Pioneer

DVD AV RECEIVER

# AVH-P3100DVD

HD Radio READY

SUPER TUNER III D

Operation Manual

*English*

# *Thank you* for purchasing this PIONEER product.

Please read through this manual before using the product for the first time, to ensure proper use. *After reading, please keep the manual in a safe and accessible place for future reference.*

**Be sure to read this**


- *DVD video disc region numbers* **7**
- *When an operation is prohibited* **10**
- *Handling guideline of discs and player* **100**

**01 Precautions**
IMPORTANT SAFEGUARDS **5**
To ensure safe driving **5**
When using a rear view camera **6**
To avoid battery exhaustion **6**

**02 Before You Start**
Information to User **7**
For Canadian model **7**
About this unit **7**
About this manual **7**
After sales service for Pioneer products **8**
Visit our website **8**
Features **8**
When an operation is prohibited **10**
Resetting the microprocessor **10**
Feature demo mode **10**

**03 What's what**
Head unit **11**
Optional remote control **11**

**04 Basic Operations**
Power ON/OFF **12**
Selecting a source **12**
Adjusting the volume **13**
Touch panel key basic operation **13**
Built in DVD player basic operations **15**

**05 Radio**
Listening to the radio **17**
Storing and recalling broadcast frequencies **17**
Introduction of advanced tuner operation **18**
Storing the strongest broadcast frequencies **18**
Tuning in strong signals **18**

**06 Playing DVD discs**
Watching a DVD **19**
Skipping back or forward to another title **20**
Operating the DVD menu **20**
Resume playback (Bookmark) **20**
CM skip/CM back **20**
Frame by frame playback **21**
Slow motion playback **21**
Pausing playback **21**
Searching for the part you want to play **21**
Changing audio language during playback (Multi audio) **21**
Changing the subtitle language during playback (Multi subtitle) **22**
Changing the viewing angle during playback (Multi angle) **22**
Return to the specified scene **22**
Automatic playback of DVDs **22**
Introduction of advanced DVD operation **23**
Repeating play **23**
Selecting audio output **23**

**07 Playing Video CDs**
Watching a Video CD **24**
PBC playback **24**
Frame by frame playback **25**
Slow motion playback **25**
Pausing playback **25**
Searching for a desired scene, starting playback from a specified time **25**
Introduction of advanced Video CD operation **25**
Repeating play **26**
Selecting audio output **26**

**08 Playing CDs**
Listening to a CD **27**
Selecting tracks from the track title list **27**

Pausing playback 27
Switching the media file type 28
Using advanced sound retriever 28
Introduction of advanced CD operation 28
Repeating play 28
Playing tracks in random order 28
Scanning tracks of a CD 28

**09 Playing compressed audio**
Listening to compressed audio 29
Selecting files from the file name list 30
Pausing playback 30
Switching the media file type 30
Using advanced sound retriever 30
Introduction of advanced compressed audio operation 30
Repeating play 31
Playing tracks in random order 31
Scanning folders and tracks 31

**10 Playing DivX/JPEG files**
Watching a DivX/JPEG 32
Viewing a JPEG slideshow 33
Playing DivX® VOD content 33
Selecting files from the file name list 33
Displaying text information on DivX/JPEG disc 34
Pausing playback 34
Switching the media file type 34
Searching for the part you want to play 34
Changing audio language during playback (Multi audio) 34
Changing the subtitle language during playback (Multi subtitle) 34
Capture an image in JPEG files 34
Introduction of advanced DivX/JPEG operation 35
Repeating play 35
Playing tracks in random order 35

**11 Playing songs in a USB storage device**
Basic Operations 36
Selecting files from the file name list 36
Pausing compressed audio playback 37
Switching the media file type 37
Using advanced sound retriever 37
Introduction to advanced operations 37

**12 Using iPod**
Basic Operations 38
Playing video 39
Browsing for a song/video 39
Displaying text information on iPod Video 40
Pausing playback 40
Using advanced sound retriever 40
Repeating play 40
Playing songs/videos in a random order (shuffle) 41
Playing all songs in a random order (shuffle all) 41
Operating this unit's iPod function from your iPod 41
Selecting songs from lists related to the currently playing song 41
Changing audiobook speed 41
Changing the screen mode 42

**13 Audio Adjustments**
Introduction of audio adjustments 43
Using balance adjustment 43
Using the equalizer 43
Adjusting loudness 44
Using subwoofer output 44
Boosting the bass 44
Using the high pass filter 45
Adjusting source levels 45

**14 Setting up the DVD player**
Introduction of DVD setup adjustments 46
Setting the subtitle language 46
Setting the audio language 46
Setting the menu language 47
Setting the angle icon display 47

Setting the aspect ratio 47
Setting the slide show interval 47
Setting the parental lock 48
Setting the DivX subtitle file 48
Displaying your DivX® VOD registration code 49
Setting for digital output 49

**15 Initial Settings**
Adjusting initial settings 50
Switching the auxiliary setting 50
Setting the rear output and subwoofer controller 50
Changing languages for CAUTION 51
Switching the sound muting/attenuation 51
Entering PIN code for Bluetooth wireless connection 51
Correcting distorted sound 52
Auto TA and EQ (auto time alignment and auto equalizing) 52
Resetting the audio functions 52

**16 System settings**
Introduction of system adjustments 53
Changing the wide screen mode 53
Changing the picture adjustment 54
Setting the AV input 54
Setting the clock 55
Setting for rear view camera (back up camera) 55

**17 Entertainment settings**
Introduction of entertainment settings 56
Selecting the background display 56
Selecting the illumination color 56
Selecting the OSD color 57

**18 Other Functions**
Adjusting the response positions of the touch panels (Touch Panel Calibration) 58
Using the AUX source 58
Using the external unit 59

**19 Available accessories**
Multi CD Player 61
XM tuner 63
SIRIUS Satellite Radio tuner 66
HD Radio™ tuner 70
Bluetooth Audio 72
Bluetooth Telephone 74
TV tuner 81
Digital Signal Processor 83

**Additional Information**
Troubleshooting 94
Error messages 96
Understanding auto TA and EQ error messages 98
Understanding messages 99
Handling guideline of discs and player 100
DVD discs 100
DVD R/DVD RW discs 101
AVCHD recorded discs 101
CD R/CD RW discs 101
Dual Discs 101
Compressed audio compatibility 101
Handling guideline and supplemental information 102
Example of a hierarchy 103
iPod compatibility 103
About handling the iPod 104
JPEG picture files 104
DivX video files 104
Using the display correctly 105
Language code chart for DVD 107
Copyright and trademark notice 108
Terms 110
Specifications 113

**Index 115**

## 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 as a reference for operating procedures and safety information.**
3 **Pay close attention to all warnings in this manual and follow the instructions carefully.**
4 **Do not allow other persons to use this system until they have read and understood the operating instructions.**
5 **Do not install the display where it may (i) obstruct the driver's vision, (ii) impair the performance of any of the vehicle's operating systems or safety features, including air bags, hazard lamp buttons or (iii) impair the driver's ability to safely operate the vehicle.**
6 **Do not operate this display if doing so in any way will divert your attention from the safe operation of your vehicle. Always observe safe driving rules and follow all existing traffic regulations. If you experience difficulty in operating the system or reading the display, park your vehicle in a safe location and make necessary adjustments.**
7 **Please remember to wear your seat belt at all times while operating your vehicle. If you are ever in an accident, your injuries can be considerably more severe if your seat belt is not properly buckled.**
8 **Never use headphones while driving.**
9 **To promote safety, certain functions are disabled unless the parking brake is on, and the vehicle is not in motion.**
10 **Never set the volume of your display so high that you cannot hear outside traffic and emergency vehicles.**

**WARNING**

- **Do not attempt to install or service your display by yourself. Installation or servicing of the display by persons without training and experience in electronic equipment and automotive accessories may be dangerous and could expose you to the risk of electric shock or other hazards.** ■

## To ensure safe driving

**WARNING**

- **LIGHT GREEN LEAD AT POWER CONNECTOR IS DESIGNED TO DETECT PARKED STATUS AND MUST BE CONNECTED TO THE POWER SUPPLY SIDE OF THE PARKING BRAKE SWITCH. IMPROPER CONNECTION OR USE OF THIS LEAD MAY VIOLATE APPLICABLE LAW AND MAY RESULT IN SERIOUS INJURY OR DAMAGE.**
- To avoid the risk of damage and injury and the potential violation of applicable laws, this unit is not for use with a video screen that is visible to the driver.
- To avoid the risk of accident and the potential violation of applicable laws, the front DVD or TV (sold separately) feature should never be used while the vehicle is being driven. Also, rear displays should not be in a location where they are visibly distracting to the driver.
- In some countries or states the viewing of images on a display inside a vehicle even by persons other than the driver may be illegal. Where such regulations apply, they must be obeyed and this unit's DVD features should not be used.

When you attempt to watch a DVD, Video CD or TV while driving, the warning **Viewing of front seat video source while driving is strictly prohibited.** will appear on the front display.

To watch a DVD, Video CD or TV on the front display, park your vehicle in a safe place and apply the parking brake.

## Parking brake interlock

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

## When using a display connected to V OUT

This unit's **V OUT** is for connection of a dis play to enable passengers in the rear seats to watch the DVD or TV.

**WARNING**

**NEVER** install the rear display in a location that enables the driver to watch the DVD or TV while driving. ■

## When using a rear view camera

With an optional rear view camera, you are able to use this unit as an aid to keep an eye on trailers, or backing into a tight parking spot.

**WARNING**

- **SCREEN IMAGE MAY APPEAR RE-VERSED.**
- **USE INPUT ONLY FOR REVERSE OR MIRROR IMAGE REAR VIEW CAMERA. OTHER USE MAY RESULT IN INJURY OR DAMAGE.**

**CAUTION**

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

## To avoid battery exhaustion

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

- When no power is supplied to this unit be cause of a replacement of the vehicle bat tery or for some similar reason, the microcomputer of this unit is returned to its initial condition. We recommend that you transcribe the audio adjustment data.

**WARNING**

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

## Information to User

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

■

## For Canadian model

This Class B digital apparatus complies with Canadian ICES 003.

■

## About this unit

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

**WARNING**

Handling the cord on this product or cords asso ciated with accessories sold with the product may expose you to chemicals listed on proposi tion 65 known to the State of California and other governmental entities to cause cancer and birth defects or other reproductive harm. ***Wash hands after handling***.

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

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

**CAUTION**

- Do not allow this unit to come into contact with liquids. Electrical shock could result. Also, damage to this unit, smoke, and over heating could result from contact with liquids.
- Keep this manual handy as a reference for op erating procedures and precautions.
- Always keep the volume low enough so that you can hear sounds from outside the vehicle.
- Protect this unit from moisture.
- If the battery is disconnected or discharged, the preset memory will be erased and must be reprogrammed.

**Important (Serial number)**

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

### DVD video disc region numbers

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 and this manual (refer to *Specifications* on page 113). ■

## 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 **WARNING**s and **CAUTION**s in this manual. ■

## After-sales service for Pioneer products

Please contact the dealer or distributor from where you purchased this unit for after sales service (including warranty conditions) or any other information. In case the necessary infor mation is not available, please contact the companies listed below:
Please do not ship your unit to the companies at the addresses listed below for repair without advance contact.

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

**CANADA**
Pioneer Electronics of Canada, Inc.
CUSTOMER SATISFACTION DEPARTMENT
300 Allstate Parkway
Markham, Ontario L3R 0P2
1 877 283 5901
905 479 4411

For warranty information please see the Lim ited Warranty sheet included with this unit. ■

## Visit our website

Visit us at the following site:
**http://www.pioneerelectronics.com**

1 Register your product. We will keep the details of your purchase on file to help you refer to this information in the event of an insurance claim such as loss or theft.
2 Receive updates on the latest products and technologies.
3 Download owner's manuals, order product catalogues, research new products, and much more.
4 Your feedback is important in our continual ef fort to design and build the most advanced, cunsumer focused product in the industry.
**Serial number**

■

## Features

### Touch panel key operation
It is possible to operate this unit by using touch panel key.
Also, scroll bar and scrubber bar can be con trolled at your fingertip.

