C.
- You can also input the desired number by using the joystick and **0-9**.

3 While the input number is displayed, touch ENTER.

This starts playback from the selected scene.



You can also perform the same operations using **SEARCH**. To display **SEARCH**, touch **A.MENU** and then touch **FUNCTION**.

Specifying track

You can use the direct search function to play a disc without using a menu (without PBC playback).

- Only the remote control can operate this function. To perform this function, switch the remote control operation mode to **DVD**. (Refer to page 14.)
- During PBC playback of Video CDs, this function cannot be operated.

Press 0–10 corresponding to a desired track number when the disc is stopped.

Track number is displayed for eight seconds and playback starts from the selected track.

- To select 3, press 3.
- To select 10, press 10 and 0 in order.
- To select 23, press 10, 10 and 3 in order.



With some discs, the icon **⊘** may be displayed and operation may not be possible. ■

Selecting audio output

You can switch between stereo and monaural audio output.

• Press AUDIO during playback.

Press **AUDIO** repeatedly to switch between the following outputs:

L+R (left and right channels)—**L** (left channel)

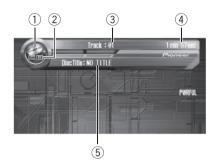
-R (right channel)



You can also perform the same operations using L/R SELECT. To display L/R SELECT, touch A.MENU and FUNCTION and then touch NEXT.

Playing CDs

Listening a CD



These are the basic steps necessary to play a CD with your DVD player. More advanced CD operation is explained starting on the next page.

1 Source icon

Shows what the source has been selected.

(2) CD indicator

Shows when a CD is playing.

③ Track number indicator

Shows the track currently playing.

4 Play time indicator

Shows the elapsed playing time of the cur rent track.

(5) Disc title indicator

Shows the title of the currently playing disc.

1 Touch the source icon and then touch DVD to select the DVD player.

- When the source icon is not displayed, you can display it by touching the screen.
- If no disc is loaded in this unit, you cannot se lect **DVD** (DVD player). Insert a disc in this unit. (Refer to page 17.)

Touch the screen to display the touch panel kevs.

To skip back or forward to another track, touch I◀◀ or ▶▶I.

Touching ►► skips to the start of the next track. Touching I once skips to the start of the current track. Touching again will skip to the previous track.

Track numbers are displayed for eight sec onds.

 You can also skip back or forward to another track by moving the joystick left or right.

4 Touch → to display ◄ and ▶▶.

Touch \rightarrow until \blacktriangleleft and \blacktriangleright appear in the dis play.

To perform fast forward or reverse, keep touching $\triangleleft \triangleleft$ or $\triangleright \triangleright$.

 You can also perform fast reverse/fast forward by holding the joystick left or right.

Notes

- When playing discs with MP3 files and audio data (CD DA) such as CD EXTRA and MIXED MODE CDs, both types can be played only by switching mode between MP3 and CD DA by touching DA<>MP3 or pressing BAND/ESC.
- If you do not use the touch panel keys for 30 seconds, they will be hidden automatically.

Stopping playback

- Touch ■.
- When you stop CD playback by touching ■, that location on the disc is memorized enabling playback from that point when you play the disc again.
- To play back the disc again, touch ►/II.

Introduction of advanced CD operation



Function display Shows the function names.

• Touch A.MENU and then touch FUNCTION to display the function names.

The function names are displayed and oper able ones are highlighted.

- When **A.MENU** is not displayed, you can display it by touching the screen.
- You can also display MENU by clicking the iovstick.
- To go to the next group of function names, touch **NEXT**.
- To return to the previous group of function names, touch **PREV**.
- To return to the previous display, touch **BACK**.
- To return to the playback display, touch ESC.

Notes

- The dynamic range control is effective only on Dolby Digital sounds. (Refer to page 39.)
- If you do not operate the function within about 30 seconds, the display is automatically re turned to the playback display.

Repeating play

Repeat play lets you hear the same track over again.

- 1 Touch A.MENU and FUNCTION and then touch REPEAT.
- 2 Touch either of the following touch panel keys to select the repeat range.
 - **DISC** Repeat the current disc
 - TRACK Repeat just the current track



- If you perform track search or fast forward/re verse, repeat play is automatically cancelled.
- When playing discs with MP3 files and audio data (CD DA), repeat play performs within the currently playing data type even if **DISC** is selected.

Playing tracks in a random order

Random play lets you play back tracks on the CD in a random order.

- 1 Touch A.MENU and FUNCTION and then touch RANDOM.
- 2 Touch ▲ to turn random play on.

Tracks will play in a random order.

To turn random play off, touch ▼.

Scanning tracks of a CD

Scan play lets you hear the first 10 seconds of each track on the CD.

1 Touch A.MENU and FUNCTION and then touch SCAN.

2 Touch ▲ to turn scan play on.

The first 10 seconds of each track is played.

When you find the desired track touch ▼ to turn scan play off.



After scanning of a CD is finished, normal play back of the tracks will begin again. ■

Pausing CD playback

Pause lets you temporarily stop disc playback.

■ Touch ►/II during playback.

The icon **II** is displayed for four seconds and playback is paused.

■ To resume playback at the same point that you turned pause on, touch ►/II again.



You can also turn on or off pause function using **PAUSE**. To display **PAUSE**, touch **A.MENU** and then touch **FUNCTION**.

Entering disc titles

You can input CD titles and display the title. The next time you insert a CD for which you have entered a title, the title of that CD will be displayed.

Disc title input lets you input CD titles up to 20 letters long and up to 48 disc titles into this unit.

- When playing a CD TEXT disc, you cannot switch to TITLE EDIT. The disc title will have already been recorded on a CD TEXT disc.
- If no title has been entered for the currently playing disc, **NO TITLE** is displayed.

- 1 Play a CD that you want to enter the title.
- 2 Touch A.MENU and FUNCTION and then touch NEXT.
- 3 Touch TITLE EDIT.

4 Touch ABC to select the desired character type.

Touch **ABC** repeatedly to switch between the following character type:

Alphabet (upper case), numbers and symbols —Alphabet (lower case)

- You can select to input numbers and symbols by touching 012.
- You can also switch character types by click ing the joystick.

5 Touch **▲** or **▼** to select a letter of the alphabet.

Each time you touch ▲ will display a letter of the alphabet in A B C ... X Y Z, numbers and symbols in 1 2 3 ... | } order. Each time you touch ▼ will display a letter in the reverse order, such as Z Y X ... C B A order.



6 Touch ► to move the cursor to the next character position.

When the desired letter is displayed, touch ► to move the cursor to the next position and then select the next letter. Touch ◀ to move backwards in the display.

7 Touch OK to store the entered title in memory.

• You can also store the entered title in memory by moving the cursor to right until it disappears.

8 Touch ESC to return to the playback display.



- Titles remain in memory, even after the disc has been removed from this unit, and are re called when the disc is reinserted.
- Titles are stored in this unit and multi CD player separately.
- After data for 48 discs has been stored in memory, data for a new disc will overwrite the oldest one.

Using CD TEXT functions

Some discs have certain information encoded on the disc during manufacture. These discs may contain such information as the CD title, track title, artist's name and playback time and are called CD TEXT discs. Only these spe cially encoded CD TEXT discs support the functions listed below.

Displaying titles on CD TEXT discs

Touch DISP.

Touch **DISP** repeatedly to switch between the following settings:

DiscTitle (disc title)—**DiscArtist** (disc artist name)—**TrackTitle** (track title)—**TrackArtist** (track artist name)

 If specific information has not been recorded on a CD TEXT disc, NO XXXX will be displayed (e.g., NO ARTIST).

Scrolling titles in the display

This unit can display the first 20 letters only of **DiscTitle**, **DiscArtist**, **TrackTitle** and **TrackArtist**. When the recorded information is longer than 20 letters, you can scroll the text to the left so that the rest of the title can be seen.

Keep touching DISP until the title begins to scroll to the left.

The rest of the title will appear in the display.

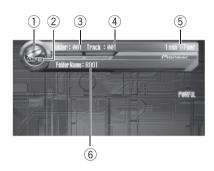
Selecting tracks from the track title list

Track title list lets you see the list of track titles on a CD TEXT disc and select one of them to playback.

- 1 Touch A.MENU and FUNCTION and then touch TRACK LIST.
- 2 Touch PREV or NEXT to switch between the lists of titles.
- 3 Touch your favorite track title.

That selection will begin to play.

Listening MP3



These are the basic steps necessary to play an MP3 with your DVD player. More advanced MP3 operation is explained starting on the next page.

1 Source icon

Shows what the source has been selected.

② MP3 indicator

Shows when the MP3 file is playing.

3 Folder number indicator

Shows the folder number currently playing.

(4) Track number indicator

Shows the track (file) currently playing.

5 Play time indicator

Shows the elapsed playing time of the cur rent track (file).

6 Folder name indicator

Shows the folder name currently playing.

1 Touch the source icon and then touch DVD to select the DVD player.

 When the source icon is not displayed, you can display it by touching the screen.

If no disc is loaded in this unit, you cannot se lect **DVD** (DVD player). Insert a disc in this unit. (Refer to page 17.)

Touch the screen to display the touch panel keys.

To skip back or forward to another track, touch |◄◄ or ▶►|.

Touching ►►I skips to the start of the next track. Touching I◄◄ once skips to the start of the current track. Touching again will skip to the previous track.

Track numbers are displayed for eight sec onds.

You can also skip back or forward to another track by moving the joystick left or right.

Touch \rightarrow to display \blacktriangle , \blacktriangledown , $\blacktriangleleft\blacktriangleleft$ and $\blacktriangleright\blacktriangleright$. Touch \rightarrow until \blacktriangle , \blacktriangledown , $\blacktriangleleft\blacktriangleleft$ and $\blacktriangleright\blacktriangleright$ appear in the display.

To perform fast forward or reverse, keep touching ◀◀ or ▶▶.

- You can also perform fast reverse/fast forward by holding the joystick left or right.
- There is no sound on fast forward or reverse.
- This is fast forward and reverse operation only for the file being played. This operation is can celed when the previous or next file is reached.

Touch **A** or **V** to select a folder.

- You can also select a folder by moving the joy stick up or down.
- To return to folder **001** (ROOT), press and hold BAND/ESC. However, if folder 001 (ROOT) con tains no files, playback commences with folder 002.
- You cannot select a folder that does not have an MP3 file recorded in it.

Motes

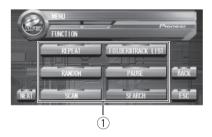
- When playing discs with MP3 files and audio data (CD DA) such as CD EXTRA and MIXED MODE CDs, both types can be played only by switching mode between MP3 and CD DA by touching DA<>MP3 or pressing BAND/ESC.
- If you have switched between playback of MP3 files and audio data (CD DA), playback starts at the first track on the disc.
- This DVD player can play back an MP3 file re corded on CD ROM. (Refer to page 93 for files that can be played back.)
- There is sometimes a delay between starting up playback and the sound being issued. This is particularly the case when playing back multi session and many folders. When being read in, FORMAT READ is displayed.
- Playback is carried out in order of file number.
 Folders are skipped if they contain no files. (If folder 001 (ROOT) contains no files, playback commences with folder 002.)
- When playing back files recorded as VBR (variable bit rate) files, the play time will not be correctly displayed if fast forward or reverse operations are used.
- If you do not use the touch panel keys for 30 seconds, they will be hidden automatically.

Stopping playback

Touch ■.

- When you stop MP3 playback by touching ■, that location on the disc is memorized enabling playback from that point when you play the disc again.
- To play back the disc again, touch ►/II.

Introduction of advanced MP3 operation



① Function display

Shows the function names.

• Touch A.MENU and then touch FUNCTION to display the function names.

The function names are displayed and oper able ones are highlighted.

- When **A.MENU** is not displayed, you can display it by touching the screen.
- You can also display **MENU** by clicking the jovstick.
- To go to the next group of function names, touch **NEXT**.
- To return to the previous group of function names, touch **PREV**.
- To return to the previous display, touch BACK.
- To return to the playback display, touch ESC.



- The dynamic range control is effective only on Dolby Digital sounds. (Refer to page 39.)
- If you do not operate the function within about 30 seconds, the display is automatically re turned to the playback display.

Playing MP3

Repeating play

For MP3 playback, there are three repeat play ranges: FOLDER (folder repeat), TRACK (one track repeat) and **DISC** (repeat all tracks).

- Touch A MENU and FUNCTION and then touch REPEAT.
- 2 Touch any of the following touch panel keys to select the repeat range.
 - DISC Repeat all tracks
 - FOLDER Repeat the current folder
 - TRACK Repeat just the current track



- If you select other folder during repeat play, the repeat play range changes to DISC.
- If you perform track search or fast forward/re verse during TRACK, the repeat play range changes to FOLDER.
- When **FOLDER** is selected, it is not possible to play back a subfolder of that folder.
- When playing discs with MP3 files and audio data (CD DA), repeat play performs within the currently playing data type even if DISC is selected.