### DVD-R/RW compatibility
It is possible to play back DVD R/RW discs re corded with the video format and Video Re cording format. (Refer to *DVD R/DVD RW discs* on page 101.)

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

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

### MP3 file playback
You can play back MP3 files recorded on CD R/RW/ROM (ISO9660 Level 1/Level 2 stan dard), DVD R/RW/ROM (ISO9660 Level 1/Level 2 standard, UDF 1.02) and USB storage device (FAT 16, FAT 32).

### WMA file playback
You can play back WMA files recorded on CD R/RW/ROM (ISO9660 Level 1/Level 2 stan dard), DVD R/RW/ROM (ISO9660 Level 1/Level 2 standard, UDF 1.02) and USB storage device (FAT 16, FAT 32).

### AAC file playback
You can play back AAC files recorded on CD R/RW/ROM (ISO9660 Level 1/Level 2 stan dard), DVD R/RW/ROM (ISO9660 Level 1/Level 2 standard, UDF 1.02) and USB storage device (FAT 16, FAT 32).

### DivX® video compatibility
Refer to *DivX compatibility* on page 104.

### JPEG picture file playback
You can play back JPEG picture files recorded on CD R/RW/ROM and USB storage device.

### Dolby Digital/DTS compatibility
When using this unit with a Pioneer multi channel processor, you can enjoy the atmo sphere and excitement provided by DVD movie and music software featuring 5.1 channel re cordings.

### Portable audio player compatibility
- Make inquiries to the manufacturer about your USB portable audio player/USB mem ory.

This unit corresponds to the following.
USB MSC (Mass Storage Class) compliant portable audio player and memory
WMA, MP3 and AAC file playback
JPEG file playback

### iPod compatibility
This unit can control, listen to songs and view videos on an iPod.
For details about the supported iPod, refer to *iPod compatibility* on page 103.

### Hands-free phoning
Using Bluetooth adapter (e.g. CD BTB200), this unit realizes effortless hands free phoning with Bluetooth wireless technology.

### Bluetooth audio player compatibility
Using Bluetooth adapter (e.g. CD BTB200), you can control Bluetooth audio player featur ing Bluetooth wireless technology.

## About DivX
DivX is a compressed digital video format cre ated by the DivX® video codec from DivX, Inc. This unit can play DivX video files recorded on CD R/RW/ROM and DVD R/RW/ROM discs. Keeping the same terminology as DVD video, individual DivX video files are called “Titles”. When naming files/titles on a CD R/RW or a DVD R/RW disc prior to burning, keep in mind that by default they will be played in alphabeti cal order.
Official DivX® Certified product
Plays all versions of DivX® video (including DivX® 6) with standard playback of DivX® media files

## About the SAT RADIO READY mark
The SAT RADIO READY mark indicates that the Satellite Radio Tuner for Pioneer (i.e., XM tuner and Sirius satellite tuner which are sold separately) can be controlled by this unit. Please inquire to your dealer or nearest authorized Pioneer service station regarding the satellite radio tuner that can be connected to this unit. For satellite radio tuner operation, please refer to the satellite radio tuner owner’s manual.
- The system will use direct satellite to recei ver broadcasting technology to provide lis teners in their cars and at home with crystal clear sound seamlessly from coast to coast. Satellite radio will create and package over 100 channels of digital quality music, news, sports, talk and children’s programming. ■

## When an operation is prohibited

When you are watching a DVD and attempt to perform an operation, it may not be performed because of the programming on the disc. When this happens, the icon ⊘ appears on the screen.

- The icon ⊘ may not appear with certain discs. ■

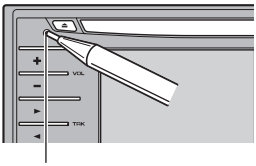
## Resetting the microprocessor

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

**Note**

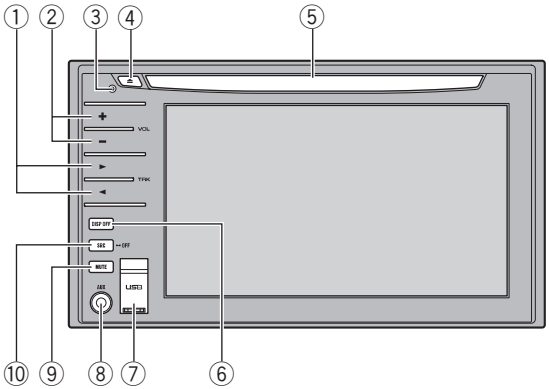
After completing connections or when you want to erase all memorized settings or return the unit to its initial (factory) settings, switch your engine ON or set the ignition switch to ACC ON before pressing **RESET**. ■

## Feature demo mode

The feature demo automatically starts when you select the source **Off**. The demo continues while the ignition switch is set to ACC or ON. To cancel the feature demo, press and hold **MUTE**. To restart the feature demo, press and hold **MUTE** again. Remember that if the fea ture demo continues operating when the car engine is turned off, it may drain battery power.

**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. ■




## Head unit

① **◄/► (TRK) buttons**
Press to do manual seek tuning, fast for ward, reverse and track search controls.

② **+/– (VOL) buttons**
Press to increase or decrease the volume.

③ **RESET button**
Press to return to the factory settings (initial settings).

④ **⏏ (eject) button**
Press to eject a disc from this unit.

⑤ **Disc loading slot**
Insert a disc to play.

⑥ **DISP OFF button**
Press to turn the information display on or off.

⑦ **USB port**
Use to connect a USB storage device and an iPod.
- When connecting, open up the USB con nector lid.
- Use an optional Pioneer USB cable (CD U50E) to connect the USB audio player/ USB memory to the USB port. Since the USB audio player/USB memory is pro jected forward from the unit, it is danger ous to connect directly.
  Do not use the unauthorized product.

⑧ **AUX1 input jack (3.5 mm stereo/video jack)**
Use to connect an auxiliary device.

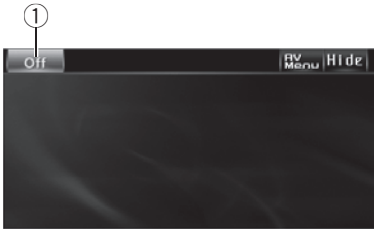
⑨ **MUTE button**
Press to turn off the sound. To turn on the sound, press again.

⑩ **SRC/OFF button**
Press to cycle through all the available sources. Press and hold to turn the source off. ■

## Optional remote control

*The remote control CD R55 is sold separately.*
For details concerning operations, see the re mote control manual. ■

## Power ON/OFF




① Source icon

### Turning the unit on

● **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.

● **When using the button, press SRC/OFF to turn the unit on.**

### 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 SRC/OFF and hold until the unit turns off.** ■

## Selecting a source

You can select a source you want to listen to. To switch to the DVD player, load a disc in the unit.

● **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.

- **Disc** Built in DVD player
- **Radio** Radio
- **M-CD** Multi CD player
- **TV** Television
- **AV** AV input
- **EXT-1** External unit 1
- **EXT-2** External unit 2
- **AUX-1** AUX 1
- **AUX-2** AUX 2
- **USB/iPod** USB/iPod
- **TEL** Bluetooth telephone
- **BT Audio** Bluetooth audio player
- **XM** XM tuner
- **SIRIUS** SIRIUS tuner
- **HD Radio** HD Radio tuner
- **RearView** Rear view camera
- **Off** Turn the unit off

■ When the source icon is not displayed, you can display it by touching the screen.
■ While operating the menu, you cannot select a source by touching the source icon.
■ To close source select menu, touch **ESC**.

● **When using the button, press SRC/OFF repeatedly to select a desired source.**

**Notes**

- In the following cases, the sound source will not change.
  When no unit corresponding to the se lected source is connected.
  When there is no disc or magazine in the player.
  When AUX (auxiliary input) is set to off (refer to page 50).
  When the AV (AV input) is not set to **Video** (refer to page 54).
- If the HD Radio tuner is connected to this unit, tuner source is skipped.
- In the following cases, **USB/iPod** icon will be changed.
  **USB** is displayed when USB storage device is connected.
  **iPod** is displayed when iPod is connected.
  **USB/iPod** is displayed when no device is connected.

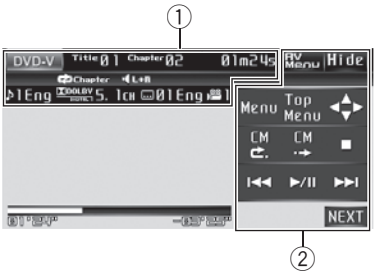
- AUX1 is set to **Video** by default. Set the AUX1 to **Off** when not in use (refer to *Switching the auxiliary setting* on page 50).
- Charging the portable audio player using car's DC power source while connecting it to AUX input may generate noise. In this case, stop charging.
- **RearView** (rear view camera) cannot be se lected by pressing **SRC/OFF**.
- Image from rear view camera can be dis played automatically when the appropriate setting is conducted. For details, refer to *Set ting for rear view camera (back up camera)* on page 55.
- External unit refers to a Pioneer product (such as ones available in the future) that, although incompatible as a source, enables control of basic functions with this unit. Two external units can be controlled with this unit. When two external units are connected, the external unit is automatically allocated to external unit 1 or external unit 2 by this unit.
- When this unit's blue/white lead is connected to the vehicle's auto antenna relay control terminal, the vehicle's antenna extends when this unit's source is turned on. To retract the antenna, turn the source off. ■

## Adjusting the volume

● **Press + or – to adjust the sound level.** ■

## Touch panel key basic operation

### Activating the touch panel keys



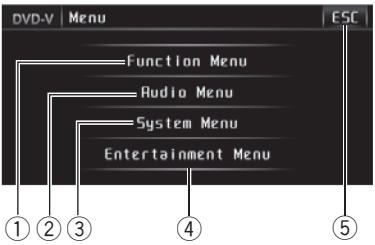

① **Information area**
Shows the various information depending on the source.

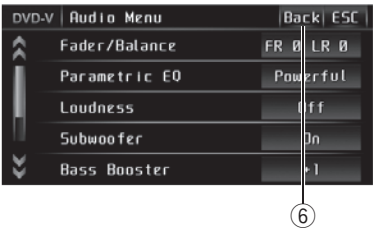
② **Touch panel keys**
Touch to do various operations.

**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 **NEXT**.
■ To return to the previous group of touch panel keys, touch **PREV**.

**2 Touch Hide to hide the touch panel keys.**
■ If you do not use the touch panel keys within 30 seconds, they will be hidden automatically when selecting video sources.

## Operating the menu




① **Function Menu key**
Touch to switch to the functions for each source.

② **Audio Menu key**
Touch to switch to the sound quality control menu.

③ **System Menu key**
Touch to switch to the setup functions menu.

④ **Entertainment Menu key**
Touch to switch to the entertainment setup menu.

⑤ **ESC key**
Touch to cancel the control mode of func tions.

⑥ **Back key**
Touch to return to the previous display.

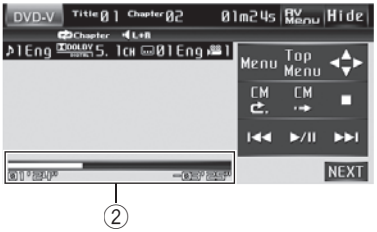
**1 Touch AV Menu to display Menu.**
The menu names are displayed and operable ones are highlighted.

- When **AV Menu** is not displayed, you can dis play it by touching the screen.

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

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

## Operating the scroll bar and the scrubber bar




① **Scroll bar**

② **Scrubber bar**

This unit features touch operation of scroll bar and scrubber bar.
If the menu has multiple pages or list has more than five selections, you can drag the scroll bar on the left side of the menu to view the hidden objects. For the disc and USB sto rage device operation, you can specify the playback point by dragging the scrubber bar.

### Scroll bar operation

● **If you see the scroll bar on the left side of the screen, drag upward or downward to view the hidden object.**

■ Touching ⌃ or ⌄ can also display the hidden object.

### Scrubber bar operation

This operation is available for the following sources:

- DVD video
- Video CD
- CD
- Compressed audio files (disc/USB)
- DivX

● **Drag the scrubber bar on the screen to specify the playback point.**

■ Drag operation is not available when the scrubber bar is grayout. ■

## Built-in DVD player basic operations

### Playing a disc

● **Insert a DVD (-R/-RW), CD (-R/-RW) into the disc loading slot.**

Playback will automatically start.

■ **Be sure to turn up the label side of a DVD (-R/-RW), CD (-R/-RW).**

■ After a DVD ( R/ RW), CD ( R/ RW) has been inserted, use touch panel keys to select the DVD player.

■ When a DVD ( R/ RW), CD ( R/ RW) is loaded in this unit, touch the source icon and then touch **Disc** to select **Disc**.

■ If you are playing a DVD or Video CD, a menu may appear. Refer to *Operating the DVD menu* on page 20 and *PBC playback* on page 24.

■ When the automatic playback function is on, this unit will cancel the DVD menu and automati cally start playback from the first chapter of the first title. Refer to *Automatic playback of DVDs* on page 22.

■ To eject a DVD ( R/ RW), CD ( R/ RW), press ⏏ (eject).

**Notes**

- The DVD player plays one, standard, 12 cm DVD ( R/ RW), CD ( R/ RW) at a time. Playing back an 8 cm disc is not possible with this unit.
- Do not insert anything other than a DVD ( R/ RW), CD ( R/ RW) into the disc loading slot.
- If bookmark function is on, DVD playback re sumes from the selected point. For more de tails, refer to *Resume playback (Bookmark)* on page 20.
- If a DVD ( R/ RW), CD ( R/ RW) contains a mix ture of various media file types such as DivX and MP3, you can switch between media file types to play. Refer to *Switching the media file type* on the next page.
- 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 ⏏ to eject the disc, and check the disc for damage before inserting it again.
- There is sometimes a delay between starting up disc playback and the sound being issued. When being read, **Format Read** is displayed.
- If an error message is displayed, refer to *Error messages* on page 96.

### Basic playback controls

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

| Key | What it does |
|---|---|
| ►/❚❚ | Starts playback, pauses a disc that's playing or restarts a paused disc. |
| ■ | Stops playback. |

| | |
|---|---|
| ⏮ | Skips to the start of the current track, chapter or file, then to previous tracks/chapters/files.<br>• Performs fast reverse by touching and holding ⏮. |
| ⏭ | Skips to the next track, chapter or file.<br>• Performs fast forward by touching and holding ⏭. |

**Note**

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

## Switching the media file type

When playing a disc containing a mixture of various media file types such as DivX and MP3, you can switch between media file types to play.

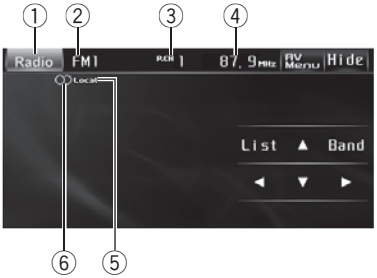
- This unit allows playback of the following media file type recorded on CD R/RW/ROM discs.
  - Audio data (CD DA)
  - Compressed audio files
  - DivX video files
  - JPEG picture files
- In case of DVD R/RW/ROM, this unit does not allow playback of audio data (CD DA) or JPEG picture files.

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

Touch **Media** repeatedly to switch between the following media file types:

**CD** (audio data (CD DA)) **ROM-Audio** (com pressed audio) **DivX** (DivX video files) **JPEG** (JPEG picture files) ■

## Listening to the radio




These are the basic steps necessary to operate the radio. More advanced tuner operation is explained starting in the following section. Refer to the next page.

① **Source icon**
Shows which source has been selected.

② **Band indicator**
Shows which band the radio is tuned to, AM or FM.

③ **Preset number indicator**
Shows which preset has been selected.

④ **Frequency indicator**
Shows the frequency to which the tuner is tuned.

⑤ **Local indicator**
Appears when local seek tuning is on.

⑥ **(stereo) indicator**
Appears when the selected frequency is being broadcast in stereo.

**1 Touch the source icon and then touch Radio to select the radio.**

**2 Touch Band to select a band.**
Touch **Band** until the desired band (**FM1**, **FM2**, **FM3** for FM or **AM**) is displayed.

**3 To perform manual tuning, briefly touch ◄ or ►.**
- You can also perform manual tuning by press ing ◄ or ► (**TRK**).

**4 To perform seek tuning, keep touching ◄ or ► for about one second and release.**
The tuner will scan the frequencies until a broadcast strong enough for good reception is found.
- You can cancel seek tuning by briefly touching either ◄ or ►.
- If you keep touching ◄ or ► you can skip sta tions. Seek tuning starts as soon as you release the key.
- You can also perform seek tuning by pressing and holding ◄ or ► (**TRK**).

**Note**

Listening AM radio while an iPod is charged from this unit may generate noise. In this case, discon nect the iPod from this unit.■

## Storing and recalling broadcast frequencies

You can easily store up to six broadcast fre quencies for later recall.
- Six stations for each band can be stored in memory.

**1 Touch List to display the preset list.**

**2 When you find a frequency that you want to store in memory keep touching one of preset tuning keys P1 to P6 until the beep sounds.**
The selected radio station frequency has been stored in memory.
The next time you touch the same preset tun ing key the radio station frequency is recalled from memory.
- When **P1** to **P6** are not displayed, you can dis play them by touching **List**.

■ You can also use ▲ and ▼ to recall radio station frequencies assigned to preset tuning keys **P1** to **P6**.

**3 Touch ESC to return to the ordinary display.** ■

## Introduction of advanced tuner operation

**1 Touch AV Menu and then touch Function Menu to display the function names.**
The function names are displayed and operable ones are highlighted.

**2 Touch ESC to return to the frequency display.**
■ To return to the previous display, touch **Back**. ■

## Storing the strongest broadcast frequencies

BSM (best stations memory) automatically stores the six strongest broadcast frequencies in the order of their signal strength.
- Storing broadcast frequencies with BSM may replace broadcast frequencies you have saved using **P1** to **P6**.

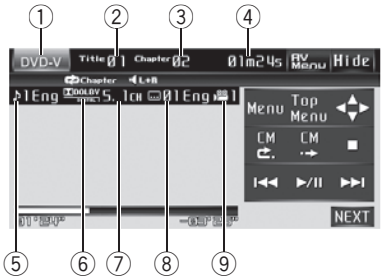
● **Touch BSM on the function menu to turn BSM on.**
**BSM** begins to flash. While **BSM** is flashing the six strongest broadcast frequencies will be stored under preset tuning keys **P1** to **P6** in order of their signal strength. When finished, **BSM** stops flashing.
■ To cancel the storage process, touch **BSM** again. ■

## Tuning in strong signals

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

● **Touch Local on the function menu to set the sensitivity.**
Touch **Local** repeatedly until the desired level of sensitivity appears in the display.
There are four levels of sensitivity for FM and two levels for AM:
FM: **Off** **Level1** **Level2** **Level3** **Level4**
AM: **Off** **Level1** **Level2**
Larger setting number is higher level. The highest level setting allows reception of only the strongest stations, while lower settings let you receive progressively weaker stations. ■

## Watching a DVD




These are the basic steps necessary to play a DVD with your DVD player. More advanced DVD operation is explained starting in the fol lowing section. Refer to page 23.

① **Source icon**
Shows which source has been selected.

② **Title number indicator**
Shows the title currently playing.

③ **Chapter number indicator**
Shows the chapter currently playing.

④ **Play time indicator**
Shows the elapsed playing time of the cur rent chapter.

⑤ **Audio language indicator**
Shows which audio language has been se lected.

⑥ **Digital format indicator**
Shows when a signal encoded in the corre sponding format is detected.

⑦ **Channel/sampling frequency/quantiza-tion bits**
Depending on the file format, some informa tion may not be displayed.

⑧ **Subtitle language indicator**
Shows which subtitle language has been selected.

⑨ **Viewing angle indicator**
Shows which viewing angle has been se lected.

**1 Touch the source icon and then touch Disc to select the DVD player.**
- If no disc is loaded in the unit, you cannot se lect **Disc** (DVD player). Insert a disc in the unit. (Refer to page 15.)
- 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.**
- Touch **Hide** to hide the touch panel keys.

**3 To skip back or forward to another chapter, touch ⏮ or ⏭.**
Touching ⏭ skips to the start of the next chapter. Touching ⏮ once skips to the start of the current chapter. Touching it again will skip to the previous chapter.
- You can also skip back or forward to another chapter by pressing ◀ or ▶ (**TRK**).

**4 To perform fast forward or reverse, keep touching ⏮ or ⏭.**
If you keep touching ⏮ or ⏭ for five sec onds, the icon ◀◀ or ▶▶ is highlighted. When this happens, fast reverse/fast forward continues even if you release ⏮ or ⏭. To resume playback at a desired point, touch ▶/❚❚.
- Fast forward/fast reverse may not be possible at certain locations on some discs. If this hap pens, normal playback automatically resumes.
- You can also perform fast reverse/fast forward by pressing and holding ◀ or ▶ (**TRK**). ■

## 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 sec onds. ■

## Operating the DVD menu

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

- You can display the menu by touching **Menu** or **Top Menu** 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.

### Using DVD menu direct touch control

This function allows you to operate the DVD menu by touching the menu item directly.

● **Touch the desired menu item on the DVD menu directly.**
▪ Depending on the contents of DVD discs, this function may not work properly. In this case, using touch panel keys operate the DVD menu.

### Using the touch panel keys

**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.
▪ To switch to the DVD menu direct touch con trol, touch **Touch**.

**2 Touch ▲, ▼, ◄ or ► to select the desired menu item.**

**3 Touch ↵.**
Playback starts from the selected menu item.
▪ The way to display the menu differs depending on the disc. ■

## Resume playback (Bookmark)

The Bookmark function lets you resume play back from a selected scene the next time the disc is loaded.

● **During playback, touch Bookmark at the point you want to resume playback next time.**
The selected scene will be bookmarked so that playback resumes from that point next time.
▪ To clear the bookmark on a disc, keep touch ing **Bookmark** during playback.
▪ You can also bookmark a disc by pressing and holding ⏏ at the point you want to bookmark. Next time you load the disc, playback will resume from the bookmarked point. Note that you can only bookmark one disc using this method. To clear the bookmark on a disc, press ⏏.
▪ You can bookmark up to six discs including the disc that is bookmarked using ⏏.
▪ The oldest bookmark is replaced by the new one. ■

## CM skip/CM back

This function skips a reproduced image for a specified time. If the currently playing disc contains commercials, it is possible to skip them.

● **To skip progressively backward or forward, touch CM or CM.**
Each time you touch CM or CM it changes steps in the following order:
**CM back**
5 sec. 15 sec. 30 sec. 1.0 min. 2.0 min. 3.0 min. 0 sec.
**CM skip**
30 sec. 1.0 min. 1.5 min. 2.0 min. 3.0 min. 5.0 min. 10.0 min. 0 sec. ■

## 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.
▪ With some discs, images may be unclear dur ing frame by frame playback. ■

## Slow motion playback

This lets you slow down playback speed.

● **Keep touching II► until ▪▪► is displayed during playback.**
The icon ▪▪► is displayed, forward slow motion playback begins.
▪ Touching ◄II or II► during slow motion play back, you can change the playback speed in four steps as follows:
1/16 1/8 1/4 1/2
▪ To return to normal playback, touch ►/II.

**Notes**

- There is no sound during slow motion play back.
- With some discs, images may be unclear dur ing slow motion playback.
- Reverse slow motion playback is not possi ble. ■

## Pausing playback

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

## Searching for the part you want to play

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

You can select **Title** (title), **Chapter** (chapter), **Time** (time) or **10key** (numeric keypad).

- Chapter search and time search are not possible when disc playback has been stopped.

**1 Touch Search.**

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

**3 Touch 0 to 9 to input the desired num- ber.**
▪ To cancel the inputted numbers, touch **C**.
▪ In the time search function, to select 1 hour 11 minutes, convert the time into 071 minutes 00 seconds and touch **0**, **7**, **1**, **0** and **0** in that order.