Playing tracks in a random order

Random play lets you play back tracks in a random order within the repeat range, FOLDER and DISC.

Select the repeat range.

Refer to Repeating play on this page.

Touch A.MENU and FUNCTION and then touch RANDOM.

Touch ▲ to turn random play on.

Tracks will play in a random order within the previously selected **FOLDER** or **DISC** ranges.

To turn random play off, touch ▼.

Scanning folders and tracks

While you are using **FOLDER**, the beginning of each track in the selected folder plays for about 10 seconds. When you are using **DISC**. the beginning of the first track of each folder is played for about 10 seconds.

Select the repeat range.

Refer to Repeating play on this page.

- Touch A.MENU and FUNCTION and then touch SCAN.
- Touch ▲ to turn scan play on.

The first 10 seconds of each track of the cur rent folder (or the first track of each folder) is played.

When you find the desired track (or folder) touch ▼ to turn scan play off.



After track or folder scanning is finished, normal playback of the tracks will begin again.

Pausing MP3 playback

Pause lets you temporarily stop disc playback.

Touch ►/II during playback.

The icon **II** is displayed for four seconds and playback is paused.

 To resume playback at the same point that you turned pause on, touch ►/II again.



You can also turn on or off pause function using **PAUSE**. To display **PAUSE**, touch **A.MENU** and then touch **FUNCTION**.

Displaying text information on MP3 discs

Text information recorded on a MP3 discs can be displayed.

Touch DISP.

Touch **DISP** repeatedly to switch between the following settings:

FolderName (folder name)—FileName (file name)—TrackTitle (track title)—ArtistName (artist name)—AlbumTitle (album title)

- —Comment (comment)—BitRate (bit rate)
- When playing back files recorded as VBR (variable bit rate) files, the bit rate value is not dis played even after switching to bit rate. (VBR will be displayed.)
- If specific information has not been recorded on a MP3 disc, **NO XXXX** will be displayed (e.g., **NO NAME**). [■]

Scrolling text information in the display

This unit can display the first 20 letters only of FolderName, FileName, TrackTitle, ArtistName, AlbumTitle and Comment. When the recorded information is longer than 20 letters, you can scroll the text to the left so that the rest of the text information can be

Keep touching DISP until the text information begins to scroll to the left.

The rest of the text information will appear in the display. ■

Selecting tracks from the file name list

File name list lets you see the list of file names (or folder names) on an MP3 disc and select one of them to playback.

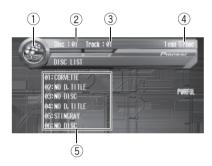
- 1 Touch A.MENU and FUNCTION and then touch FOLDER&TRACK LIST.
- 2 Touch PREV or NEXT to switch between the lists of names.
- 3 Touch your favorite file name (or folder name).

That selection will begin to play.

- When you have selected a folder, a list of the names of the files (or the folders) in it can be viewed. Repeat 2 and 3 to select the desired file name.
- To return to the previous list (the folder one level higher), touch **UP**. ■

seen.

Listening a CD



You can use this unit to control a multi CD player, which is sold separately.

These are the basic steps necessary to play a CD with your multi CD player. More advanced CD operation is explained starting on the next page.

1 Source icon

Shows what the source has been selected.

② Disc number indicator

Shows the disc currently playing.

③ Track number indicator

Shows the track currently playing.

Play time indicator

Shows the elapsed playing time of the cur rent track.

5 Disc list display

Shows the disc title list.

1 Touch the source icon and then touch M-CD to select the multi-CD player.

 When the source icon is not displayed, you can display it by touching the screen.

Touch the screen to display the touch panel keys.

Touch any of 01—06 to select a disc you want to listen to.

If you want to select a disc located at 7 to 12. touch PREV or NEXT to display 07-12.

- When **01—06** and **07—12** are not displayed. you can display them by touching **DISP**.
- You can also sequentially select a disc by using **▲**/▼.

To skip back or forward to another track, touch ◀ or ▶.

Touching ► skips to the start of the next track. rent track. Touching again will skip to the pre vious track.

 You can also skip back or forward to another track by moving the joystick left or right.

To perform fast forward or reverse, keep touching \triangleleft or \triangleright .

 You can also perform fast reverse/fast forward by holding the joystick left or right.

Notes

- When the multi CD player performs the pre paratory operations, **READY** is displayed.
- If the multi CD player does not operate prop erly, an error message such as ERROR-02 may be displayed. Refer to the multi CD player owner's manual.
- If there are no discs in the multi CD player ma gazine. NO DISC is displayed.
- If you do not use the touch panel keys for 30 seconds, they will be hidden automatically.

50-disc multi-CD player

Only those functions described in this manual are supported for 50 disc multi CD players.

Multi-CD Player

Introduction of advanced multi-CD player operation



① Function display

Shows the function names.

• Touch A.MENU and then touch FUNCTION to display the function names.

The function names are displayed and oper able ones are highlighted.

- When **A.MENU** is not displayed, you can display it by touching the screen.
- You can also display MENU by clicking the iovstick.
- To go to the next group of function names, touch **NEXT**.
- To return to the previous group of function names, touch **PREV**.
- To return to the previous display, touch **BACK**.
- To return to the playback display, touch ESC.



If you do not operate the function within about 30 seconds, the display is automatically returned to the playback display.

Repeating play

There are three repeat play ranges for the multi CD player: **MULTI-CD REPEAT** (multi CD player repeat), **TRACK REPEAT** (one track re peat) and **DISC REPEAT** (disc repeat).

1 Touch A.MENU and FUNCTION and then touch REPEAT.

2 Touch **◄►** to select the repeat range.

Touch **◄►** repeatedly until the desired repeat range appears in the display.

- MULTI-CD REPEAT Repeat all discs in the multi CD player
- TRACK REPEAT Repeat just the current track
- **DISC REPEAT** Repeat the current disc
- You can also select the repeat range by moving the joystick left or right.



- If you select other discs during repeat play, the repeat play range changes to
 MULTI-CD REPEAT
- If you perform track search or fast forward/re verse during TRACK REPEAT, the repeat play range changes to DISC REPEAT.

Playing tracks in a random order

Random play lets you play back tracks in a random order within the repeat range.

MULTI-CD REPEAT and DISC REPEAT.

1 Select the repeat range.

Refer to Repeating play on this page.

2 Touch A.MENU and FUNCTION and then touch RANDOM.

3 Touch ▲ to turn random play on.

Tracks will play in a random order within the previously selected **MULTI-CD REPEAT** or **DISC REPEAT** ranges.

To turn random play off, touch ▼.

Scanning CDs and tracks

While you are using **DISC REPEAT**, the begin ning of each track on the selected disc plays for about 10 seconds. When you are using **MULTI-CD REPEAT**, the beginning of the first track of each disc is played for about 10 sec onds

Select the repeat range.

Refer to Repeating play on the previous page.

- Touch A.MENU and FUNCTION and then touch SCAN.
- Touch ▲ to turn scan play on.

The first 10 seconds of each track of the cur rent disc (or the first track of each disc) is played.

When you find the desired track (or disc) touch ▼ to turn scan play off.



After track or disc scanning is finished, normal playback of the tracks will begin again.

Pausing CD playback

Pause lets you temporarily stop disc playback.

- Touch A.MENU and FUNCTION and then touch PAUSE.
- 2 Touch ▲ to turn pause on.

Play of the current track pauses.

To turn pause off, touch ▼.

Using ITS playlists

ITS (instant track selection) lets you make a playlist of favorite tracks from those in the multi CD player magazine. After you have added your favorite tracks to the playlist you can turn on ITS play and play just those selec tions

Creating a playlist with ITS programming

You can use ITS to enter and playback up to 99 tracks per disc, up to 100 discs (with the disc title). (With multi CD players sold before the CDX P1250 and CDX P650, up to 24 tracks can be stored in the playlist.)

- Play a CD that you want to program. Touch \blacktriangle or \blacktriangledown to select a CD.
- Touch A.MENU and FUNCTION and then touch NEXT.
- Touch ITS MEMORY.
- Touch ◀ or ▶ to select a desired track.
- Touch ▲ to store the currently playing track in the playlist.

ITS MEMORY is displayed briefly and the cur rently playing selection is added to your play list. The display then shows track number again.

6 Touch ESC to return to the playback display.



After data for 100 discs has been stored in mem ory, data for a new disc will overwrite the oldest one.

Multi-CD Player

Playback from your ITS playlist

ITS play lets you listen to the tracks that you have entered into your ITS playlist. When you turn on ITS play, tracks from your ITS playlist in the multi CD player will begin to play.

1 Select the repeat range.

Refer to Repeating play on page 54.

2 Touch A.MENU and FUNCTION and then touch NEXT.

- 3 Touch ITS PLAY.
- 4 Touch ▲ to turn ITS play on.

Playback begins of those tracks from your playlist within the previously selected

MULTI-CD REPEAT or DISC REPEAT ranges.

- If no tracks in the current range are pro grammed for ITS play then ITS EMPTY is dis played.
- To turn ITS play off, touch ▼.

Erasing a track from your ITS playlist

When you want to delete a track from your ITS playlist, you can if ITS play is on. If ITS play is already on, skip to step 2.

- 1 Play a CD you want to delete a track from your ITS playlist, and turn ITS play on. Refer to *Playback from your ITS playlist* on this page.
- 2 Touch A.MENU and FUNCTION and then touch NEXT.
- 3 Touch ITS MEMORY.

5 Touch ▼ to erase a track from your ITS playlist.

The currently playing selection is erased from your ITS playlist and playback of the next track from your ITS playlist begins.

- If there are no tracks from your playlist in the current range, ITS EMPTY is displayed and nor mal play resumes.
- 6 Touch ESC to return to the playback display.

Erasing a CD from your ITS playlist

When you want to delete all tracks of a CD from your ITS playlist, you can if ITS play is off.

- 1 Play a CD that you want to delete.
 Touch ▲ or ▼ to select a CD.
- 2 Touch A.MENU and FUNCTION and then
- touch NEXT.
- 3 Touch ITS MEMORY.
- 4 Touch ▼ to erase all tracks on the currently playing CD from your ITS playlist.

All tracks on the currently playing CD are erased from your playlist and **ITS CLEAR** is dis played.

Using disc title functions

You can input CD titles and display the title. Then you can easily search for and select a de sired disc for play.

Entering disc titles

Disc title input lets you input CD titles up to 20 letters long and up to 100 disc titles (with ITS playlist) into the multi CD player.

- With multi CD players sold before the CDX P1250 and CDX P650, up to 10 letters long can be input into multi CD player.
- When playing a CD TEXT disc on a CD TEXT compatible multi CD player, you cannot switch to TITLE EDIT. The disc title will have already been recorded on a CD TEXT disc.

1 Play a CD that you want to enter the title.

Touch ▲ or ▼ to select a CD.

2 Touch A.MENU and FUNCTION and then touch NEXT.

3 Touch TITLE EDIT.

4 Touch ABC to select the desired character type.

Touch **ABC** repeatedly to switch between the following character type:

Alphabet (upper case), numbers and symbols —Alphabet (lower case)

- You can select to input numbers and symbols by touching **012**.
- You can also switch character types by click ing the joystick.

5 Touch **△** or **▼** to select a letter of the alphabet.

Each time you touch ▲ will display a letter of the alphabet in **A B C ... X Y Z**, numbers and symbols in **1 2 3 ...** |} order. Each time you touch ▼ will display a letter in the reverse order, such as **Z Y X ... C B A** order.



6 Touch ▶ to move the cursor to the next character position.

When the desired letter is displayed, touch ► to move the cursor to the next position and then select the next letter. Touch ◀ to move backwards in the display.

7 Touch OK to store the entered title in memory.

 You can also store the entered title in memory by moving the cursor to right until it disappears.

8 Touch ESC to return to the playback display.

Notes

- Titles remain in memory, even after the disc has been removed from the magazine, and are recalled when the disc is reinserted.
- Titles are stored in this unit and multi CD player separately.
- After data for 100 discs has been stored in memory, data for a new disc will overwrite the oldest one.

Displaying disc titles

You can display the title of any disc that has had a disc title entered.

Touch DISP.

Touch **DISP** repeatedly to switch between the following settings:

DISC LIST (disc list)—**DiscTitle** (disc title) When you select **DiscTitle**, the title of the cur rently playing disc is shown in the display.

■ If no title has been entered for the currently playing disc, **NO TITLE** is displayed. ■

Multi-CD Player

Using CD TEXT functions

You can use these functions only with a CD TEXT compatible multi CD player.

Some discs have certain information encoded on the disc during manufacture. These discs may contain such information as the CD title, track title, artist's name and playback time and are called CD TEXT discs. Only these spe cially encoded CD TEXT discs support the functions listed below.