**4 Touch ↵.**
This starts playback from the selected part.

**Note**

With discs featuring a menu, you can also touch **Menu** or **Top Menu** and then make selections from the displayed menu. ■

## 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** it switches be tween audio systems.

**Notes**

- 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 **Setup**. For details, refer to *Set ting the audio language* on page 46.

- Only digital output of DTS audio is possible. If this unit's optical digital outputs are not con nected, DTS audio will not be output, so select an audio setting other than DTS.
- 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 Subtitle during playback.**
Each time you touch **Subtitle** it switches be tween subtitle languages.

**Notes**

- With some DVDs, switching between subtitle languages may only be possible using a menu display.
- You can also switch between subtitle lan guages using **Setup**. For details, refer to *Set ting the subtitle language* on page 46.
- Touching **Subtitle** 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, the angle icon is dis played. Turn angle icon display on or off using **Setup**. For details, refer to *Setting the angle icon display* on page 47.

● **Touch Angle during playback of a scene shot from multiple angles.**

**Note**

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

## Return to the specified scene

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

● **Touch Return to return to the specified scene.**
▪ If a specified scene has not been prepro grammed in DVD disc, this function is not possi ble. ■

## Automatic playback of DVDs

When a DVD disc with DVD menu is inserted, this unit will cancel the DVD menu automati cally and start playback from the first chapter of the first title.

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

● **Touch Auto Play to turn automatic play-back on.**
▪ To turn automatic playback off, touch **Auto Play** again.
▪ When the automatic playback is on, you can not operate repeating play of DVD disc (refer to *Repeating play* on the next page). ■

## Introduction of advanced DVD operation

**1 Touch AV Menu and then touch Function Menu to display the function names.**
The function names are displayed and operable ones are highlighted.

**2 Touch ESC to return to the playback display.**
■ To return to the previous display, touch **Back**. ■

## Repeating play

There are three repeat play ranges for DVD playback.

● **Touch Repeat on the function menu to select the repeat range.**
- **Disc** Play through the current disc
- **Chapter** Repeat the current chapter
- **Title** Repeat the current title

■ If you perform chapter search or fast forward/reverse, the repeat play range changes to **Disc**. ■

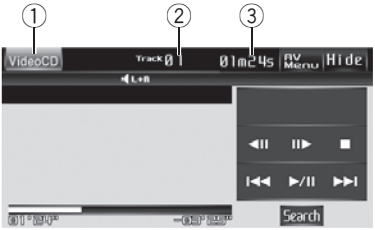
## Selecting audio output

When playing DVD video discs recorded with LPCM audio, you can switch the audio output.
- This function is not possible when disc playback has been stopped.
- If you select **Linear PCM**, when playing a disc recorded on a dual mono mode, you can operate this function. (Refer to *Setting for digital output* on page 49.)

● **Touch L/R Select on the function menu to select the audio output.**
Touch **L/R Select** repeatedly until the desired audio output appears in the display.
- **L+R** left and right
- **Left** left
- **Right** right
- **Mix** mixing left and right

■ Depending on the disc and the playback location on the disc, the function may not be selectable, indicating that operating this function is not possible. ■

## 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 in the following section. Refer to the next page.

① **Source icon**
Shows which source has been selected.

② **Track number indicator**
Shows the number of the track playing.

③ **Play time indicator**
Shows the elapsed playing time of the cur rent track.

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

- If no disc is loaded in the unit, you cannot se lect **Disc** (DVD player). Insert a disc in the unit. (Refer to page 15.)
- With a Video CD featuring the PBC (playback control) function, a menu is displayed. (Refer to *PBC playback* on this page.)

**2 Touch the screen to display the touch panel keys.**

- Touch **Hide** to hide the touch panel keys.

**3 To skip back or forward to another track, briefly touch ⏮ or ⏭.**

Touching ⏭ skips to the start of the next track. Touching ⏮ once skips to the start of the current track. Touching it again will skip to the previous track.

- During PBC playback, a menu may be dis played if you perform these operations.
- You can also skip back or forward to another track by pressing ◀ or ▶ (**TRK**).

**4 To perform fast forward or reverse, keep touching ⏮ or ⏭.**

If you keep touching ⏮ or ⏭ for five sec onds, the icon ◀◀ or ▶▶ is highlighted. When this happens, fast reverse/fast forward continues even if you release ⏮ or ⏭. To resume playback at a desired point, touch ▶/❚❚.

- Fast forward/fast reverse may not be possible at certain locations on some discs. If this hap pens, normal playback automatically resumes.
- You can also perform fast reverse/fast forward by pressing and holding ◀ or ▶ (**TRK**). ■

## PBC playback

During playback of Video CDs featuring PBC (Playback Control), **PBC ON** is displayed. You can operate PBC menu with **10Key**.

**1 When PBC menu is displayed, touch Search and then touch 10key.**

- Depending on the discs, the menu may be two or more pages long. In such case, touch ⏮ or ⏭ to display the next or previous menu.

**2 Touch 0 to 9 corresponding to a menu number and then touch ↵ to start play-back.**

Playback starts from the selected menu item.

**3 Touch ESC to hide the touch panel keys.**

**Notes**

- You can display the menu by touching **Return** during PBC playback. For details, refer to the instructions provided with the disc.
- PBC playback of Video CD cannot be can celed.

- During playback of Video CDs featuring PBC (Playback Control), **PBC ON**, search and time search functions cannot be used nor can you select the range for repeat play. ■

## 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.
■ With some discs, images may be unclear dur ing frame by frame playback. ■

## Slow motion playback

This lets you slow down playback speed.

● **Keep touching II► until ▪▪► is displayed during playback.**
The icon ▪▪► is displayed, forward slow motion playback begins.
■ Touching ◄II or II► during slow motion play back, you can change the playback speed in four steps as follows:
1/16 1/8 1/4 1/2
■ To return to normal playback, touch ►/II.

**Notes**

- There is no sound during slow motion play back.
- With some discs, images may be unclear dur ing slow motion playback.
- Reverse slow motion playback is not possi ble. ■

## Pausing playback

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

## 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 playback of Video CDs featuring PBC (playback control), this function can not be operated.
- Time search is not possible when disc play back has been stopped.

**1 Touch Search.**

**2 Touch Track (track), Time (time) or 10key (numeric keypad).**

**3 Touch 0 to 9 to input the desired num- ber.**
■ To cancel the inputted numbers, touch **C**.
■ In the time search function, to select 1 hour 11 minutes, convert the time into 071 minutes 00 seconds and touch **0**, **7**, **1**, **0** and **0** in that order.

**4 Touch ↵.**
This starts playback from the selected scene. ■

## Introduction of advanced Video CD operation

**1 Touch AV Menu and then touch Function Menu to display the function names.**
The function names are displayed and oper able ones are highlighted.

**2 Touch ESC to return to the playback dis- play.**
■ To return to the previous display, touch **Back**. ■

## Repeating play

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

- During playback of Video CDs featuring PBC (playback control), this function can not be operated.

● **Touch Repeat on the function menu to select the repeat range.**

- **Disc** Repeat the current disc
- **Track** Repeat the current track

■ If you perform track search or fast forward/reverse, the repeat play range changes to **Disc**. ■

## Selecting audio output

You can switch between stereo and monaural audio output.

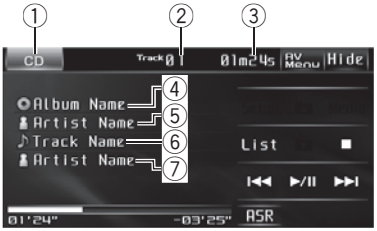
- This function is not possible when disc playback has been stopped.

● **Touch L/R Select on the function menu to select the audio output.**

Touch **L/R Select** repeatedly until the desired audio output appears in the display.

- **L+R** left and right
- **Left** left
- **Right** right
- **Mix** mixing left and right ■

## Listening to a CD




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

① **Source icon**
Shows which source has been selected.

② **Track number indicator**
Shows the number of the track playing.

③ **Play time indicator**
Shows the elapsed playing time of the cur rent track.

④ **Disc title indicator**
Shows the title of the currently playing disc only when playing CD TEXT discs.

⑤ **Disc artist name indicator**
Shows the artist name of the currently play ing disc only when playing CD TEXT disc.

⑥ **Track name list display**
Shows the track name list only when playing CD TEXT disc.

⑦ **Track artist name indicator**
Shows the artist name of the currently play ing track only when playing CD TEXT disc.

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

- Touch **Hide** to hide the touch panel keys.
- If no disc is loaded in the unit, you cannot se lect **Disc** (DVD player). Insert a disc in the unit. (Refer to page 15.)

**2 To skip back or forward to another track, briefly touch ⏮ or ⏭.**
Touching ⏭ skips to the start of the next track. Touching ⏮ once skips to the start of the current track. Touching it again will skip to the previous track.

- You can also skip back or forward to another track by pressing ◀ or ▶ (**TRK**).

**3 To perform fast forward or reverse, keep touching ⏮ or ⏭.**

- You can also perform fast reverse/fast forward by pressing and holding ◀ or ▶ (**TRK**).

**Note**

If specific information has not been recorded on a CD TEXT disc, **No xxxx** will be displayed (e.g., **No Name**). ■

## Selecting tracks from the track title list

Track title list lets you see the list of tracks on a disc and select one of them to play back. When playing a CD TEXT disc, track titles are displayed.

**1 Touch List.**

**2 Touch your favorite track title.**
That selection will begin to play.

**3 Touch ESC to return to the ordinary display.** ■

## Pausing playback

● **Touch ▶/II during playback.**

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

## Switching the media file type

If a disc contains a mixture of various media file types such as DivX and MP3, you can switch between media file types to play. Refer to *Switching the media file type* on page 16.

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

## Using advanced sound retriever

Advanced sound retriever function automati cally enhances compressed audio and re stores rich sound.

● **Touch ASR repeatedly to select the desired setting.**
**Off** (off) **ASR1** **ASR2**
▪ **ASR2** is more effective than **ASR1**.

**Note**

When you use this unit with a multi channel pro cessor (DEQ P8000) and switch the advanced sound retriever function to **ASR1** or **ASR2**, the vo lume will become slightly lower. The volume will become much lower for **ASR2** than it will for **ASR1**. Take care when you increase the volume for **ASR2** and then switch to **Off**, because the vo lume will suddenly seem much louder. ■

## Introduction of advanced CD operation

**1 Touch AV Menu and then touch Function Menu to display the function names.**
The function names are displayed and oper able ones are highlighted.

**2 Touch ESC to return to the playback display.**
▪ To return to the previous display, touch **Back**. ■

## Repeating play

There are two repeat play ranges for the CD playback: **Track** (track repeat) and **Disc** (disc repeat).

● **Touch Repeat on the function menu to select the repeat range.**
- **Disc** Repeat the current disc
- **Track** Repeat the current track

▪ If you perform track search or fast forward/re verse, the repeat play range changes to **Disc**.
▪ When playing discs with compressed audio and audio data (CD DA), repeat play performs within the currently playing data type even if **Disc** is selected. ■

## Playing tracks in random order

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

● **Touch Random on the function menu to turn random play on.**
Tracks play in a random order.
▪ To turn random play off, touch **Random** again. ■

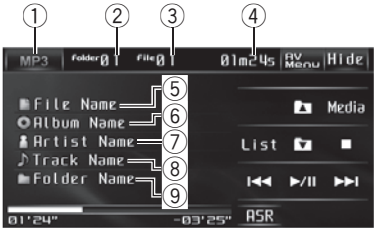
## Scanning tracks of a CD

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

**1 Touch Scan on the function menu to turn scan play on.**
The first 10 seconds of each track is played.

**2 When you find the desired track touch Scan again.**
▪ After scanning of a CD is finished, normal playback of the tracks will begin again. ■

## Listening to compressed audio




These are the basic steps necessary to play a compressed audio with your DVD player. More advanced compressed audio operation is ex plained starting in the following section. Refer to the next page.

① **Source icon**
Shows the media type currently playing.

② **Folder number indicator**
Shows the folder number currently playing.

③ **File number indicator**
Shows the file number currently playing.

④ **Play time indicator**
Shows the elapsed playing time of the cur rent file.

⑤ **File name indicator**
Shows the name of the currently playing file.

⑥ **Album title indicator**
Shows the title of the currently playing album.

⑦ **Artist name indicator**
Shows the artist name of the currently play ing file.

⑧ **Track title indicator**
Shows the name of the currently playing track.

⑨ **Folder name indicator**
Shows the name of the currently playing folder.

**1 Touch the source icon and then touch Disc to select the DVD player.**
- Touch **Hide** to hide the touch panel keys.
- If no disc is loaded in the unit, you cannot se lect **Disc** (DVD player). Insert a disc in the unit. (Refer to page 15.)

**2 Touch ▲ or ▼ to select a folder.**
- You cannot select a folder that does not have a compressed audio file recorded in it.

**3 To skip back or forward to another file, touch ⏮ or ⏭.**
Touching ⏭ skips to the start of the next file. Touching ⏮ once skips to the start of the current file. Touching it again will skip to the previous file.
- You can also skip back or forward to another file by pressing ◄ or ► (**TRK**).

**4 To perform fast forward or reverse, keep touching ⏮ or ⏭.**
- You can also perform fast reverse/fast forward by pressing and holding ◄ or ► (**TRK**).

**Notes**
- This DVD player can play back a compressed audio recorded on CD R/RW/ROM and DVD R/RW/ROM. (Please see the following section for files that can be played back. Refer to page 102)
- Playback is carried out in order of file number. Folders are skipped if they contain no files. (If folder **01** (ROOT) contains no files, playback commences with folder **02**.)
- 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 specific information has not been recorded on a compressed audio disc, **No xxxx** will be displayed (e.g., **No Name**).

- If the characters recorded on the disc are not compatible with this unit, those characters will not be displayed.
- Text information may not be correctly dis played depending on the recorded en vironment. ■

## Selecting files from the file name list

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

**1 Touch List.**

**2 Touch your favorite file name (or folder name).**
That selection will begin to play.
■ You can start playback throughout the se lected list by touching Play.
■ When you have selected a folder, a list of the names of the files (or the folders) in it can be viewed. Repeat this operation to select the de sired file name.
■ To return to the previous list (the folder one level higher), touch **Back**.
■ To return to folder **01** (ROOT), touch and hold **Back**. However, if folder **01** (ROOT) contains no files, playback commences with folder **02**.

**3 Touch ESC to return to the ordinary display.** ■

## Pausing playback

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

## Switching the media file type

If a disc contains a mixture of various media file types such as DivX and MP3, you can switch between media file types to play. Refer to *Switching the media file type* on page 16.

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

## Using advanced sound retriever

Advanced sound retriever function automati cally enhances compressed audio and re stores rich sound.

● **Touch ASR repeatedly to select the desired setting.**
**Off** (off) **ASR1** **ASR2**
■ **ASR2** is more effective than **ASR1**.

**Note**

When you use this unit with a multi channel pro cessor (DEQ P8000) and switch the advanced sound retriever function to **ASR1** or **ASR2**, the vo lume will become slightly lower. The volume will become much lower for **ASR2** than it will for **ASR1**. Take care when you increase the volume for **ASR2** and then switch to **Off**, because the vo lume will suddenly seem much louder. ■

## Introduction of advanced compressed audio operation

**1 Touch AV Menu and then touch Function Menu to display the function names.**
The function names are displayed and oper able ones are highlighted.

**2 Touch ESC to return to the playback display.**
■ To return to the previous display, touch **Back**. ■

## Repeating play

For compressed audio playback, there are three repeat play ranges: **Folder** (folder re peat), **File** (one track repeat) and **Disc** (repeat all tracks).

● **Touch Repeat on the function menu to select the repeat range.**

- **Disc** Repeat all tracks
- **File** Repeat the current track
- **Folder** Repeat the current folder

■ If you select another folder during repeat play, the repeat play range changes to **Disc**.

■ If you perform track search or fast forward/re verse during **File**, 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 compressed audio and audio data (CD DA), repeat play performs within the currently playing data type even if **Disc** is selected. ■

## Playing tracks in random order

Random play lets you play back tracks in a random order within the repeat range, **Folder** and **Disc**.

● **Touch Random on the function menu to turn random play on.**

Tracks will play in a random order within the previously selected repeat range.

■ To turn random play off, touch **Random** again. ■

## 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.

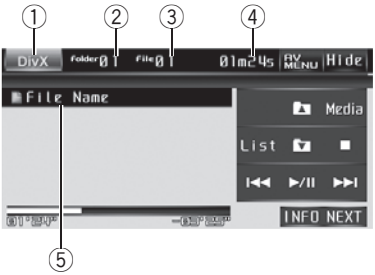
**1 Touch Scan on the function menu to turn scan play on.**

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

**2 When you find the desired track (or folder) touch Scan again.**

■ After track or folder scanning is finished, nor mal playback of the tracks will begin again. ■

## Watching a DivX/JPEG




These are the basic steps necessary to play a DivX/JPEG with your DVD player. More ad vanced DivX/JPEG operation is explained start ing in the following section. Refer to page 35.

① **Source icon**
Shows which source has been selected.

② **Folder number indicator**
Shows the folder number currently playing.

③ **File number indicator**
Shows the file number currently playing.

④ **Play time indicator**
Shows the elapsed playing time of the cur rent file.
- When playing a JPEG disc, play time in dicator does not appear.

⑤ **File name indicator**
Shows the name of the currently playing file.

**1 Touch the source icon and then touch Disc to select the DVD player.**
■ If no disc is loaded in the unit, you cannot se lect **Disc** (DVD player). Insert a disc in the unit. (Refer to page 15.)

**2 Touch the screen to display the touch panel keys.**
■ Touch **Hide** to hide the touch panel keys.

**3 Touch ▲ or ▼ to select a folder.**
■ You cannot select a folder that does not have a DivX/JPEG file recorded in it.

**4 To skip back or forward to another file, touch ⏮ or ⏭.**
Touching ⏭ skips to the start of the next file. Touching ⏮ once skips to the start of the current file. Touching it again will skip to the previous file.
■ You can also skip back or forward to another file by pressing ◀ or ▶ (**TRK**).

**5 To perform fast forward or reverse, keep touching ⏮ or ⏭.**
When DivX disc is playing, if you keep touch ing ⏮ or ⏭ for five seconds, the icon ◀◀ or ▶▶ is highlighted. When this happens, fast reverse/fast forward continues even if you re lease ⏮ or ⏭. To resume playback at a de sired point, touch ▶/❚❚.
■ 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.
■ You can also perform fast reverse/fast forward by pressing and holding ◀ or ▶ (**TRK**).
■ When playing JPEG file, performing this op eration enables you to search every 10 files.

**Notes**
- This DVD player can play back a DivX file re corded on CD R/RW/ROM and DVD R/RW/ ROM. (Please see the following section for files that can be played back. Refer to page 104.)
- This unit can play back a JPEG file recorded on CD R/RW/ROM or USB storage device. (Please see the following section for files that can be played back. Refer to page 104.)
- Playback is carried out in order of file number. Folders are skipped if they contain no files. (If folder **01** (ROOT) contains no files, playback commences with folder **02**.) ■

## Viewing a JPEG slideshow

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

| Key | What it does |
|---|---|
| ►/II | Starts the slideshow, pauses the slideshow or restarts a paused disc. |
| I◄◄ | Displays the previous picture. |
| ►►I | Displays the next picture. |
| ↻ | Rotates the displayed picture 90° clockwise. |

■

## Playing DivX® VOD content

Some DivX VOD (video on demand) content may only be playable a fixed number of times. When you load a disc containing this type of DivX VOD content, the remaining number of plays is shown on screen and you then have the option of playing the disc (thereby using up one of the remaining plays), or stopping. If you load a disc that contains expired DivX VOD content (for example, content that has zero remaining plays), **Rental Expired.** is displayed.

- If your DivX VOD content allows an unlimited number of plays, then you may load the disc into your player and play the content as often as you like, and no message will be displayed.
- Playable number of times is displayed with **Remaining Views:**.

**Important**

- In order to play DivX VOD content on this unit, you first need to register the unit with your DivX VOD content provider. About your registration code, refer to *Displaying your DivX® VOD registration code* on page 49.
- DivX VOD content is protected by a DRM (Digital Rights Management) system. This restricts playback of content to specific, registered devices.

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

## Selecting files from the file name list

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

**1 Touch List.**

**2 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 this operation to select the desired file name.
■ You can start playback throughout the selected list by touching Play.
■ To return to the previous list (the folder one level higher), touch **Back**.
■ To return to folder **01** (ROOT), touch and hold **Back**. However, if folder **01** (ROOT) contains no files, playback commences with folder **02**.

**3 Touch ESC to return to the ordinary display.** ■

## Displaying text information on DivX/JPEG disc

Text information recorded on a DivX/JPEG disc can be displayed.

● **Touch INFO.**
Touch **INFO** repeatedly to switch between the following settings:
**Folder Name** (folder name) **File Name** (file name)
▪ If the characters recorded on the disc are not compatible with this unit, those characters will not be displayed. ■

## Pausing playback

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

## Switching the media file type

If a disc contains a mixture of various media file types such as DivX and MP3, you can switch between media file types to play. Refer to *Switching the media file type* on page 16.

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

## Searching for the part you want to play

You can use the time search function to speci fy the time on a disc at which play starts.
- This function is available for DivX disc.
- This function is not possible when disc playback has been stopped.

**1 Touch Search.**

**2 Touch 0 to 9 to input the desired number.**
▪ To cancel the inputted numbers, touch **C**.
▪ To select 1 hour 11 minutes, convert the time into 071 minutes 00 seconds and touch **0**, **7**, **1**, **0** and **0** in that order.

**3 Touch ↵.**
This starts playback from the selected part. ■

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

You can switch audio language during play back when playing a file recorded with dialog in two or more languages.
- This function is available for DivX disc.

● **Touch Audio during playback.**
Each time you touch **Audio** it switches be tween audio systems.
▪ 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)

You can switch subtitle language during play back when playing file recorded with subtitles in one or more languages.
- This function is available for DivX disc.

● **Touch Subtitle during playback.**
Each time you touch **Subtitle** it switches be tween subtitle languages.
▪ Touching **Subtitle** during fast forward/fast re verse, pause or slow motion playback returns you to normal playback. ■

## Capture an image in JPEG files

Image data can be captured in order to use it for wallpaper. Images can be stored in this unit, and recall easily.
- This function is available for JPEG disc.

- This unit can store only one image data. Old image is overwitten with new one.

**1 Touch ►/II to pause the slideshow when the desired image is displayed.**

**2 Touch Capture.**
**Captureing the image** is displayed.

**3 When Do you save this image? is displayed, touch Yes.**
While storing the image to this unit, **Saving the image Don't switch off the battery.** is displayed. After stored completely, **Image saved** is displayed.
■ To cancel the strorage process, touch **No**. ■

## Introduction of advanced DivX/JPEG operation

**1 Touch AV Menu and then touch Function Menu to display the function names.**
The function names are displayed and oper able ones are highlighted.

**2 Touch ESC to return to the playback display.**
■ To return to the previous display, touch **Back**. ■

## Repeating play

For DivX video file playback, there are three re peat play ranges: **Folder** (folder repeat), **File** (file repeat) and **Disc** (repeat all files).
For JPEG picture file playback, there are two repeat play ranges: **Folder** (folder repeat) and **Disc** (repeat all files).

● **Touch Repeat on the function menu to select the repeat range.**
- **Disc** Repeat all files
- **Folder** Repeat the current folder
- **File** Repeat just the current file

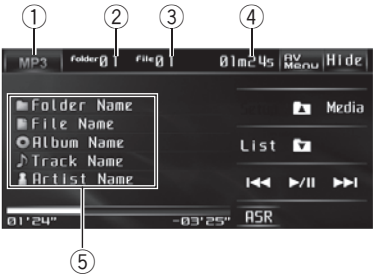
■ If you select another folder during repeat play, the repeat play range changes to **Disc**.
■ If you perform track search or fast forward/re verse during **File**, the repeat play range changes to **Folder**.
■ When **Folder** is selected, it is not possible to play back a subfolder of that folder. ■

## Playing tracks in random order

When playing a JPEG disc, random play lets you play back files in a random order within the repeat range, **Folder** and **Disc**.
- This function is available for JPEG disc.