Displaying titles on CD TEXT discs

Touch DISP.

Touch **DISP** repeatedly to switch between the following settings:

DISC LIST (disc list)—DiscTitle (disc title)
—DiscArtist (disc artist name)—TrackTitle
(track title)—TrackArtist (track artist name)

• If specific information has not been recorded on a CD TEXT disc, **NO XXXX** will be displayed (e.g., **NO ARTIST**).

Scrolling titles in the display

This unit can display the first 20 letters only of **DiscTitle**, **DiscArtist**, **TrackTitle** and **TrackArtist**. When the recorded information is longer than 20 letters, you can scroll the text to the left so that the rest of the title can be seen.

• Keep touching DISP until the title begins to scroll to the left.

The rest of the title will appear in the display.

Selecting tracks from the track title list

Track title list lets you see the list of track titles on a CD TEXT disc and select one of them to playback.

1 Touch A.MENU and FUNCTION and then touch TRACK LIST.

- 2 Touch PREV or NEXT to switch between the lists of titles.
- 3 Touch your favorite track title.

That selection will begin to play.

Using compression and bass emphasis

You can use these functions only with a multi CD player that supports them.

Using COMP (compression) and DBE (dy namic bass emphasis) functions let you adjust the sound playback quality of the multi CD player. Each of the functions have a two step adjustment. The COMP function balances the output of louder and softer sounds at higher volumes. DBE boosts bass levels to give play back a fuller sound. Listen to each of the effects as you select through them and use the one that best enhances the playback of the track or CD that you are listening to.

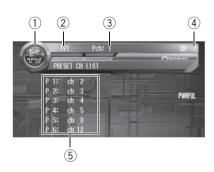
- 1 Touch A.MENU and FUNCTION and then touch COMPRESSION.
- If the multi CD player does not support COMP/DBE, NO COMPRESSION is displayed when you attempt to select it.
- 2 Touch ▲▼ to select your favorite setting.

Touch ▲▼ repeatedly to switch between the following settings:

OFF—COMP1—COMP2—OFF—DBE1—DBE2

■ You can also select the desired setting by moving the joystick up or down. ■

Watching the TV tuner



You can use this unit to control a TV tuner, which is sold separately.

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

1 Source icon

Shows what the source has been selected.

② Band indicator

Shows which band the TV tuner is tuned to.

③ Preset number indicator

Shows what preset has been selected.

(4) Channel indicator

Shows which channel the TV tuner is tuned.

⑤ Preset list display

Shows the preset list.

1 Touch the source icon and then touch TV to select the TV.

• When the source icon is not displayed, you can display it by touching the screen.

2 Touch the screen to display the touch panel keys.

3 Touch BAND to select a band.

Touch **BAND** repeatedly until the desired band is displayed. **TV1** or **TV2**.

4 To perform manual tuning, touch ◀ or ► shortly.

The channels move up or down step by step.

You can also perform manual tuning by moving the joystick left or right.

The tuner will scan the channels until a broad cast strong enough for good reception is found.

- You can cancel seek tuning by touching either
- ✓ or

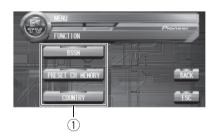
 ✓ shortly.
- If you keep touching ◀ or ▶ you can skip broadcasting channels. Seek tuning starts as soon as you release the keys.
- You can also perform seek tuning by holding the joystick left or right.



If you do not use the touch panel keys for 30 sec onds, they will be hidden automatically.

TV tuner

Introduction of advanced TV tuner operation



① Function display

Shows the function names.

• Touch A.MENU and then touch FUNCTION to display the function names.

The function names are displayed and oper able ones are highlighted.

- When **A.MENU** is not displayed, you can display it by touching the screen.
- You can also display MENU by clicking the iovstick.
- To return to the previous display, touch **BACK**.
- To return to the TV picture, touch ESC.



If you do not operate the function within about 30 seconds, the display is automatically returned to the TV picture. •

Storing and recalling broadcast stations

If you touch any of the preset tuning keys **P 1—P12** you can easily store up to 12 broad cast stations for later recall with the touch of a key.

When you find a station that you want to store in memory keep touching a preset tuning key P 1—P12 until the preset number stops flashing.

The number you have touched will flash in the preset number indicator and then remain lit. The selected station has been stored in mem ory.

The next time you touch the same preset tuning key **P 1—P12** the station is recalled from memory.

- To switch between P 1—P 6 and P 7—P12, touch PREV or NEXT.
- When the touch panel keys are not displayed, you can display them by touching the screen.
- When **P 1—P 6** and **P 7—P12** are not dis played, you can display them by touching **DISP**.



- Up to 24 stations, 12 for each of two TV bands can be stored in memory.
- You can also perform the same operations using PRESET CH MEMORY. To display PRESET CH MEMORY, touch A.MENU and then touch FUNCTION.

Storing the strongest broadcast stations sequentially

- 1 Touch A.MENU and FUNCTION and then touch BSSM.
- 2 Touch ▲ to turn BSSM on.

BSSM begins to flash. While **BSSM** is flashing the 12 strongest broadcast stations will be stored in order from the lowest channel up. When finished, **BSSM** stops flashing.

To cancel the storage process, touch ▼.

Section



Storing broadcast stations with BSSM may replace broadcast stations you have saved using P 1—P12.

Selecting the country group

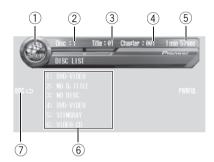
- This function can be operated only when connecting a TV tuner (e.g. GEX P6450TVP) featuring the country setting.
- 1 Touch A.MENU and FUNCTION and then touch COUNTRY.
- 2 Touch ◀ or ▶ to select the country group.

Touch ◀ or ▶ until the desired country group appears in the display.

COUNTRY 1 (CCIR channel)—COUNTRY 2 (IN channel)—COUNTRY 3 (CHN channel)—COUNTRY 4 (U.K. channel)—COUNTRY 5 (OIRT channel)—COUNTRY 6 (AUSTRALIA channel)

DVD Player

Playing a disc



You can use this unit to control a DVD player or multi DVD player, which is sold separately. For details concerning operation, refer to the DVD player's or multi DVD player's operation manuals. This section provides information on DVD operations with this unit which differs from that described in the DVD player's or multi DVD player's operation manual.

- Switch the remote control selection to sui table setting to operate DVD players. (Refer to page 79.)
- Switch the remote control operation mode to **DVD** to operate the DVD player by using remote control. (Refer to page 14.)

1 Source icon

Shows what the source has been selected.

2 Disc number indicator

Shows the disc currently playing when using a multi DVD player.

3 Title number indicator

Shows the title currently playing during DVD video playback.

4 Chapter/track number indicator

Shows the chapter/track currently playing.

⑤ Play time indicator

Shows the elapsed playing time of the cur rent chapter/track.

6 Disc list display

Shows the list of the disc type or the disc title when using a multi DVD player.

(7) Repeat indicator

Shows the selected repeat range.

1 Touch the source icon and then touch S-DVD to select the DVD player.

• When the source icon is not displayed, you can display it by touching the screen.

2 Touch the screen to display the touch panel keys.

3 To skip back or forward to another chapter/track, touch ◀ or ▶ shortly.

You can also skip back or forward to another chapter/track by moving the joystick left or right. When using the joystick on the remote control, switch the remote control operation mode to AVH. (Refer to page 14.)

4 To perform fast forward or reverse, keep touching ◀ or ▶ for about one second and release.

 You can also perform fast reverse/fast forward by holding the joystick left or right.
 When using the joystick on the remote control, switch the remote control operation mode to
 AVH. (Refer to page 14.)



If you do not use the touch panel keys for 30 sec onds, they will be hidden automatically.

DVD Player

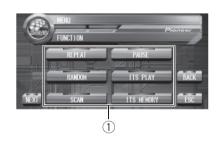
Turning the DVD player on or off

- Only the remote control can operate this function. To perform this function, switch the remote control operation mode to **DVD**. (Refer to page 14.)
- Press REAR.S to turn the DVD player on.
- To turn the DVD player off, press REAR.S again.

Selecting a disc

- Only when a multi DVD player is connected to this unit, you can operate this function.
- Touch any of 1—6 to select the desired disc.
- When **1—6** are not displayed, you can display them by touching DISP.
- You can also sequentially select a disc by using **▲**/▼.
- You can also skip back or forward to another disc by moving the joystick up or down. When using the joystick on the remote control, switch the remote control operation mode to AVH. (Refer to page 14.)
- You can also select a disc by pressing BACK or ENTERTAINMENT on the remote control when the remote control operation mode is switched to DVD.

Introduction of advanced **DVD** player operation



- Function display Shows the function names.
- Touch A.MENU and then touch FUNCTION to display the function names.

The function names are displayed and oper able ones are highlighted.

- When **A.MENU** is not displayed, you can dis play it by touching the screen.
- You can also display MENU by clicking the joystick.
- To return to the previous display, touch BACK.
- To return to the playback display, touch **ESC**.



If you do not operate the function within about 30 seconds, the display is automatically returned to the playback display. 🔳

Repeating play

- During PBC playback of Video CDs, this function cannot be operated.
- Touch A.MENU and FUNCTION and then touch REPEAT.

DVD Player

2 Touch **◄►** to select the repeat range. During DVD video playback

- DISC REPEAT Repeat the current disc
- CHAPTER REPEAT Repeat just the current chapter
- TITLE REPEAT Repeat just the current title

During Video CD or CD playback

- **DISC REPEAT** Repeat the current disc
- TRACK REPEAT Repeat just the current track



- If you select other discs during repeat play, the repeat play range changes to DISC REPEAT.
- If you perform track search or fast forward/re verse during TRACK REPEAT, the repeat play range changes to DISC REPEAT.

Pausing disc playback

- 1 Touch A.MENU and FUNCTION and then touch PAUSE.
- 2 Touch ▲ to turn pause on.
- To turn pause off, touch ▼.

Playing tracks in a random order

- You can operate this function only during CD playback.
- 1 Touch A.MENU and FUNCTION and then touch RANDOM.
- 2 Touch ▲ to turn random play on.

Tracks will play in a random order.

To turn random play off, touch ▼.

Scanning tracks of a CD

- You can operate this function only during CD playback.
- 1 Touch A.MENU and FUNCTION and then touch SCAN.
- 2 Touch ▲ to turn scan play on.

The first 10 seconds of each track is played.

3 When you find the desired track touch ▼ to turn scan play off. ■

Using ITS playlists

- Only when a multi DVD player is connected to this unit, you can operate these func tions.
- This function differs slightly from ITS play back with a multi CD player. With multi DVD player, ITS playback applies only to the CD playing. For details, refer to *Using ITS* playlists on page 55.

Using disc title functions

You can input CD titles and display the title. Then you can easily search for and select a de sired disc for play.

Entering disc titles

Disc title input lets you input CD titles up to 10 letters long into the multi DVD player. For de tails concerning operation, refer to *Entering disc titles* on page 57.

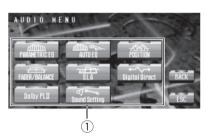
 Only when a multi DVD player is connected to this unit, you can operate this function.

Introduction of audio adjustments

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

- 1 Using the position selector
- 2 Selecting a cut off frequency
- 3 Auto TA and EQ (auto time alignment and auto equalizing)

Operating the audio menu



1 Audio display

Shows the audio function names.

• Touch A.MENU and then touch AUDIO to display the audio function names.

The audio function names are displayed and operable ones are highlighted.

- When **A.MENU** is not displayed, you can display it by touching the screen.
- You can also display **MENU** by clicking the joystick.
- When playing discs recorded with more than 96 kHz sampling frequency, you cannot use audio functions. Also, equalizer curve setting,

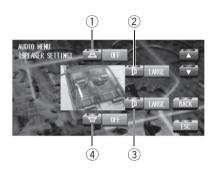
POSITION, **AUTO EQ** and **AUTO TA** will be can celled.

- When playing discs recorded with more than 96 kHz sampling frequency, audio is output from front speaker only.
- When selecting the FM tuner as the source, you cannot switch to **SLA**.
- To return to the previous display, touch BACK.
- To return to the display of each source, touch **ESC**.



If you do not operate the audio function within about 30 seconds, the display is automatically re turned to the source display.

About speaker settings



- Center speaker
- 2 Front speaker
- 3 Rear speaker
- 4 Subwoofer



When selecting **SP LEVEL**, **Test Tone** or **Time Alignment**, L/R speaker adjustments for the front and rear can be adjusted separately.

Using the equalizer

The equalizer lets you adjust the equalization to match car interior acoustic characteristics as desired.

Recalling equalizer curves

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

Display	Equalizer curve
SUPER BASS (S BASS)	Super bass
POWERFUL (PWRFUL)	Powerful
NATURAL	Natural
VOCAL	Vocal
FLAT	Flat
CUSTOM1	Custom 1
CUSTOM2	Custom 2
сиѕтомз	Custom 3
CUSTOM4	Custom 4

- CUSTOM1, CUSTOM2, CUSTOM3 and CUSTOM4 are adjusted equalizer curves.
- When FLAT is selected no supplement or correction is made to the sound. This is useful to check the effect of the equalizer curves by switching alternatively between FLAT and a set equalizer curve.

Press EQ to select the equalizer.

Press **EQ** repeatedly to switch between the following equalizers:

SUPER BASS (S BASS)—
POWERFUL (PWRFUL)—NATURAL—VOCAL
—FLAT—CUSTOM1—CUSTOM2—
CUSTOM3—CUSTOM4

Adjusting 3-band parametric equalizer

For custom equalizer curves (**CUSTOM1**— **CUSTOM4**), 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 cre ated for each source.
- CUSTOM2, CUSTOM3 and CUSTOM4 curves can be created common to all sources.

 The center speaker largely determines the sound image and getting the balance right isn't easy. We recommend reproducing a 2 ch. audio (a CD for example) and getting the balance right among the speakers ex cept for the center, and then reproducing a 5.1 ch. audio (Dolby Digital or DTS) and ad justing the center speaker output to the balance you have already got among the other speakers.

1 Touch A.MENU and AUDIO and then touch PARAMETRIC EQ.

2 Touch C.EQ to select the equalizer.

Touch **C.EQ** repeatedly to switch between the following equalizers:

SUPER BASS (S BASS)—
POWERFUL (PWRFUL)—NATURAL—VOCAL
—FLAT—CUSTOM1—CUSTOM2—
CUSTOM3—CUSTOM4

3 Touch POS to select the speaker to be adjusted.

Each time you touch **POS** selects speakers in the following order:

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

 You cannot select speakers whose size is set OFF.

4 Touch BAND to select the equalizer band to be adjusted.

Each time you touch **BAND** selects equalizer bands in the following order:

LOW (low)—MID (mid)—HIGH (high)

5 Touch **◄** or **▶** to select the center frequency of selected band.

Touch \triangleleft or \triangleright until the desired frequency appears in the display.

• You can select a center frequency from among 20 frequencies for each band. You can change the center frequency in 1/3 octave steps, but you cannot select frequencies that have inter vals shorter than 1 octave among the center frequencies of the three bands.

6 Touch ▲ or ▼ to adjust the equalizer level.

Each time you touch \triangle or ∇ increases or de creases the equalizer level. +12dB - -12dB is displayed as the level is increased or de creased.

7 Touch Q.Fac to select the desired Q factor.

Each time you touch **Q.Fac** switches between the following Q factor:

WIDE (wide)—**NARROW** (narrow)

 You can adjust parameters for each band of the other speakers in the same way.

Using the auto-equalizer

The auto equalizer is the equalizer curve cre ated by auto TA and EQ (refer to *Auto TA* and EQ (auto time alignment and auto equalizing) on page 73).

You can turn the auto equalizer on or off.

1 Touch A.MENU and AUDIO and then touch AUTO EO.

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

2 Touch ▲ to turn the auto-equalizer on.

To turn auto equalizer off, touch ▼.

Using the position selector

One way to assure a more natural sound is to accurately position the stereo image, putting you right in the center of the sound field. The position selector function lets you automatically adjust the speaker output levels and in serts a delay time to match the number and position of occupied seats.

1 Touch A.MENU and AUDIO and then touch POSITION.

2 Touch **◄/▶/▲/▼** to select a listening position.

Touch one of these, $\blacktriangleleft/\blacktriangleright/\blacktriangle/\blacktriangledown$, to select a listening position as listed in the table.

Key	Display	Position
◄	FL	Front seat left
>	FR	Front seat right
A	FRONT	Front seats
▼	ALL	All seats

• To cancel the selected listening position, touch the same key again.



When you make adjustments for listening position, the speakers are automatically set for appropriate output levels. You can tailor them if you want as discussed under the heading of Adjust ing the speaker output levels using a test tone or Adjusting the speaker output levels.

Using balance adjustment

You can select a fader/balance setting that provides an ideal listening environment in all occupied seats.

1 Touch A.MENU and AUDIO and then touch FADER/BALANCE.

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

Each time you touch \triangle or ∇ moves the front/rear speaker balance towards the front or the rear.

FAD F:25 – **FAD R:25** is displayed as the front/rear speaker balance moves from front to rear.

■ **FAD FR: 0** is the proper setting when only two speakers are used.

3 Touch or to adjust left/right speaker balance.

Each time you touch ◀ or ► moves the left/ right speaker balance towards the left or the right.

BAL L:25 – BAL R:25 is displayed as the left/ right speaker balance moves from left to right. ■

Adjusting source levels

SLA (source level adjustment) lets you adjust the volume level of each source to prevent ra dical changes in volume when switching be tween sources.

- Settings are based on the FM tuner volume level, which remains unchanged.
- 1 Compare the FM tuner volume level with the level of the source you wish to adjust.
- 2 Touch A.MENU and AUDIO and then touch SLA.
- 3 Touch ▲ or ▼ to adjust the source volume.

Each time you touch **▲** or **▼** increases or decreases the source volume.

+8dB – **-8dB** is displayed as the source vo lume is increased or decreased.

Notes

- The AM tuner volume level can also be ad justed with source level adjustments.
- Video CD, CD and MP3 are set to the same source level adjustment volume automatically.
- DVD and the optional DVD player are set to the same source level adjustment volume automatically.
- External unit 1 and external unit 2 are set to the same source level adjustment volume automatically.
- AUX (auxiliary input) and AV (video input) are set to the same source level adjustment vo lume automatically.

Using the direct control

You can override audio settings to check for ef fectiveness of your audio settings.

- All audio functions are locked out during the direct control is on except VOLUME.
- 1 Touch A.MENU and AUDIO and then touch Digital Direct.
- 2 Touch ▲ to turn the direct control on.
- To turn direct control off, touch ▼.

Using the Dolby Pro Logic ${ m II}$

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

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

1 Touch A.MENU and AUDIO and then touch Dolby PLII.

2 Touch any of the following touch panel keys to select the desired mode.

- MOVIE The Movie mode suitable for movie playback
- MUSIC The Music mode suitable for music playback
- **MATRIX** The Matrix mode in the case when the FM radio reception is weak
- OFF Turn Dolby Pro Logic II off
- MUSIC ADJUST Adjust the Music mode
- You can operate MUSIC ADJUST only when
 MUSIC has been selected.

Adjusting the Music mode

You can adjust the Music mode as following three controls.

- Panorama (PANORAMA) extends the front stereo image to include the surround speakers for an exciting "wraparound" ef fect.
- Dimension (**DIMENSION**) allows you to gradually adjust the sound field either to wards the front or the rear.
- Center Width (CENTER WIDTH) allows center channel sounds to be positioned be tween the center speaker and the left/right speakers. It improves the left center right stage presentation for both the driver and the front passenger.
- 1 Touch A.MENU and AUDIO and then touch Dolby PLII.

2 Touch MUSIC and then touch MUSIC ADJUST.

 You can operate MUSIC ADJUST only when MUSIC has been selected.

3 Touch PANORAMA and then touch ► to turn the Panorama control on.

- To turn the Panorama control off, touch ◀.
- 4 Touch DIMENSION and then touch ◀ or
 ▶ to adjust front/surround speaker balance.

Each time you touch ◀ or ▶ moves the sound towards the front or the surrounds.

+3 – **-3** is displayed as the front/surround speaker balance moves from front to sur rounds.

5 Touch CENTER WIDTH and then touch ◀ or ▶ to adjust the center image.

Each time you touch ◀ or ▶ gradually spreads the center channel sound into the front left and right speakers over a range 0–7.

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. ■

Setting the speaker setting

You need to make with/without (or yes/no) and size (bass reproducing capacity) selection/ad justments depending on the installed speak ers. The size needs to be set to **LARGE** (large) if the speaker is capable of reproducing sounds of about 100 Hz or below. Otherwise select **SMALL** (small).

- Low frequency range is not output if the subwoofer is set to OFF and the front and rear speakers set to SMALL or OFF.
- It is imperative that non installed speakers be set to **OFF**.
- Set the front or rear speaker to LARGE if the speaker is capable of reproducing bass content, or if no subwoofer is installed.
- 1 Touch A.MENU and AUDIO and then touch Sound Setting.

- 2 Touch SP SET.
- 3 Touch the speaker to be adjusted.
- 4 Touch ▲ or ▼ to select the correct size for the selected speaker.

Each time you touch \blacktriangle or \blacktriangledown selects the size in the following order:

OFF (off)—SMALL (small)—LARGE (large)

- You cannot select **OFF**, when the front speak ers have been selected.
- You can turn **ON** or **OFF**, when the subwoofer has been selected.

Correcting the subwoofer's phase

If trying to boost the bass output of the sub woofer doesn't do much or rather makes you feel that the bass gets more murky, this may indicate that the subwoofer's output and bass content you hear over other speakers cancel each other out. To remove this problem, try changing the phase setting for the subwoofer.

- 1 Touch A.MENU and AUDIO and then touch Sound Setting.
- 2 Touch SP SET.
- 3 Touch the subwoofer.
- 4 Touch ▲ to turn subwoofer output on.
- To turn subwoofer output off, touch ▼.
- 5 Touch ◀ or ▶ to select the phase of subwoofer output.

Touch ► to select normal phase and **NORMAL** appears in the display. Touch ◀ to select reverse phase and **REVERSE** appears in the display. ■

Selecting a cut-off frequency

You can select a frequency, under which sounds are reproduced through the subwoo fer. If the installed speakers include one whose size has been set to **SMALL**, you can select a frequency, under which sounds are reproduced through a **LARGE** speaker or subwoo fer.

- 1 Touch A.MENU and AUDIO and then touch Sound Setting.
- 2 Touch Cross Over.
- 3 Touch the speaker to be adjusted.
- You cannot select speakers whose size is set OFF.

4 Touch ▲ or ▼ to select cut-off frequency.

Each time you touch **△** or **▼** selects cut off fre quencies in the following order:

63—80—100—125—160—200 (Hz)



Selecting cut off frequencies are to set cut off fre quencies of the subwoofer's L.P.F. (low pass filter) and that of the **SMALL** speaker H.P.F. (high pass filter). The cut off frequency setting has no effect if the subwoofer is set to **OFF** and other speakers are set to **LARGE** or **OFF**.

Adjusting the speaker output levels

You can readjust the speaker output levels using a test tone while listening to music.

1 Touch A.MENU and AUDIO and then touch Sound Setting.

- 2 Touch SP LEVEL.
- 3 Touch the speaker to be adjusted.
- You cannot select speakers whose size is set
 OFF

4 Touch ▲ or ▼ to adjust the speaker output level.

Each time you touch ▲ or ▼ increases or de creases the speaker output level. +10 – -10 is displayed as the level is increased or de creased.



To adjust the speaker output levels at this mode is the same as making the speaker output levels at **Test Tone**. Both provide the same results.

Adjusting the speaker output levels using a test tone

A convenient test tone allows you to easily get the overall balance right among the speakers.

1 Touch A.MENU and AUDIO and then touch Sound Setting.

2 Touch Test Tone.

The test tone is output. It rotates from speaker to speaker in the following sequence at inter vals of about two seconds. The current set tings for the speaker over which you hear the test tone are shown in the display.

Front speaker light—Rear speaker right—Rear

Front speaker lett—Center speaker—Front speaker right—Rear speaker right—Rear speaker left—Subwoofer

Check each speaker output level. If no adjust ments are needed, perform step 4 to stop the test tone.

• The settings do not appear for speakers whose size is set **OFF**.

3 Touch ▲ or ▼ to adjust the speaker output level.

Each time you touch ▲ or ▼ increases or de creases the speaker output level. +10 - -10 is displayed as the level is increased or de creased.

• The test tone rotates to the next speaker after about two seconds from the last operation.

4 Touch BACK to stop the test tone output.



- If needed, select speakers and adjust their 'ab solute' output levels. (Refer to Adjusting the speaker output levels on the previous page.)
- To adjust the speaker output levels at this mode is the same as making the speaker out put levels at SP LEVEL. Both provide the same results.

Using the time alignment

The time alignment lets you adjust the distance between each speaker and the listening position.

- 1 Touch A.MENU and AUDIO and then touch Sound Setting.
- 2 Touch Time Alignment.
- 3 Touch any of the following touch panel keys to select the time alignment.
 - **INITIAL** Initial time alignment (factory set ting)
 - AUTO TA Time alignment created by auto TA and EQ. (Refer to Auto TA and EQ (auto time alignment and auto equalizing) on the next page.)
 - **CUSTOM** Adjusted time alignment that you can create for yourself

- OFF Turn the time alignment off
- ADJUSTMENT Adjust the time alignment as desired
- You cannot select AUTO TA if auto TA and EQ has not been carried out.
- You cannot select ADJUSTMENT when neither FL nor FR is selected in POSITION.