● **Touch Random on the function menu to turn random play on.**
Files will play in a random order within the pre viously selected **Folder** or **Disc** ranges.
■ To turn random play off, touch **Random** again. ■

## Basic Operations




*For details about the supported device, refer to Portable audio player compatibility on page 9. Operation of JPEG in a USB storage device is the same as JPEG on a disc.*

① **Source icon**
Shows the media type currently playing.

② **Folder number indicator**
Shows the folder number currently playing.

③ **File number indicator**
Shows the file number currently playing.
- Last four digit can be displayed as the file number.

④ **Play time indicator**
Shows the elapsed playing time of the cur rent file.

⑤ **Song information**
Shows detailed information of currently playing song.

**1 Touch the source icon and then touch USB to select the USB.**
- When the source icon is not displayed, you can display it by touching the screen.
- Touch **Hide** to hide the touch panel keys.

**2 Touch ▲ or ▼ to select a folder.**
- You cannot select a folder that does not have a compressed audio file recorded in it.

**3 To skip back or forward to another file, touch ⏮ or ⏭.**
Touching ⏭ skips to the start of the next file. Touching ⏮ once skips to the start of the current file. Touching it again will skip to the previous file.
- You can also skip back or forward to another file by pressing ◀ or ▶ (**TRK**).

**4 To perform fast forward or reverse, keep touching ⏮ or ⏭.**
- You can also perform fast reverse/fast forward by pressing and holding ◀ or ▶ (**TRK**).

**Notes**
- Optimum performance of this unit may not be obtained depending on the connected USB portable audio player/USB memory.
- If folder 01 (ROOT) contains no files, playback commences with folder 02.
- If an error message or icon is displayed, refer to *Error messages* on page 96.
- When the USB portable audio player having battery charging function is connected to this unit and the ignition switch is set to ACC or ON, the battery is charged.
- You can disconnect the USB portable audio player/USB memory anytime you want to fin ish listening to it.
- If the characters recorded on the audio file are not compatible with this unit, those charac ters will not be displayed.
- Text information may not be correctly dis played depending on the recorded en vironment. ■

## Selecting files from the file name list

The operation is the same as that of the built in DVD player.
Refer to *Selecting files from the file name list* on page 30. ■

## Pausing compressed audio playback

● **Touch ►/II during playback.**

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

## Switching the media file type

The operation is the same as that of the built in DVD player.
If a USB portable audio player/USB memory contains compressed audio files and JPEG file, you can switch between media file types to play. Refer to *Switching the media file type* on page 16. ■

## Using advanced sound retriever

Advanced sound retriever function automati cally enhances compressed audio and re stores rich sound.

● **Touch ASR repeatedly to select the desired setting.**
**Off** (off) **ASR1** **ASR2**

■ **ASR2** is more effective than **ASR1**.

**Note**

When you use this unit with a multi channel pro cessor (DEQ P8000) and switch the advanced sound retriever function to **ASR1** or **ASR2**, the vo lume will become slightly lower. The volume will become much lower for **ASR2** than it will for **ASR1**. Take care when you increase the volume for **ASR2** and then switch to **Off**, because the vo lume will suddenly seem much louder. ■

## Introduction to advanced operations

**1 Touch AV Menu and then touch Function Menu to display the function names.**
The function names are displayed and oper able ones are highlighted.

**2 Touch ESC to return to the playback display.**

■ To return to the previous display, touch **Back**.

## Function and operation

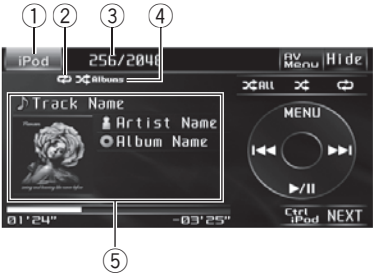
**Repeat**, **Random** and **Scan** operations are ba sically the same as that of the built in DVD player.

| Function name | Operation |
|---|---|
| **Repeat** | Refer to *Repeating play* on page 31. However, the repeat play ranges you can select are different from that of the built in DVD player. The repeat play ranges of the USB por table audio player/USB memory are:<br>• **File** Repeat just the current file<br>• **Folder** Repeat the current folder<br>• **All** Repeat all files |
| **Random** | Refer to *Playing tracks in random order* on page 31. |
| **Scan** | Refer to *Scanning folders and tracks* on page 31. |

**Notes**

- If you select another folder during repeat play, the repeat play range changes to **All**.
- If you perform track search or fast forward/re verse during **File**, the repeat play range changes to **Folder**.
- When **Folder** is selected, it is not possible to play back a subfolder of that folder.
- After file or folder scanning is finished, nor mal playback of the files begins again. ■

## Basic Operations




- *You can use this unit to control an iPod by using a cable (e.g., CD IU50), which is sold separately.*
- *If an iPod with video capabilities is con nected to this unit via interface cable (e.g. CD IU50V), which is sold separately, you can enjoy the video contents of the iPod as the* **iPod** *source. In this case, set the* **AUX1** *to* **iPod**. *Refer to Switching the auxiliary setting on page 50.*

① **Source icon**
Shows which source has been selected.

② **Repeat indicator**
Shows when repeat range is set to or .

③ **Song number indicator**
Up to 65 535 can be displayed as the song number.

④ **Shuffle indicator**
Shows when random play is set to **Songs** or **Albums**.

⑤ **Song information**
Shows detailed information of currently playing song.

**1 Touch the source icon and then touch iPod to select the iPod.**
While connected to this unit, **PIONEER**, **Accessory Attached** or ✓ (check mark) is displayed on the iPod.
■ When the source icon is not displayed, you can display it by touching the screen.
■ Touch **Hide** to hide the touch panel keys.
■ Before connecting the dock connector of this unit to the iPod, disconnect the headphones from the iPod.
■ Depending on the model of iPod or the data size in the iPod, there may be a delay to start play ing after connection.
■ After the iPod has been connected to this unit, use touch panel keys to select the iPod.
■ When removing the iPod from this unit, this unit is turned off.

**2 To skip back or forward to another song/video, touch ⏮ or ⏭.**
■ You can also skip back or forward to another song/video by pressing ◀ or ▶ (**TRK**).

**3 To perform fast forward or reverse, keep touching ⏮ or ⏭.**
When video is playing, if you keep touching ⏮ or ⏭ for five seconds, the icon ◀◀ or ▶▶ is highlighted. 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 pressing and holding ◀ or ▶ (**TRK**).

**4 When playing a file with chapter, touch ⏮ or ⏭ to select a chapter.**

**Notes**
- Read the precautions for iPod in the following section. Refer to page 104.
- If an error message or icon is displayed, refer to *Error messages* on page 96.
- Connect directly the dock connector cable to the iPod so that this unit works properly.
- When the ignition switch is set to ACC or ON, the iPod's battery is charged while the iPod is connected to this unit.
- While the iPod is connected to this unit, the iPod cannot be turned on or off.
- The iPod is turned off about two minutes after the ignition switch is set to OFF.
- If specific information is not recorded on the iPod, **No xxxx** will be displayed (e.g., **No Name**).

- If the characters recorded on the iPod are not compatible with this unit, those characters are not displayed.
- This unit can display the album art. While loading the album art information from iPod, functions may not work properly.
  List operation may not function promptly.
  Time display and actual time may not match.

  If many songs and album art have been stored in iPod, loading may take long time. ■

## Playing video

This unit can play video if an iPod with video capabilities is connected.

- To pause video playback, touch **MENU**.
- This unit can play back “Movies”, “Music vi deos”, “Video Podcast” and “TV show” which are downloaded from iTunes store.
- Change the video setting on the iPod so that the iPod can output the video to an ex ternal device, before you display the video screen.
- iPod video image is not displayed on the PAL rear monitor.
  When the control mode is set to iPod, it is possible to change the signal be tween PAL and NTSC from iPod.
  When the control mode is set to this unit, it is not possible to display the video on the PAL monitor.
  For about control mode, see the follow ing section. Refer to *Operating this unit's iPod function from your iPod* on page 41.
- For details, refer to the iPod's manuals.

**1 Touch MENU to display iPod menus.**

**2 Touch Video.**

■ To return to the music operation screen, touch **Music**.

**3 Play video on the iPod.** ■

## Browsing for a song/video

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

- If the characters recorded on the iPod are not compatible with this unit, those charac ters are not displayed.

### Searching songs/videos by category

**1 Touch MENU to display iPod menus.**

**2 Touch one of the categories in which you want to search for a song/video.**

**When browsing for a song**

- **Playlists** (playlists)
- **Artists** (artists)
- **Albums** (albums)
- **Songs** (songs)
- **Podcasts** (podcasts)
- **Genres** (genres)
- **Composers** (composers)
- **Audiobooks** (audiobooks)

**When browsing for a video**

- **Video Playlists** (video playlists)
- **Movies** (movies)
- **Music Videos** (music videos)
- **Video Podcasts** (video podcasts)
- **TV Shows** (TV shows)

**3 Touch a list title that you want to play.**

Repeat this operation until you find the de sired song/video.

■ You can start playback throughout the se lected list by touching Play.

■ To return to the previous menu, touch **Back**.

**4 Touch ESC to return to the ordinary dis-play.**

### Searching by alphabet in the list

**1 Select a category. (Refer to *Searching songs/videos by category* on the previous page.)**

**2 When a list for the selected category is displayed, touch ABC to switch to alphabet search mode.**
Alphabet search mode is displayed.

**3 Touch ◄ or ► to select the first letter you are looking for.**

**4 Touch ↵ to show entries starting with the letter you chose.**
While searching, **Searching** flashes. In this condition, touch panel key operation is not available.
- To refine the search with a different letter, touch **Cancel**.

**5 Touch a list title that you want to play.**
Repeat this operation until you find the de sired song/video.
- You can start playback throughout the se lected list by touching Play.
- To return to the previous menu, touch **Back**. ■

## Displaying text information on iPod Video

● **Touch INFO.**
**Song Title** (song title) **Artist Name** (artist name) **Album Title** (album title)
- If specific information is not recorded on the iPod, **No xxxx** will be displayed (e.g., **No Name**).
- If the characters recorded on the iPod are not compatible with this unit, those characters are not displayed. ■

## Pausing playback

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

## Using advanced sound retriever

Advanced sound retriever function automati cally enhances compressed audio and re stores rich sound.

● **Touch ASR repeatedly to select the desired setting.**
**Off** (off) **ASR1** **ASR2**
- **ASR2** is more effective than **ASR1**.

**Note**

When you use this unit with a multi channel pro cessor (DEQ P8000) and switch the advanced sound retriever function to **ASR1** or **ASR2**, the vo lume will become slightly lower. The volume will become much lower for **ASR2** than it will for **ASR1**. Take care when you increase the volume for **ASR2** and then switch to **Off**, because the vo lume will suddenly seem much louder. ■

## Repeating play

For playback of the songs/videos on the iPod, there are two repeat play ranges: (repeat one song/video) and (repeat all songs/vi deos in the list).
- While repeat play range is set to , you cannot select the other songs/videos. How ever, you can select other songs/videos while browsing.

● **Touch to select the repeat range.**
- Repeat just the current song/video
- Repeat all songs/videos in the selected list ■

## Playing songs/videos in a random order (shuffle)

For playback of songs/videos on the iPod, there are two random play methods: **Songs** (play back songs/videos in a random order) and **Albums** (play back albums in a random order).

● **Touch ⤮ to select the random play method.**
- **Songs** Play back songs/videos in the se lected list in random order.
- **Albums** Play back songs/videos from a randomly selected album in order.

■ To cancel the random play, touch ⤮ repeat edly until the shuffle icon is turned off. ■

## Playing all songs in a random order (shuffle all)

This method plays all songs on the iPod ran domly.

● **Touch ⤮ALL to turn shuffle all on.**
All songs on the iPod play randomly. ■

## Operating this unit's iPod function from your iPod

This unit's iPod function can be operated from your iPod. Sound can be heard from the car's speakers, and operation can be conducted from your iPod.
- While this function is in use, even if the ignition key is turned off, the iPod will not be turned off. To turn off power, operate the iPod.