Adjusting the time alignment

You can adjust the distance between each speaker and the selected position.

- An adjusted time alignment is memorized in CUSTOM.
- 1 Touch A.MENU and AUDIO and then touch Sound Setting.
- 2 Touch Time Alignment and then touch ADJUSTMENT.
- You cannot select **ADJUSTMENT** when neither **FL** nor **FR** is selected in **POSITION**.
- 3 Touch the speaker to be adjusted.
- You cannot select speakers whose size is set OFF.

4 Touch ▲ or ▼ to adjust the distance between the selected speaker and the listening position.

Each time you touch ▲ or ▼ increases or de creases the distance. **0.0cm** – **500.0cm** is dis played as the distance is increased or decreased.

Audio Adjustments

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

The auto time alignment automatically adjusts the distance between each speaker and the listening position.

The auto equalizer automatically measures the car interior acoustic characteristics, and then creates the auto equalizer curve based on that information.



WARNING

To prevent accidents, never carry out auto TA and EQ while driving. When this function measures the car interior acoustic characteristics to create an auto equalizer curve, a loud measurement tone (noise) may be output from the speakers.



CAUTION

- Carrying out auto TA and EQ under the follow ing conditions may damage the speakers. Be sure to check the conditions thoroughly be fore carrying out auto TA and EQ.
 - When speakers are incorrectly connected. (e.g., When a rear speaker is connected to a subwoofer output.)
 - When a speaker is connected to a power amp delivering output higher than the speaker's maximum input power capabil ity.
- If the microphone is placed in an unsuitable position the measurement tone may become loud and measurement may take a long time, resulting in a drain on battery power. Be sure to place the microphone in the specified loca tion.

Before operating the auto TA and EQ function

- Carry out auto TA and EQ in as quiet a
 place as possible, with the car engine and
 air conditioning switched off. Also cut
 power to car phones or portable telephones
 in the car, or remove them from the car be
 fore carrying out auto TA and EQ. Sounds
 other than the measurement tone (sur
 rounding sounds, engine sound, tele
 phones ringing etc.) may prevent correct
 measurement of the car interior acoustic
 characteristics.
- Be sure to carry out auto TA and EQ using the supplied microphone. Using another microphone may prevent measurement, or result in incorrect measurement of the car interior acoustic characteristics.
- When front speaker is not connected, auto TA and EQ cannot be carried out.
- When this unit is connected to a power amp with input level control, auto TA and EQ may not be possible if you lower power amp input level. Set the power amp's input level to the standard position.
- When this unit is connected to a power amp with an LPF, turn off the LPF on the power amp before carrying out auto TA and EQ. In addition, the cut off frequency for built in LPF of an active subwoofer should be set to the highest frequency.
- The time alignment value calculated by auto TA and EQ may differ from the actual distance in the following circumstances. However, the distance has been calculated by computer to be the optimum delay to give accurate results for the circum stances, so please continue to use this value.
 - When the reflected sound within a vehicle is strong and delays occur.
 - When delays occur for low sounds due to the influence of the LPF on active subwoofers or external amps.

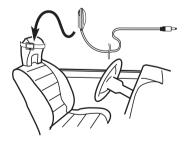
Audio Adjustments

- Auto TA and EQ changes the audio settings as below:
 - The fader/balance settings return to the center position. (Refer to page 68.)
 - The equalizer curve switches to FLAT. (Refer to page 66.)
 - It will be adjusted automatically to high pass filter setting for front, center and rear speaker.
- If you carry out auto TA and EQ when a pre vious setting of this already exists, the set ting will be replaced.

Carrying out auto TA and EQ

- 1 Stop the car in a place that is as quiet as possible, close all doors, windows and the sun roof, and then turn the engine off. If the engine is left running, engine noise may prevent correct auto TA and EQ.
- 2 Fix the supplied microphone in the center of the headrest of the driver's seat, facing forward, using the belt (sold separately).

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 carry out auto TA and EQ.



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

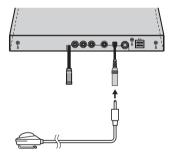
conditioner or heater may prevent correct auto TA and EO.

• Press **SOURCE** 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 68

- If no position is selected before you start auto TA and EQ. FL is selected automatically.
- 5 Press SOURCE and hold until the unit turns off.
- 6 Press and hold EQ to enter the auto TA and EQ measurement mode.
- 7 Plug the microphone into the microphone input jack on the hide-away unit.



- 8 Touch START to start the auto TA and EQ.
- 9 Get out of the car and close the door within 10 seconds when the 10-second count-down starts.

The measurement tone (noise) is output 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, touch STOP.

Audio Adjustments

• To cancel auto TA and EQ part way through, touch **BACK** or **ESC**.

10 When auto TA and EQ is completed, Complete is displayed.

When correct measurement of car interior acoustic characteristics is not possible, an error message is displayed. (Refer to *Under standing auto TA and EQ error messages* on page 91.)

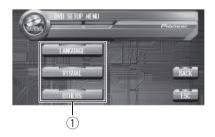
11 Touch ESC to cancel the auto TA and EQ mode.

12 Store the microphone carefully in the glove compartment.

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

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.

 When watching a DVD/Video CD on the rear display independently, you cannot op erate this menu.

1 DVD setup menu display

Shows the DVD setup menu names.

1 Touch ■.

SETUP will be displayed instead of **MENU**.

2 Touch SETUP when the disc is stopped.

The DVD setup menu is displayed.

- When **SETUP** is not displayed, you can display it by touching the screen.
- You can also display DVD SETUP MENU by pressing MENU on the remote control when the disc is stopped.

3 Touch any of LANGUAGE, VISUAL or OTHERS to display the DVD setup function names.

The DVD setup function names in selected menu are displayed.

- To go to the next group of function names, touch **NEXT**.
- To return to the previous group of function names, touch **PREV**.
- To return to the previous display, touch **BACK**.
- To return to the playback display, touch **ESC**.



If you do not operate the DVD setup function within about 30 seconds, the display is automatically returned to the playback display.

Setting the subtitle language

You can set a desired subtitle language. If the selected subtitle language is recorded on the DVD, subtitles are displayed in that language.

1 Touch SETUP and LANGUAGE and then touch SUB TITLE LANGUAGE.

A subtitle language menu is displayed and the currently set language is highlighted.

- To switch to the second language select menu, touch **NEXT**.
- To return to the first language select menu, touch **PREV**.

2 Touch the desired language.

A subtitle language is set.

■ If you have selected **OTHERS**, refer to *When* you select **OTHERS** on the next page.



- If the selected language is not recorded on the disc, the language specified on the disc is displayed.
- You can also switch the subtitle language by touching SUB.T during playback. (Refer to Changing the subtitle language during play back (Multi subtitle) on page 38.)
- Even if you use SUB.T to switch the subtitle language, this does not affect the settings here.

Setting up the DVD player

When you select OTHERS

When you select **OTHERS**, a language code input display is shown. Refer to *Language code chart for DVD* on page 96 to input the four digit code of the desired language.

1 Touch 0—9 to input the language code.

- To cancel the input numbers, touch **C**.
- You can also input the desired number by using the joystick and **0-9**.

2 While the input number is displayed, touch ENTER.

Setting the audio language

You can set the preferred audio language.

1 Touch SETUP and LANGUAGE and then touch AUDIO LANGUAGE.

An audio language menu is displayed and the currently set language is highlighted.

- To switch to the second language select menu, touch **NEXT**.
- To return to the first language select menu, touch **PREV**.

2 Touch the desired language.

The audio language is set.

• If you have selected **OTHERS**, refer to *When* you select **OTHERS** on this page.



- If the selected language is not recorded on the disc, the language specified on the disc is output.
- You can also switch the audio language by touching AUDIO during playback. (Refer to Changing audio language during playback (Multi audio) on page 38.)

 Even if you use AUDIO to switch the audio language, this does not affect the settings here.

Setting the menu language

You can set the preferred language for displays of menus recorded on a disc.

1 Touch SETUP and LANGUAGE and then touch MENU LANGUAGE.

A menu language menu is displayed and the currently set language is highlighted.

- To switch to the second language select menu, touch **NEXT**.
- To return to the first language select menu, touch **PREV**.

2 Touch the desired language.

The menu language is set.

• If you have selected **OTHERS**, refer to *When* you select **OTHERS** on this page.



If the selected language is not recorded on the disc, the language specified on the disc is dis played.

Setting assist subtitles on or off

Assist subtitles offer explanations for the au rally impaired. However, they are only dis played if they are recorded on the DVD. You can turn assist subtitles on or off as de sired.

1 Touch SETUP and LANGUAGE and then touch NEXT.

15

Setting up the DVD player

- 2 Touch ASSIST SUB TITLE.
- 3 Touch ▲ to turn assist subtitles on.
- To turn assist subtitles off, touch ▼.

Setting angle icon display

You can set up that the angle icon appears on scenes where the angle can be switched.

- 1 Touch SETUP and VISUAL and then touch MULTI ANGLE.
- 2 Touch ▲ to turn angle icon display on.
- To turn angle icon display off, touch ▼.

Setting the aspect ratio

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

- When using a regular display, select either LETTER BOX or PANSCAN. Selecting 16:9 may result in an unnatural picture.
- If you select the TV aspect, this unit's display changes to the same setting.
- 1 Touch SETUP and VISUAL and then touch TV ASPECT.
- 2 Touch any of the following touch panel keys to select the TV aspect.
 - **16:9** Wide screen picture (16:9) is dis played as it is (initial setting)
 - LETTER BOX The picture is the shape of a letter box with black bands at the top and bottom of the screen

 PANSCAN – The picture is cut short at the right and left of the screen



- When playing discs that do not specify PANSCAN, playback is with LETTER BOX even if you select the PANSCAN setting. Con firm whether the disc package bears the 16:9 LB mark. (See page 8.)
- Some discs do not enable changing of the TV aspect. For details, refer to the disc's in structions.

Setting the parental lock

Some DVD video discs let you use parental lock to restrict the viewing of violent and adult oriented scenes by children. You can set the parental lock level in steps as desired.

 When you set a parental lock level and then play a disc featuring parental lock, code number input indications may be dis played. In this case, playback will begin when the correct code number is input.

Setting the code number and level

When you first use this function, register your code number. If you do not register a code number, parental lock will not operate.

- 1 Touch SETUP and VISUAL and then touch PARENTAL.
- 2 Touch 0—9 to input a four digit code number.
- 3 While the input number is displayed, touch ENTER.

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

Setting up the DVD player

4 Touch ◀ or ▶ to select the desired level.

The parental lock level is set.

- **8** Playback of the entire disc is possible (initial setting)
- **7–2** Playback of discs for children and non adult oriented discs is possible
- 1 Playback of discs for children only is possible

Notes

- We recommend to keep a record of your code number in case you forget it.
- The parental lock level is recorded on the disc.
 You can confirm it by looking at the disc pack
 age, included literature or on the disc itself.
 With discs that do not feature a recorded par
 ental lock level, you cannot use parental lock.
- With some discs, parental lock operates to skip certain scenes only, after which normal playback resumes. For details, refer to the disc's instructions.

Changing the level

You can change the set parental lock level.

1 Touch SETUP and VISUAL and then touch PARENTAL.

2 Touch 0—9 to input the registered code number.

3 Touch ENTER.

This enters the code number, and you can now change the level.

- If you input an incorrect code number, the icon on is displayed. Touch can input the correct code number.
- If you forget your code number, refer to *If you forget your code number* on this page.

4 Touch ◀ or ▶ to select the desired level. The new parental lock level is set.

If you forget your code number

Refer to *Changing the level* on this page, and touch **C** 10 times. The registered code number is canceled, letting you register a new one.

To play back bonus groups

Some DVD audio discs have an extra 'bonus' group that requires a four digit password to access. See the disc packaging for details and the password. When you try and play the bonus group, the password input screen will automatically appear.

- The bonus group can be played back after the password has been entered until the disc is removed from the unit.
- 1 Touch SETUP and OTHERS and then touch BONUS GROUP.
- 2 Touch 0—9 to input a four digit password.
- If you input an incorrect password, touch C and then input the correct password.
- 3 While the input number is displayed, touch ENTER. ■

Setting remote control code type

When the remote control operation switch is set to **DVD**, changing the remote control code type enables you to operate the Pioneer DVD player by the supplied remote control. There are three remote codes, code type **A**, code type **B** and code type **AVH**. When using this unit with a multi DVD player (e.g. XDV P9), se lect code **A**. When using this unit only, select code **AVH**.

• With this unit, code **B** cannot be used.