**1 Touch Ctrl iPod to switch the control mode to iPod.**

■ Touching Ctrl Audio switches the control mode to this unit.

■ Even if this function is performed, track up/down, chapter up/down, fast forward/reverse and play/pause can be operated from this unit. Also, it is possible to display the text information while playing back video.

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

## Selecting songs from lists related to the currently playing song

Lists related to the currently playing song are displayed. You can select songs from the fol lowing lists.

Album list of currently playing artist
Song list of currently playing album
Album list of currently playing genre

- Depending on the number of files in the iPod, there may be a delay when displaying a list.

**1 Touch Link Play.**
Link play selection screen is displayed.

**2 Touch a desired mode.**
- **Artists** Plays songs related to the cur rently playing artist.
- **Albums** Plays songs related to the cur rently playing album.
- **Genres** Plays songs related to the cur rently playing genre.

While searching the song, **Link Play..** flashes. In this condition, touch panel key operation is not available.

■ If the related albums/songs are not found, **Not Found** is displayed.

**3 Display returns to the ordinary display and playback begin.** ■

## Changing audiobook speed

While listening to an audiobook on iPod, play back speed can be changed.

● **Touch AudioBooks to select your favorite setting.**

- **Faster** Playback faster than normal speed
- **Normal** Playback in normal speed
- **Slower** Playback slower than normal speed ■

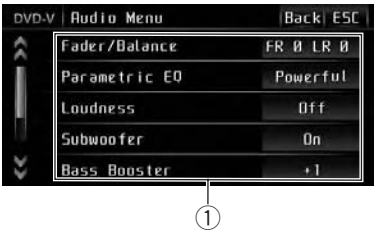
## Changing the screen mode

While video is playing, you can select the dis play mode between widescreen (16:9) and standard (4:3) screen.

● **Touch Wide Screen.**

■ To switch to standard (4:3) screen, touch **Wide Screen** again. ■

## Introduction of audio adjustments




① **Audio display**
Shows the audio adjustment status.

**Important**

If the multi channel processor (DEQ P8000) is connected to this unit, the audio function will be changed to the multi channel processor's audio menu. For details, refer to *Introduction of DSP ad justments* on page 83.

**1 Touch AV Menu and then touch Audio Menu to display the audio function names.**
The audio function names are displayed and operable ones are highlighted.
- When selecting FM as the source, you cannot switch to **Source Level Adjuster**.
- When selecting Bluetooth telephone as the source, you can only switch to **Fader/Balance**.

**2 Touch ESC to return to the ordinary display.**
- To return to the previous display, touch **Back**. ■

## Using balance adjustment

You can change the fader/balance setting so that it can provide the ideal listening environ ment in all occupied seats.

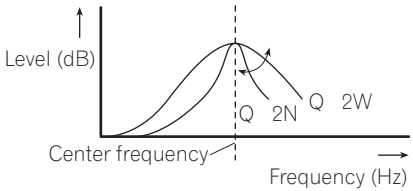
**1 Touch Fader/Balance on the audio function menu.**

**2 Touch ▲ or ▼ to adjust front/rear speaker balance.**
**Front:15** to **Rear:15** is displayed as the front/rear speaker balance moves from front to rear.
- **FR: 0/LR: 0** is the proper setting when only two speakers are used.
- When the rear output setting is **Subwoofer**, you cannot adjust front/rear speaker balance. Refer to *Setting the rear output and subwoofer controller* on page 50.

**3 Touch ◄ or ► to adjust left/right speaker balance.**
**Left:15** to **Right:15** is displayed as the left/right speaker balance moves from left to right. ■

## Using the equalizer

The equalizer lets you adjust the equalization to match the car's interior acoustic character istics as desired.
You can adjust the center frequency and the Q factor (curve characteristics) of each currently selected curve band (**Low**/**Mid**/**High**).
- The actual range of the adjustments are dif ferent depending on which equalizer curve is selected.




**1 Touch Parametric EQ on the audio function menu.**

**2 Touch ◄ or ► on EQ Select to select the equalizer.**

| Display | Equalizer curve |
|---|---|
| **Powerful** | Powerful |
| **Natural** | Natural |
| **Vocal** | Vocal |

| | |
|---|---|
| **Custom** | Custom |
| **Flat** | Flat |
| **Super Bass** | Super bass |

■ **Custom** is an adjusted equalizer curve that you create. If you make adjustments to an equali zer curve, the equalizer curve setting is memor ized in **Custom**.
■ When **Flat** is selected, no supplement or cor rection is made to the sound. This is useful to check the effect of the equalizer curves by switch ing alternatively between **Flat** and a set equalizer curve.

**3 Touch ◄ or ► on Band to select the equalizer band to adjust.**
**Low** (low) **Mid** (mid) **High** (high)

**4 Touch ◄ or ► on Frequency to select the frequency to adjust.**
Low: **40Hz 80Hz 100Hz 160Hz**
Mid: **200Hz 500Hz 1kHz 2kHz**
High: **3.15kHz 8kHz 10kHz 12.5kHz**

**5 Touch ◄ or ► on Q.Factor to select the Q factor.**
**2Wide 1Wide 1Narrow 2Narrow**

**6 Touch ▲ or ▼ to adjust the level of the equalizer band.**
**+12dB** to **-12dB** is displayed as the level is in creased or decreased.
■ You can then select another band and adjust the level. ■

## Adjusting loudness

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

**1 Touch Loudness on the audio function menu.**

**2 Touch ► to turn loudness on.**
■ To turn loudness off, touch ◄.

**3 Touch ◄ or ► to select a desired level.**
**Low** (low) **Mid** (mid) **High** (high) ■

## Using subwoofer output

This unit is equipped with a subwoofer output which can be turned on or off.
• When the subwoofer output is on, you can adjust the cut off frequency and the output level of the subwoofer.

**1 Touch Subwoofer on the audio function menu.**

**2 Touch ► next to Subwoofer to turn subwoofer output on.**
■ To turn subwoofer output off, touch ◄.

**3 Touch ◄ or ► next to Phase to select the phase of subwoofer output.**
Touch ► to select normal phase and **Normal** appears in the display. Touch ◄ to select re verse phase and **Reverse** appears in the dis play.

**4 Touch ◄ or ► next to Level to adjust the output level of the subwoofer.**
**+6** to **–24** is displayed as the level is increased or decreased.

**5 Touch ◄ or ► next to Frequency to select cut-off frequency.**
Each time you touch ◄ or ► selects cut off fre quencies in the following order:
**50Hz 63Hz 80Hz 100Hz 125Hz**
Only frequencies lower than those in the se lected range are outputted from the sub woofer. ■

## Boosting the bass

Bass boost function boosts the bass level of sound.

**1 Touch Bass Booster on the audio function menu.**

**2 Touch ◄ or ► to select a desired level.**
**0** to **+6** is displayed as the level is increased or decreased. ■

## Using the high pass filter

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

**1 Touch High Pass Filter on the audio function menu.**

**2 Touch ► next to High Pass Filter to turn high pass filter on.**

■ To turn high pass filter off, touch ◄.

**3 Touch ◄ or ► next to Frequency to select cut-off frequency.**

Each time you touch ◄ or ► selects cut off fre quencies in the following order:

**50Hz 63Hz 80Hz 100Hz 125Hz**

Only frequencies higher than those in the se lected range are output from the front or rear speakers. ■

## Adjusting source levels

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 volume level, which remains unchanged.

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

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

**3 Touch ◄ or ► to adjust the source volume.**

Each time you touch ◄ or ► it increases or de creases the source volume.

**+4** to **–4** is displayed as the source volume is increased or decreased.

### Notes

- The AM volume level can also be adjusted with source level adjustments.
- Video CD, CD, compressed audio and DivX are set to the same source level adjustment volume automatically.
- iPod and USB storage device are set to the same source level adjustment volume auto matically.
- External unit 1 and external unit 2 are set to the same source level adjustment volume automatically. ■

## Introduction of DVD setup adjustments

① **DVD setup menu display**
Shows the DVD setup menu names.

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

**1 Touch ■.**
**Setup** will be displayed instead of **Menu**.

**2 Touch Setup.**
The DVD setup function names are displayed.

**3 Touch ESC to return to the playback display.**
■ To return to the previous display, touch **Back**. ■

## 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 Subtitle Language on the DVD setup menu.**
A subtitle language menu is displayed.

**2 Touch the desired language.**
A subtitle language is set.
■ If you have selected **Others**, refer to *When you select* **Others** on this page.

**Notes**

- If the selected language is not recorded on the disc, the language specified on the disc is displayed.
- You can also switch the subtitle language by touching **Subtitle** during playback. (Refer to *Changing the subtitle language during play back (Multi subtitle)* on page 22.)
- Even if you use **Subtitle** during playback to switch the subtitle language, this does not af fect the settings here.

### When you select Others

When you select **Others**, a language code input display is shown. Please see the follow ing section to input the four digit code of the desired language. Refer to *Language code chart for DVD* on page 107.

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

**2 Touch ↵.** ■

## Setting the audio language

You can set the preferred audio language.

**1 Touch Audio Language on the DVD setup menu.**
An audio language menu is displayed.

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

**Notes**

- If the selected language is not recorded on the disc, the language specified on the disc is outputted.

- You can also switch the audio language by touching **Audio** during playback. (Refer to *Changing audio language during playback (Multi audio)* on page 21.)
- Even if you use **Audio** during playback to switch the audio language, this does not af fect the settings here. ■

## Setting the menu language

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

**1 Touch Menu Language on the DVD setup menu.**
A menu language menu is displayed.

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

**Note**

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

## Setting the angle icon display

You can set it up so that the angle icon ap pears on scenes where the angle can be switched.
- Initially, this function is set to on.

● **Touch Multi Angle on the DVD setup menu to turn angle icon display on.**
■ To turn the angle icon display off, touch **Multi Angle** again. ■

## 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 **V OUT**.
- When using a regular display, select either **Letter Box** or **Pan Scan**. Selecting **16 : 9** may result in an unnatural picture.
- If you select the TV aspect, the unit's dis play changes to the same setting.

● **Touch TV Aspect on the DVD setup menu to select the TV aspect.**
Touch **TV Aspect** repeatedly until the desired TV aspect appears in the display.
- **16 : 9** Wide screen picture (16:9) is dis played as it is (initial setting)
- **Letter Box** The picture is the shape of a letterbox with black bands at the top and bottom of the screen
- **Pan Scan** The picture is cut short at the right and left of the screen

**Notes**
- When playing discs that do not specify **Pan Scan**, playback is with **Letter Box** even if you select **Pan Scan** setting. Confirm whether the disc package bears the 16 : 9 LB mark.
- Some discs do not enable changing of the TV aspect. For details, refer to the disc's in structions. ■

## Setting the slide show interval

Slide show is possible when JPEG files are playing with this unit. In this setting, interval of slide show can be set.

● **Touch Slide Show on the DVD setup menu to select the slide show interval.**
Touch **Slide Show** repeatedly until the desired setting appears in the display.
- **10sec** JPEG images switch at intervals of 10 seconds
- **20sec** JPEG images switch at intervals of 20 seconds
- **30sec** JPEG images switch at intervals of 30 seconds

- **Manual** JPEG images can be switched manually■

## Setting the parental lock

Some DVD video discs let you use parental lock to restrict children from viewing violent and adult oriented scenes. You can set the par ental lock to your desired level.

- 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

You need to have registered a code number for playing back discs with parental lock.

**1 Touch Parental on the DVD setup menu.**

**2 Touch 0 to 9 to input a four digit code number.**

■ To cancel the inputted numbers, touch **C**.

**3 Touch ↵.**

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

**4 Touch any of 1 to 8 to select the desired level.**

The parental lock level is set.

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

**Notes**

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

### Changing the level

You can change the set parental lock level.

**1 Touch Parental on the DVD setup menu.**

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

**3 Touch ↵.**

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

■ If you input an incorrect code number, the icon ⊘ is displayed. Touch **C** and input the cor rect code number.

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

**4 Touch any of 1 to 8 to select the desired level.**

The new parental lock level is set.