15

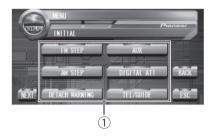
Setting up the DVD player

- 1 Set the remote control selection switch on the left side of the remote control to the appropriate position with a pen tip or other pointed instrument.
 - If you select **AVH** mode, there is no need to take the following procedure.
 - If you select A/B mode, take the following procedure and change the code type to the appropriate type.
- 2 Press 7 and 0 on the remote control simultaneously to change the code type.

 Initially, the code type is set to A. Each time

Initially, the code type is set to **A**. Each time you press **7** and **0** simultaneously on the re mote control the code type switches between **A** and **B**.

Adjusting initial settings



Initial settings lets you perform initial set up of different settings for this unit.

1 Function display

joystick.

Shows the function names.

1 Touch the source icon and then touch OFF to turn this unit off.

• When the source icon is not displayed, you can display it by touching the screen.

2 Touch A.MENU and then touch INITIAL to display the function names.

The function names are displayed and oper able ones are highlighted.

- When **A.MENU** is not displayed, you can display it by touching the screen.
- play it by touching the screen.

 You can also display **MENU** by clicking the
- To go to the next group of function names, touch **NEXT**.
- To return to the previous group of function names, touch **PREV**.
- To return to the previous display, touch BACK.
- \blacksquare To return to the display of each source, touch $\mathbf{ESC}. \blacksquare$

Setting the FM tuning step

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

- 1 Touch A.MENU and INITIAL and then touch FM STEP.
- 2 Touch either of the following touch panel keys to select the FM tuning step.
 - **50k** 50 kHz
 - 100k 100 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.

Setting the AM tuning step

The AM tuning step can be switched between 9 kHz, the preset step, and 10 kHz. When using the tuner in North, Central or South America, reset the tuning step from 9 kHz (531 – 1,602 kHz allowable) to 10 kHz (530 – 1,640 kHz allowable).

- 1 Touch A.MENU and INITIAL and then touch AM STEP.
- 2 Touch either of the following touch panel keys to select the AM tuning step.
 - **9k** 9 kHz
 - 10k 10 kHz ■

Initial Settings

Switching the warning tone

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

- 1 Touch A.MENU and INITIAL and then touch DETACH WARNING.
- 2 Touch ▲ to turn warning tone on.
- To turn warning tone off, touch ▼.

Switching the auxiliary setting

It is possible to use auxiliary equipment with this unit. Activate the auxiliary setting when using auxiliary equipment connected to this unit.

- 1 Touch A.MENU and INITIAL and then touch AUX.
- 2 Touch ▲ to turn auxiliary setting on.
- To turn auxiliary setting off, touch ▼.

Correcting distorted sound

You can minimize distortion likely caused by the equalizer curve settings.

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

- 1 Touch A.MENU and INITIAL and then touch DIGITAL ATT.
- 2 Touch either of the following touch panel keys to select the digital attenuator setting.
 - HIGH High quality sound

• **LOW** – Minimize distortion sound

Switching the sound muting/attenuation

Sound from this system is muted or attenu ated automatically when a call is made or re ceived using a cellular telephone connected to this unit.

- The sound is turned off, **MUTE** is displayed and no audio adjustments are possible.
- The sound is attenuated, ATT is displayed and no audio adjustments, except volume control, are possible.
- Operation returns to normal when the phone connection is ended.
- 1 Touch A.MENU and INITIAL and then touch TEL/GUIDE.
- 2 Touch any of the following touch panel keys to select the desired setting.
 - MIXING Mixing
 - ATT -10dB Attenuation
 - ATT -20dB Attenuation (ATT -20dB has a stronger effect than ATT -10dB)
 - **MUTE** Muting ■

Switching the automatic disc playback

You can turn automatic disc playback on or off when you insert a disc into the disc loading slot. When this function is on, the disc will be automatically played after it is inserted into the disc loading slot.

Initially, this function is set to on.

1 Touch A.MENU and INITIAL and then touch NEXT.

Initial Settings

- 2 Touch DVD AUTO PLAY.
- 3 Touch ▲ to turn automatic disc playback on.
- To turn automatic disc playback off, touch
- ▼.■

Switching the dimmer setting for sub-display

To prevent the sub display from being too bright at night, the sub display is automatically dimmed when the car's headlights are turned on. You can turn dimmer on or off.

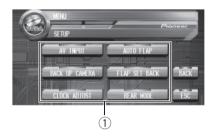
- 1 Touch A.MENU and INITIAL and then touch NEXT.
- 2 Touch SUB DISPLAY DIMMER.
- 3 Touch ▲ to turn dimmer on.
- To turn dimmer off, touch ▼.

Resetting the audio functions

You can reset all audio functions except vo lume.

- 1 Touch A.MENU and INITIAL and then touch NEXT.
- 2 Touch AUDIO RESET.
- 3 Touch RESET.
- 4 Touch RESET again to reset audio functions.
- \blacksquare To cancel resetting the audio functions, touch $\textbf{CANCEL}. \ \blacksquare$

Introduction of setup adjustments



① **Setup menu display**Shows the setup function names.

• Touch A.MENU and then touch SETUP to display the setup function names.

The setup function names are displayed and operable ones are highlighted.

- When **A.MENU** is not displayed, you can display it by touching the screen.
- You can also display **MENU** by clicking the iovstick.
- To return to the previous display, touch **BACK**.
- To return to the display of each source, touch **ESC.**



If you do not operate the setup function within about 30 seconds, the display is automatically returned to the source display.

Setting the video input

You can switch the setting according to the connected component.

- Select VIDEO to watch video of a con nected component as AV source.
- Select M-DVD to watch video of a con nected DVD player as S-DVD source.

1 Touch A.MENU and SETUP and then touch AV INPUT.

2 Touch any of the following touch panel keys to select the video input setting.

- OFF No video component is connected.
- VIDEO External video component
- M-DVD DVD player connected with RCA cable
- When a DVD player is connected with an AV BUS cable, do not select **M-DVD** or else no pic ture is displayed even if you select **S-DVD**. ■

Setting for back-up camera

This unit features a function that automatically switches to the back up camera video (BACK UP CAMERA IN jack) when a back up camera is installed on your car. When the gear shift is in REVERSE (R) position, the video automatically switches to a back up camera video. (For more details, consult with your dealer.)

- We recommend that you use a camera which outputs mirror reversed images.
- Confirm the setting immediately whether the display changes to a back up camera video when the gear shift is moved to RE-VERSE (R) from another position.
- When the display changes to a back up camera video during normal drivings, switch to another setting.
- To return to the source display, press **MENU** on the head unit.

1 Touch A.MENU and SETUP and then touch BACK UP CAMERA.

2 Touch ▲ to turn back-up camera setting on.

To turn back up camera setting off, touch ▼.

3 Touch ◀ or ▶ to select an appropriate setting for polarity.

Each time you touch ◀ or ▶ switches between the following polarity:

- **BATTERY** When the polarity of the con nected lead is positive while the gear shift is **REVERSE (R)** position
- GND When the polarity of the connected lead is negative while the gear shift is RE-VERSE (R) position

Setting the clock

Use these instructions to set the clock.

- When this unit is turned on, time is dis played on the entertainment clock only. (Refer to Switching the background display on page 87.)
- 1 Touch A.MENU and SETUP and then touch CLOCK ADJUST.

2 Touch ◀ or ▶ to select the segment of the clock display you wish to set.

Each time you touch ◀ or ▶ will select one segment of the clock display:

Hour-Minute

As you select segments of the clock display the segment selected will be highlighted.



3 Touch ▲ or ▼ to set the clock.

Each time you touch ▲ will increase the se lected hour or minute. Each time you touch ▼ will decrease the selected hour or minute.

Motes

- You can match the clock to a time signal by touching JUST.
 - If the minute is 00—29, the minutes are rounded down. (e.g., 10:18 becomes 10:00.)
 - If the minute is 30—59, the minutes are rounded up. (e.g., 10:36 becomes 11:00.)
- You can display the clock for eight seconds by pressing FLIP DOWN/CLOCK when the LCD panel is closed.
- Even when the sources are off, the clock display appears on the display.

Setting the automatic open function

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

- 1 Touch A.MENU and SETUP and then touch AUTO FLAP.
- 2 Touch either of the following touch panel keys to select the display to open/ close automatically or manually.
 - AUTO The LCD panel will be opened or closed automatically with the turning of the ignition switch on or off
 - MANUAL You have to press
 OPEN/CLOSE to open/close the LCD panel

Adjusting the LCD panel slide position

To adjust the LCD panel slide position, you can turn the set back on or off.

- 1 Touch A.MENU and SETUP and then touch FLAP SET BACK.
- 2 Touch ▲ to turn the set back on, and the LCD panel slides to the back.
- To turn the set back off, touch ▼ and the LCD panel slides to the front. ■

Setting the video of rear display

You can select either showing the same source as the front display or showing the video source on rear display independently.

- When selecting FRONT SOURCE in REAR MODE, when the selected source is an audio source, nothing is displayed on rear display.
- When selecting FRONT SOURCE in REAR MODE, audio is not output from REAR MONITOR OUT.
- 1 Touch A.MENU and SETUP and then touch REAR MODE.
- 2 Touch either of the following touch panel keys to select the video on rear display.
 - FRONT SOURCE Display the same source as the front display
 - SEPARATE Display the video source on rear display independently of front dis play

Using the AUX source

An IP BUS RCA Interconnector such as the CD RB20/CD RB10 (sold separately) lets you connect this unit to auxiliary equipment fea turing RCA output. For more details, refer to the IP BUS RCA Interconnector owner's manual.

Selecting AUX as the source

- Touch the source icon and then touch AUX to select AUX as the source.
- When the source icon is not displayed, you can display it by touching the screen.
- If the auxiliary setting is not turned on, **AUX** cannot be selected. For more details, see *Switch* ing the auxiliary setting on page 82.

Setting the AUX title

The title displayed for the **AUX** source can be changed.

- 1 After you have selected AUX as the source, touch A.MENU and FUNCTION and then touch NAME EDIT.
- 2 Touch ABC to select the desired character type.

Touch **ABC** repeatedly to switch between the following character type:

Alphabet (upper case), numbers and symbols —Alphabet (lower case)

- You can select to input numbers and symbols by touching 012.
- You can also switch character types by click ing the joystick.
- 3 Touch ▲ or ▼ to select a letter of the alphabet.

Each time you touch ▲ will display a letter of the alphabet in **A B C ... X Y Z**, numbers and symbols in **1 2 3 ...** |} order. Each time you

touch ▼ will display a letter in the reverse order, such as **Z Y X ... C B A** order.



4 Touch ▶ to move the cursor to the next character position.

When the desired letter is displayed, touch ► to move the cursor to the next position and then select the next letter. Touch ◀ to move backwards in the display.

5 Touch OK to store the entered title in memory.

- You can also store the entered title in memory by moving the cursor to right until it disappears.
- 6 Touch ESC to return to the playback display. ■

Switching the background display

You can switch background displays while lis tening to each source.

Press ENTERTAINMENT.

Each time you press **ENTERTAINMENT** the display changes in the following order: Video of currently selected source—**PICTURE1** (picture 1)—**PICTURE2** (picture 2)—**SPEANA** (spectrum analyzer)—**LEVEL METER1** (level meter 1)—**LEVEL METER2** (level meter 2)

- ---MOVIE1 (movie 1)---MOVIE2 (movie 2)
- —**CLOCK** (entertainment clock)—**DVD** (DVD player)—**AV** (video input)

Motes

- In the following cases, the background display will not change:
 - When no disc is set in this unit.
 - When the AV (video input) is not set to VIDEO (refer to page 84).
- If car's parking brake is not engaged,
 MOVIE1 and MOVIE2 will be changed into still pictures.

Using the PGM button

You can operate the preprogrammed functions for each source by using **PGM**.

- Press PGM to turn pause on when selecting the following sources:
 - **DVD** Built in DVD player
 - **S-DVD** DVD player/multi DVD player
 - M-CD Multi CD player
- To turn pause off, press **PGM** again.
- Press PGM and hold to turn BSM on when selecting TUNER as the source.

Press PGM and hold until the BSM turns on.

- To cancel the storage process, press PGM again.
- Press PGM and hold to turn BSSM on when selecting TV as the source.

Press **PGM** and hold until the BSSM turns on.

■ To cancel the storage process, press **PGM** again. ■

Troubleshooting

Common

Symptom	Cause	Action (See)	
Power doesn't turn on. The unit doesn't operate.	Leads and connectors are incor rectly connected.	Confirm once more that all connections are correct.	
	The fuse is blown.	Rectify the reason for the fuse blowing, then replace the fuse. Be very sure to install the correct fuse with the same rate.	
	Noise and other factors are causing the built in microprocessor to oper ate incorrectly.	Press RESET. (Page 9)	
Operation with the remote con trol isn't possible.	The remote control operation mode is incorrect.	Switch to the correct remote control mode. (Page 14)	
The unit does not operate cor rectly even when the appropriate remote control buttons are pressed.	The remote control code is incorrect.	Make sure the remote control selection switch setting and code type setting are the same. (Page 79)	
pressed.	Battery power is low.	Load new battery. (Page 9)	
	Some operations are prohibited with certain discs.	Check using another disc.	
Playback is not possible.	The disc is dirty.	Clean disc. (Page 92)	
	The loaded disc is a type this unit cannot play.	Check what type the disc is.	
	Non compatible video system disc is loaded.	Change to a disc compatible to your video system.	
No sounds are heard.	Cables are not connected correctly.	Connect the cables correctly.	
The volume level will not rise.	The unit is performing still, slow mo tion or frame by frame playback.	There is no sound during still, slow motion or frame by frame playback.	
	The front, rear, left and right speak ers are not properly adjusted in level balance.	Adjust the relative levels between the speak ers correctly. (Page 68)	
Sound is not heard over a specific speaker.	The speaker size is set to OFF .	Make the correct size setting for the speaker. (Page 70)	
	The speaker level is set too low.	Increase the speaker level setting to get the balance right with the other speakers. (Page 71)	
	The center speaker size is set to SMALL or LARGE whereas no cen ter speaker is installed.	Set the center speaker size to OFF . (Page 70)	
There's no picture.	The parking brake cord is not con nected.	Connect a parking brake cord, and apply the parking brake.	
	The parking brake is not applied.	Connect a parking brake cord, and apply the parking brake.	

Symptom	Cause	Action (See)	
The icon \odot is displayed, and op eration is not possible.	The operation is prohibited for the disc.	This operation is not possible.	
	The operation is not compatible with the disc's organization.	This operation is not possible.	
The picture stops (pauses) and the unit cannot be operated.	Reading of data has become impos After pressing ■ once, start playback sible during playback. ■ once, start playback more.		
There's no sound.	The volume level is low.	Adjust the volume level.	
Volume level is low.	The attenuator is on.	Turn the attenuator off.	
There's audio and video skip ping.	This unit is not firmly secured.	Secure this unit firmly.	
The picture is stretched, the as pect is incorrect.	The aspect setting is incorrect for the display.	Select the appropriate setting for your display. (Page 78)	
When the ignition switch is turned ON (or turned to ACC), the motor sounds.	This unit confirms whether a disc is loaded or not.	This is a normal operation.	
Nothing is displayed. The touch panel keys cannot use.	The back up camera is not con nected. BACK UP CAMERA is incorrect set ting.	Connect a back up camera. Press MENU on the head unit to return to the source display and then select the correct set ting for BACK UP CAMERA . (Page 84)	

Problems during DVD playback

Troblems during DVD pia,	, saon			
Symptom	Cause	Action (See)		
Playback is not possible.	The loaded disc has a different re gion number from this unit.	Replace the disc with one featuring the same region number as this unit. (Page 6, Page 99)		
A parental lock message is dis played and playback is not pos sible.	,		Parental lock is on.	Turn parental lock off or change the level. (Page 78)
Parental lock cannot be can	The code number is incorrect.	Input the correct code number. (Page 78)		
celed.	You have forgotten your code number.	Press CLEAR 10 times to cancel the code number. (Page 79)		
Dialog language (and subtitle language) cannot be switched.	The DVD playing does not feature multiple language recordings.	You cannot switch among multiple languages if they aren't recorded on the disc.		
	You can only switch between items indicated in the disc menu.	Switch using the disc menu.		
No subtitles are displayed.	The DVD playing does not feature subtitles.	Subtitles are not displayed if they are not re corded on the disc.		
	You can only switch between items indicated in the disc menu.	Switch using the disc menu.		
Playback is not with the audio language and subtitle language settings selected in DVD SETUP MENU .	The DVD playing does not feature dialog or subtitles in the language selected in DVD SETUP MENU .	Switching to a selected language is not possi ble if the language selected in DVD SETUP MENU is not recorded on the disc.		

Symptom	Cause	Action (See)
Switching the viewing angle is not possible.	The DVD playing does not feature scenes shot from multiple angles.	You cannot switch between multiple angles if the DVD does not feature scenes recorded from multiple angles.
	You are trying to switch to multiple angle viewing of a scene that is not recorded from multiple angles.	Switch between multiple angles when watch ing scenes recorded from multiple angles.
The picture is extremely unclear/distorted and dark during play back.	The disc features a signal to prohibit copying. (Some discs may have this.)	Since this unit is compatible with the copy guard analog copy protect system, when play ing a disc that has a signal prohibiting copy ing, the picture may suffer from horizontal stripes or other imperfections when viewed on some displays. This does not mean this unit is malfunctioning.

Problems during Video CD playback

Symptom	Cause	Action (See)
The PBC (playback control) menu display cannot be called	The Video CD playing does not fea ture PBC.	This operation is not possible with Video CDs not featuring PBC.
up.	PBC is turned off.	Turn PBC on. (Page 40, Page 44)
Repeat play and track/time search are not possible.	PBC is turned on.	Turn PBC off. (Page 40, Page 44)



Error messages

When problems occur with disc playback, an error message appears on the display. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists, contact your dealer or your nearest PIONEER Service Center.

Message	Cause	Action (See)	
ERROR-02	Dirty disc	Clean disc.	
	Scratched disc	Replace disc.	
ERROR-05	Electrical or mechanical	Press RESET .	
DIFFERENT REGION DISC (REGION ERR)	The disc does not have the same re gion number as this unit	Replace the DVD video with one bearing the correct region number.	
ION PLAYABLE DISC (NON-LAY) This type of disc cannot be played by this unit		Replace the disc with one this unit can play.	
	The disc is loaded upside down	Check that the disc is loaded correctly.	
THERMAL PROTECTION IN MOTION (TEMP)	The temperature of this unit is out side of the normal operating range	Wait until the unit's temperature returns to within normal operating limits.	

Understanding auto TA and EQ error messages

When correct measurement of car interior acoustic characteristics is not possible using the auto TA and EQ, an error message may appear on the display. If an error message appears on the display refer to the table below to see what the problem is and the suggested method of correcting the problem. After checking, try again.

Message	Cause	Action
Error check MIC	Microphone is not connected.	Plug the supplied microphone securely into the jack.
Error check front SP, Error check FL SP, Error check FR SP, Error check center SP, Error check RL SP, Error check RR SP, Error check subwoofer	The microphone cannot pick up the measuring tone of any speaker.	Confirm that the speakers are connected correctly. Correct the input level setting of the power amp connected to the speakers. Set the microphone correctly.
Error check noise	The surrounding noise level is too high.	Stop your car in a place that is as quite as possible, and switch off the engine, air conditioner or heater. Set the microphone correctly.

DVD player and care

 Use only normal, round discs. If you insert irregular, non round, shaped discs they may jam in the DVD player or not play prop erly.





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



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

DVD discs

- With some DVD video discs, it may not be possible to use certain functions.
- It may not be possible to play back some DVD video discs.
- When DVD R/DVD RW discs are used, playback is possible only for discs which have been finalized.
- When DVD R/DVD RW discs are used, playback is possible only for discs which have been recorded with the Video format (video mode). It is not possible to play back DVD RW discs which have been recorded with the Video Recording format (VR mode).
- It may not be possible to play back DVD R/DVD RW discs which have been recorded with the Video format (video mode), be cause of disc characteristics, scratches or dirt on the disc, or dirt, condensation, etc. on the lens of this unit.
- It is not possible to play back DVD ROM/ DVD RAM discs.
- Playback of discs recorded on a personal computer may not be possible depending on the application settings and the environ ment. Please record with the correct for mat. (For details, contact the manufacturer of the application.)

CD-R/CD-RW discs

- When CD R/CD RW discs are used, play back is possible only for discs which have been finalized.
- It may not be possible to play back CD R/ CD RW discs recorded on a music CD re corder or a personal computer because of disc characteristics, scratches or dirt on the disc, or dirt, condensation, etc. on the lens of this unit.

- Playback of discs recorded on a personal computer may not be possible depending on the application settings and the environ ment. Please record with the correct for mat. (For details, contact the manufacturer of the application.)
- Playback of CD R/CD RW discs may be come impossible in case of direct exposure to sunlight, high temperatures, or the sto rage conditions in the car.
- Titles and other text information recorded on a CD R/CD RW disc may not be dis played by this unit (in the case of audio data (CD DA)).
- This unit conforms to the track skip function of the CD R/CD RW disc. The tracks containing the track skip information are skipped automatically (in case of audio data (CD DA)).
- If you insert a CD RW disc into this unit, time to playback will be longer than when you insert a conventional CD or CD R disc.
- Read the precautions with CD R/CD RW discs before using them.

MP3 files

- MP3 is short for MPEG Audio Layer 3 and refers to an audio compression technology standard.
- This unit allows playback of MP3 files on CD ROM, CD R and CD RW discs. Disc re cordings compatible with level 1 and level 2 of ISO9660 and with the Romeo and Joliet file system can be played back.
- It is possible to play back multi session compatible recorded discs.
- MP3 files are not compatible with packet write data transfer.
- The max. number of characters which can be displayed for a file name, including the extension (.mp3), is 32 characters from the first character.

- The max. number of characters which can be displayed for a folder name is 32 characters.
- In case of files recorded according to the Romeo and Joliet file system, only the first 32 characters can be displayed.
- When playing discs with MP3 files and audio data (CD DA) such as CD EXTRA and MIXED MODE CDs, both types can be played only by switching mode between MP3 and CD DA.
- The folder selection sequence for playback and other operations becomes the writing sequence used by the writing software. For this reason, the expected sequence at the time of playback may not coincide with the actual playback sequence. However, there also is some writing software which per mits setting of the playback order.
- Files are compatible with the ID3 Tag Ver. 1.0 and Ver. 1.1 formats for display of album (disc title), track (track title) and ar tist (track artist).
- Only when MP3 files of 32, 44.1 and 48 kHz frequencies are played back, the emphasis function is valid. (16, 22.05, 24, 32, 44.1, 48 kHz sampling frequencies can be played back.)
- There is no m3u playlist compatibility.
- There is no compatibility with the MP3i (MP3 interactive) or mp3 PRO format.
- The sound quality of MP3 files generally be comes better with increasing bit rate. This unit can play recordings with bit rates from 8 kbps to 320 kbps, but in order to be able to enjoy a certain sound quality, it is recom mended to use only discs recorded with a bit rate of at least 128 kbps.

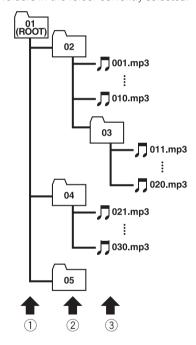
[Important

 When naming an MP3 file, add the corre sponding filename extension (.mp3).

 This unit plays back files with the filename ex tension (.mp3) as an MP3 file. To prevent noise and malfunctions, do not use this exten sion for files other than MP3 files.

About folders and MP3 files

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



- First level
- ② Second level
- 3 Third level



 This unit assigns folder numbers. The user can not assign folder numbers.

- It is not possible to check folders that do not include MP3 files. (These folders will be skipped without displaying the folder number.)
- MP3 files in up to 8 tiers of folders can be played back. However, there is a delay in the start of playback on discs with numerous tiers. For this reason we recommend creating discs with no more than 2 tiers.
- It is possible to play back up to 253 items from folder on one disc.

Using the display correctly



- If moisture or foreign matter should get inside this unit, turn off the power immediately and consult your dealer or the nearest authorized PIONEER Service Station. Using this unit in this condition may result in a fire or electric shock, or other failure.
- If you notice smoke, a strange noise or smell, or any other abnormal signs from the display, turn off the power immediately and consult your dealer or the nearest authorized PIO NEER Service Station. Using this unit in this condition may result in failure of the system.
- Do not disassemble or modify this unit, as there are high voltage components inside which may cause an electric shock. Be sure to consult your dealer or the nearest author ized PIONEER Service Station for internal in spection, adjustments or repairs.

Handling the display

 When the display is subjected to direct sun light for a long period of time, it will be come very hot resulting in possible damage to the LCD screen. When not using this unit, close the display and avoid exposing it to direct sunlight as much as possible.

- The display should be used within the tem perature ranges shown below.
 Operating temperature range: -10 to +50
 °C.
 - Storage temperature range: -20 to +80 °C At temperatures higher or lower than the operating temperature range the display may not operate normally.
- The LCD screen of this unit is exposed in order to increase its visibility within the ve hicle. Please do not press strongly on it as this may damage it.
- Do not place anything on the display when it is deployed. Also, do not attempt to carry out angle adjustment, or open/close the display by hand. Applying strong force to the display may damage it.
- Do not push the LCD screen with much force as this may scratch it.
- Be careful not to place anything between the display and the main body when the display is opening or closing. If an object gets between the display and main body, the display may stop working.

Liquid crystal display (LCD) screen

- If the display is near the vent of an air con ditioner when it is opened, make sure that air from the air conditioner is not blowing on it. Heat from the heater may break the LCD screen, and cool air from the cooler may cause moisture to form inside the dis play resulting in possible damage. Also, if the display is cooled down by the cooler, the screen may become dark, or the life span of the small fluorescent tube used in side the display may be shortened.
- Small black dots or white dots (bright dots)
 may appear on the LCD screen. These are
 due to the characteristics of the LCD
 screen and do not indicate a problem with
 the display.

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

Keeping the display in good condition

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

Small fluorescent tube

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

Language code chart for DVD

Language (code), input code
Japanese (ja), 1001
English (en), 0514
French (fr), 0618
Spanish (es), 0519
German (de), 0405
Italian (it), 0920
Chinese (zh), 2608
Dutch (nl), 1412
Portuguese (pt), 1620
Swedish (sv), 1922
Russian (ru), 1821
Korean (ko), 1115
Greek (el), 0512
Afar (aa), 0101
Abkhazian (ab), 0102
Afrikaans (af), 0106
Amharic (am), 0113
Arabic (ar), 0118
Assamese (as), 0119
Aymara (ay), 0125
Azerbaijani (az), 0126
Bashkir (ba), 0201
Byelorussian (be), 0205
Bulgarian (bg), 0207
Bihari (bh), 0208
Bislama (bi), 0209
Bengali (bn), 0214
Tibetan (bo), 0215
Breton (br), 0218
Catalan (ca), 0301
Corsican (co), 0315
Czech (cs), 0319
Welsh (cy), 0325
Danish (da), 0401
Bhutani (dz), 0426
Esperanto (eo), 0515
Estonian (et), 0520
Basque (eu), 0521
Persian (fa), 0601
Finnish (fi), 0609
Fiji (fj), 0610
Faroese (fo), 0615
Frisian (fy), 0625
Irish (ga), 0701
Scots Gaelic (gd), 0704
Scots Gaelic (gu), 0/04

Guarani (gn), 0714
Gujarati (gu), 0721
Hausa (ha), 0801
Hindi (hi), 0809
Croatian (hr), 0818
Hungarian (hu), 0821
Armenian (hy), 0825
Interlingua (ia), 0901
Interlingue (ie), 0905
Inupiak (ik), 0911
Indonesian (in), 0914
Icelandic (is), 0919
Hebrew (iw), 0923
Yiddish (ji), 1009
Javanese (jw), 1023
Georgian (ka), 1101
Kazakh (kk), 1111
Greenlandic (kl), 1112 Cambodian (km), 1113
Kannada (kn), 1114
Kashmiri (ks), 1119
Kurdish (ku), 1121
Kirghiz (ky), 1125
Latin (la), 1201
Lingala (In), 1214
Laothian (Io), 1215
Lithuanian (It), 1220
Latvian (Iv), 1222
Malagasy (mg), 1307
Maori (mi), 1309
Macedonian (mk), 1311
Malayalam (ml), 1312
Mongolian (mn), 1314
Moldavian (mo), 1315 Marathi (mr), 1318
Malay (ms), 1319
Maltese (mt), 1320
Burmese (my), 1325
Nauru (na), 1401
Nepali (ne), 1405
Norwegian (no), 1415
Occitan (oc), 1503
Oromo (om), 1513
Oriya (or), 1518
Panjabi (pa), 1601
Polish (pl), 1612

Language (code), input code

Language (code), input code Pashto, Pushto (ps), 1619 Quechua (qu), 1721 Rhaeto Romance (rm), 1813 Kirundi (rn), 1814 Romanian (ro), 1815 Kinyarwanda (rw), 1823 Sanskrit (sa), 1901 Sindhi (sd), 1904 Sangho (sg), 1907 Serbo Croatian (sh), 1908 Sinhalese (si), 1909 Slovak (sk), 1911 Slovenian (sl), 1912 Samoan (sm), 1913 Shona (sn), 1914 Somali (so), 1915 Albanian (sq), 1917 Serbian (sr), 1918 Siswati (ss). 1919 Sesotho (st), 1920 Sundanese (su), 1921 Swahili (sw), 1923 Tamil (ta), 2001 Telugu (te), 2005 Tajik (tg), 2007 Thai (th), 2008 Tigrinya (ti), 2009 Turkmen (tk), 2011 Tagalog (tl), 2012 Setswana (tn), 2014 Tonga (to), 2015 Turkish (tr), 2018 Tsonga (ts), 2019 Tatar (tt), 2020 Twi (tw). 2023 Ukrainian (uk), 2111 Urdu (ur), 2118 Uzbek (uz), 2126 Vietnamese (vi), 2209 Volapük (vo), 2215 Wolof (wo), 2315 Xhosa (xh), 2408 Yoruba (yo), 2515 Zulu (zu), 2621

Galician (gl), 0712

Terms

Aspect ratio

This is the width to height ratio of a TV screen. A regular display has an aspect ratio of 4:3. Wide screen displays have an aspect ratio of 16:9, providing a bigger picture for exceptional presence and atmosphere.

Bit rate

This expresses data volume per second, or bps units (bits per second). The higher the rate, the more information is available to reproduce the sound. Using the same encoding method (such as MP3), the higher the rate, the better the sound.

Bonus group

An 'extra' group on some DVD audio discs that requires a key number to access.

Browsable pictures

A feature of some DVD audio discs in which you can browse still pictures recorded on the disc while the audio is played back.

Chapter

DVD titles are in turn divided into chapters which are numbered in the same way as the chapters of a book. With DVD video discs fea turing chapters, you can quickly find a desired scene with chapter search.

Dolby Digital

Dolby Digital provides multi channel audio from up to 5.1 independent channels. This is the same as the Dolby Digital surround sound system used in theaters.

Dolby Pro Logic ${\rm I\hspace{-.1em}I}$

Dolby Pro Logic II can create five full band width output channels from two channel sources. This new technology enables a discrete 5 channel playback with 2 front channels, 1 center channel, and 2 rear channels. A

music mode is also available for 2 channel sources in addition to the movie mode.

DTS

This stands for Digital Theater Systems. DTS is a surround system delivering multi channel audio from up to 6 independent channels.

Dynamic range control

Dolby Digital has a function for compressing the difference between the loudest and softest sounds: Dynamic range control. This control ensures sounds with an increased dynamic range are heard clearly even at low volume le vels.

Group

A collection of tracks on a DVD audio disc. Equivalent to a DVD video title.

ID3 tag

This is a method of embedding track related information in a MP3 file. This embedded in formation can include the track title, the ar tist's name, the album title, the music genre, the year of production, comments and other data. The contents can be freely edited using software with ID3 Tag editing functions. Although the tags are restricted to the number of characters, the information can be viewed when the track is played back.

ISO9660 format

This is the international standard for the for mat logic of CD ROM folders and files. For the ISO9660 format, there are regulations for the following two levels.

Level 1:

The file name is in 8.3 format (the name con sists of up to 8 characters, half byte English capital letters and half byte numerals and the "" sign, with a file extension of three characters.)

Level 2:

The file name can have up to 31 characters (in cluding the separation mark "." and a file ex tension). Each folder contains less than 8 hierarchies.

Extended formats

Joliet:

File names can have up to 64 characters. Romeo:

File names can have up to 128 characters.

Linear PCM (LPCM)/Pulse code modulation

This stands for linear pulse code modulation, which is the signal recording system used for music CDs and DVDs. Generally, DVDs are re corded with higher sampling frequency and bit rate than CDs. Therefore, DVDs can provide higher sound quality.

m3u

Playlists created using the "WINAMP" soft ware have a playlist file extension (.m3u).

MP3

MP3 is short for MPEG Audio Layer 3. It is an audio compression standard set by a working group (MPEG) of the ISO (International Standards Organization). MP3 is able to compress audio data to about 1/10th the level of a conventional disc.

MPEG

This stands for Moving Pictures Experts Group, and is an international video image compression standard. Some DVDs feature di gital audio compressed and recorded using this system.

Multi-angle

With regular TV programs, although multiple cameras are used to simultaneously shoot scenes, only images from one camera at a time are transmitted to your TV. Some DVDs feature scenes shot from multiple angles, let ting you choose your viewing angle as desired.

Multi-audio (Multilingual dialog)

Some DVDs feature dialog recorded in multiple languages. Dialog in up to 8 languages can be recorded on a single disc, letting you choose as desired.

Multi-session

Multi session is a recording method that al lows additional data to be recorded later. When recording data on a CD ROM, CD R or CD RW, etc., all data from beginning to end is treated as a single unit or session. Multi ses sion is a method of recording more than 2 ses sions in one disc.

Multi-subtitle

Subtitles in up to 32 languages can be re corded on a single DVD, letting you choose as desired.

Packed PCM

A lossless compression system that enables more PCM audio to be stored on a DVD audio disc than would otherwise be possible.

Packet write

This is a general term for a method of writing on CD R, etc. at the time required for a file, just as is done with files on floppy or hard discs.

Parental lock

Some DVD video discs with violent or adult or iented scenes feature parental lock which pre vents children from viewing such scenes. With this kind of disc, if you set the unit's parental lock level, playback of scenes inappropriate for children will be disabled, or these scenes will be skipped.

Playback control (PBC)

This is a playback control signal recorded on Video CDs (Version 2.0). Using menu displays provided by Video CDs with PBC lets you enjoy playback of simple interactive software and

software with search functions. You can also enjoy viewing high and standard resolution still images.

Region number

DVD players and DVD discs feature region numbers indicating the area in which they were purchased. Playback of a DVD is not pos sible unless it features the same region number as the DVD player. This unit's region number is displayed on the bottom of this unit.

Slideshow

A feature of some DVD discs in which still pic tures recorded on the disc cycle automatically while the audio is played back.

Title

DVD video discs have high data capacity, en abling recording of multiple movies on a sin gle disc. If, for example, one disc contains three separate movies, they are divided into title 1, title 2 and title 3. This lets you enjoy the convenience of title search and other functions

VBR

VBR is short for variable bit rate. Generally speaking CBR (constant bit rate) is more widely used. But to flexibly adjust the bit rate according to the needs of audio compression, it is possible to achieve compression priorities sound quality.

Specifications

n	

Display

Screen size/aspect ratio	. / inch wide/16:9
	(effective display area: 154
	× 87 mm)
Pixels	. 336,960 (1,440 × 234)
Type	.TFT active matrix, transmis
	sive type
Color system	. NTSC/PAL compatible
Operating temperature rang	je
	.−10 − +50 °C
Storage temperature range	
	20 - +80 °C
Angle adjustment	.50 – 110°
	(initial settings: 110°)

......279 × 28 × 171 mm

Weight1.0 kg

Audio

Crossover frequency 63/80/100/125/160/200 Hz

DecoderLinear PCM/Dolby Digital/ Dolby Pro Logic II/DTS Subwoofer:

SystemDVD audio, DVD video,

DVD Player

Val

	Video CD, CD, dtsCD, MP3 system
Usable discs	,
Region number:	
for Southeast Asian mo	odels
	3
for South American and	d Oceanian models
	4
Signal format:	
Sampling frequency	16/22.05/24/44.1/48/88.2/96/ 176.4/192 kHz
Number of quantization	n bits
	16/20/24; linear
Frequency response	5 – 96,000 Hz (with DVD, at sampling frequency 192 kHz)
Signal to noise ratio	97 dB (1 kHz) (IEC A net work) (CD: 96 dB (1 kHz) (IEC A
	network))
Dynamic range	.,
Dynamic range	(CD: 94 dB (1 kHz))
Distortion	0.008 % (1 kHz)
Output level:	,
Video	1.0 Vp p/75 Ω (±0.2 V)
Audio	
Number of channels	
MP3 decoding format	. ,, ,

FM tuner

Frequency range 87.5 - 108.0 MHz

Usable sensitivity	.8 dBf (0.7 μ V/75 Ω , mono,
	S/N: 30 dB)
50 dB quieting sensitivity	. 10 dBf (0.9 μ V/75 Ω , mono)
Signal to noise ratio	.75 dB (IEC A network)
Distortion	. 0.3 % (at 65 dBf, 1 kHz,
	stereo)
	0.1 % (at 65 dBf, 1 kHz,
	mono)
Frequency response	. 30 – 15,000 Hz (±3 dB)
Stereo separation	. 45 dB (at 65 dBf, 1 kHz)

AM tuner

Frequency range531 – 1,602 kHz (9 kHz)
530 – 1,640 kHz (10 kHz)
Usable sensitivity 18 µV (S/N: 20 dB)
Signal to noise ratio 65 dB (IEC A network)

Infrared remote control

Wavelength	945	nr	n			
Output	typ;	10) mw/sr	per l	infrare	d
	IFF)				



Specifications and the design are subject to pos sible modifications without notice due to im provements. •

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