### If you forget your code number

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

## Setting the DivX subtitle file

You can select whether to display DivX exter nal subtitles or not.

- The DivX subtitles will be displayed even when **Custom** is selected if no DivX exter nal subtitle files exist.

● **Touch DivX Subtitle on the DVD setup menu to select the desired subtitle setting.**

- **Original** Display the DivX subtitles

- **Custom** Display the DivX external subti tles

**Notes**

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

## Displaying your DivX® VOD registration code

In order to play DivX VOD (video on demand) content on this unit, you first need to register the unit with your DivX VOD content provider. You do this by generating a DivX VOD registra tion code, which you submit to your provider.

● **Touch DivX VOD on the DVD setup menu.**

Your 8 digit registration code is displayed.

- Make a note of the code as you will need it when you register with a DivX VOD provider. ■

## Setting for digital output

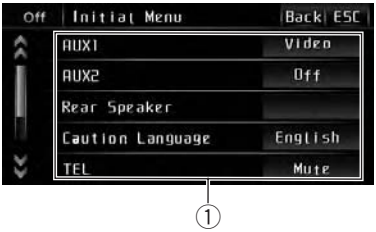
Audio which is outputted from digital output of this unit can be selected. Normally, set to **Stream**. If this unit's digital output is not used, there is no need to change settings.

- Selecting **Linear PCM** enables you to switch the output channel if playing the fol lowing type of discs. (Refer to *Selecting audio output* on page 23.)
  Dual mono mode DVD video discs

● **Touch Digital Output on the DVD setup menu to select the desired digital output setting.**

- **Stream** The Dolby Digital/DTS signal is output as it is (initial setting)
- **Linear PCM** The Dolby Digital/DTS signal is converted to and output as a linear PCM signal ■

## Adjusting initial settings




① **Function display**
Shows the function names.

Using the initial settings, you can customize various system settings to achieve optimal per formance from this unit.

**1 Touch the source icon and then touch Off to turn this unit off.**

**2 Touch the screen to display the touch panel keys.**

**3 Touch AV Menu and then touch Initial Menu to display the function names.**
The function names are displayed and oper able ones are highlighted.

**4 Touch ESC to return to the ordinary display.**
■ To return to the previous display, touch **Back**. ■

## Switching the auxiliary setting

Auxiliary devices connected to this unit can be activated individually. Set each AUX source to ON when using. For more information about connecting or using auxiliary devices, refer to *Using the AUX source* on page 58.

### Switching the auxiliary 1 setting

● **Touch AUX1 on the initial menu to select desired setting.**
- **Video** auxiliary video device connected with 4 pole mini plug cable (e.g., CD V150M)
- **Audio** auxiliary device connected with stereo mini plug cable
- **iPod** an iPod with video capabilities con nected with CD IU50V
- **Off** No auxiliary device is connected

### Switching the auxiliary 2 setting

● **Touch AUX2 on the initial menu to turn auxiliary 2 setting on.**
■ To turn auxiliary 2 setting off, touch **AUX2** again. ■

## Setting the rear output and subwoofer controller

This unit's rear output (rear speaker leads out put and RCA rear output) can be used for full range speaker (**Full**) or subwoofer (**Subwoofer**) connection. If you switch the rear output setting to **Subwoofer**, you can connect a rear speaker lead directly to a sub woofer without using an auxiliary amp. Initially, the unit is set for rear full range speak er connection (**Full**). When rear output is con nected to full range speakers (when **Full** is selected), you can connect other full range speakers (**Rear**) or a subwoofer (**Subwoofer**) to the RCA rear output.
- When the multi channel processor (DEQ P8000) is connected to this unit, you can not operate this function.

**1 Touch Rear Speaker on the initial menu.**

**2 Touch ◄ or ► next to Rear Speaker to switch the rear output setting.**
Touch ◄ to select full range speaker and **Full** appears in the display. Touch ► to select sub woofer and **Subwoofer** appears in the dis play.

■ When no subwoofer is connected to the rear output, select **Full** (full range speaker).
■ When a subwoofer is connected to the rear output, select **Subwoofer** (subwoofer).
■ When the rear output setting is **Subwoofer**, you cannot operate the following procedure.

**3 Touch ◄ or ► next to Preout to switch the subwoofer output or rear output.**
Touching ◄ or ► will switch between **Subwoofer** and **Rear** and that status will be displayed.

**Notes**

- Even if you change this setting, there is no output unless you turn the subwoofer output on (refer to *Using subwoofer output* on page 44).
- If you change this setting, subwoofer output in the audio menu will return to the factory settings.
- Both rear speaker lead outputs and RCA rear output are switched simultaneously in this setting. ■

## Changing languages for CAUTION

Some operations on this unit are prohibited while driving or needs to be paid a careful at tention when operating. In such case, a cau tion appears on the display. You can change the language of the cautions at this setting.

● **Touch Caution Language on the initial menu to select your desired language.**
Each time you touch **Caution Language** it se lects languages for CAUTION in the following order:
**English** (English) **Español** (Spanish)
**Français** (French) ■

## Switching the sound muting/attenuation

Sound from this system is muted or attenu ated automatically when the signal from the equipment with mute function is received.

- Sound from this system returns to normal when the muting or attenuation is can celed.

● **Touch TEL on the initial menu to select the setting.**
Touch **TEL** until the desired setting appears in the display.

- **Mute** Muting
- **ATT-20dB** Attenuation (**ATT-20dB** has a stronger effect than **ATT-10dB**)
- **ATT-10dB** Attenuation
- **Off** Turn the sound muting/attenuation off

**Notes**

- 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. ■

## Entering PIN code for Bluetooth wireless connection

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

- With some Bluetooth audio players, you may be required to enter the Bluetooth audio player PIN code in advance to set this unit for a connection.
- You can only operate this function when Bluetooth adapter (e.g. CD BTB200) is con nected to this unit.

**1 Touch PIN Code Input on the initial menu.**
PIN code input display appears.

**2 Touch 0 to 9 to input the PIN code of your Bluetooth audio player.**
- To cancel the inputted numbers, touch **C**.

**3 After inputting PIN code (up to 16 digits), touch ↵.**
The PIN code you entered is stored in this system. ■

## Correcting distorted sound

You can minimize distortion that may be caused by the equalizer curve settings. Setting an equalizer level high can cause distortion. If high sound is crippled or distorted, try switching to **Low**. Normally, leave the setting at **High** to ensure quality sound.
- Only when the multi channel processor (DEQ P8000) is connected to this unit, you can operate this function.

● **Touch Digital ATT on the initial menu to switch the digital attenuator setting.**
Touch **Digital ATT** repeatedly until the desired setting appears in the display.
- **High** High quality sound
- **Low** Minimize distortion sound ■

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

The auto time alignment is automatically adjusted for 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.
- Only when the multi channel processor (DEQ P8000) is connected to this unit, you can operate this function.

Please see the following section for Auto TA and EQ operation. Refer to *Auto TA and EQ (auto time alignment and auto equalizing)* on page 90 ■

## Resetting the audio functions

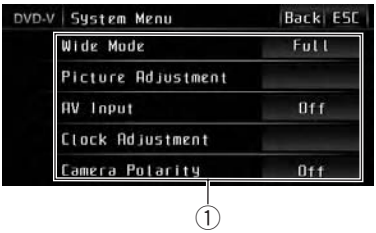
You can reset all audio functions except volume.
- Only when the multi channel processor (DEQ P8000) is connected to this unit, you can operate this function.

**1 Touch Audio Reset on the initial menu.**

**2 Touch Reset.**

**3 Touch Reset again to reset audio functions.**
- To cancel resetting the audio functions, touch **Cancel**. ■

## Introduction of system adjustments




① **System menu display**
Shows the system function names.

**1 Touch AV Menu and then touch System Menu to display the system function names.**
The system function names are displayed and operable ones are highlighted.

**2 Touch ESC to return to the display of each source.**
■ To return to the previous display, touch **Back**. ■

## Changing the wide screen mode

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

**1 Touch Wide Mode on the system menu.**

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

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

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

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

**Zoom (zoom)**
A 4:3 picture is enlarged in the same proportion both vertically and horizontally; ideal for a cinema 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 different.
- Remember that using the wide mode feature of this system for commercial or public viewing purposes may constitute an infringement on the author's rights protected by the Copyright Law.
- The video image will appear coarser when viewed in **Cinema** or **Zoom** mode. ■

## Changing the picture adjustment

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

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

**1 Touch Picture Adjustment on the system menu.**
The adjustment function names are displayed.

**2 Touch any of the following touch panel keys to select the function to be adjusted.**
To switch between groups of touch panel keys, touch **NEXT** or **PREV**.

- **Brightness** Adjusts the black intensity
- **Contrast** Adjusts the contrast
- **Color** Adjusts the color saturation
- **Hue** Adjusts the tone of color (red is em phasized or green is emphasized)
- **Dimmer** Adjust the brightness of display
- **Temperature** Adjusts the color tempera ture, resulting in a better white balance
- **Black Level** Emphasizes dark portion on images so that the difference between brightness and darkness becomes more distinct
- **Rear View**/**Source** Switch the picture ad justment modes

■ You cannot adjust the picture adjustment for rear view camera when **Camera Polarity** is set to **Off**. (Refer to *Setting for rear view camera (back up camera)* on the next page.)
■ If color system is set to PAL/PAL M/SECAM, you cannot adjust **Hue**.
■ With some rear view cameras, picture adjust ment may not be possible.

**3 Touch ◄ or ► to adjust the selected item.**
Each time you touch ◄ or ► it increases or de creases the level of selected item. **+24** to **–24** is displayed as the level is increased or de creased.

■ **Temperature** can be adjusted from **+3** to **–3**.
■ **Black Level** can be set on or off.

## Adjusting the dimmer

To prevent the display from being too bright at night, the display is automatically dimmed when the car's headlights are turned on. You can turn the dimmer on or off.

**1 Touch Picture Adjustment on the system menu.**
The adjustment function names are displayed.

**2 Touch NEXT.**

**3 Touch Dimmer.**

**4 Touch ◄ or ► to adjust the brightness.**
Each time you touch ◄ or ► it moves cursor towards the left or the right.
The level indicates the brightness of the screen being adjusted. The farther the cursor moves to the right, the brighter the screen becomes. ■

## Setting the AV input

You can switch the setting according to the connected component.

- Select **Video** to watch video of a connected component as **AV** source.
- Select **EXT-Video** to watch video of a con nected video unit as **EXT** source.
- Select **TV** to watch TV pictures from a con nected TV tuner as **TV** source.

● **Touch AV Input on the system menu to select the AV input setting.**

- **Off** No video component connected
- **Video** External video component (such as portable video player)
- **EXT-Video** External video unit (such as Pioneer products available in the future)
- **TV** TV tuner connected with RCA cable ■

## Setting the clock

Use these instructions to set the clock.

**1 Touch Clock Adjustment on the system menu.**

**2 Touch On/Off to turn the clock display on.**

■ To turn the clock display off, touch **On/Off** again.

**3 Touch ◄ or ► to select the segment of the clock display you wish to set.**

Each time you touch ◄ or ► it will select one segment of the clock display:
Hour Minute
As you select segments of the clock display the segment selected will be highlighted.

**4 Touch ▲ or ▼ to put a clock right.**

**Notes**

- You can match the clock to a time signal by touching **Just**.
  If **00** to **29**, the minutes are rounded down. (e.g., **10:18** becomes **10:00**.)
  If **30** to **59**, the minutes are rounded up. (e.g., **10:36** becomes **11:00**.)
- Even when the sources are off, the clock display appears on the display. ■

## Setting for rear view camera (back up camera)

**CAUTION**

**Pioneer recommends the use of a camera which outputs mirror reversed images, otherwise screen image may appear reversed.**

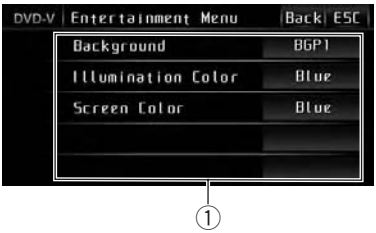
This unit features a function that automatically switches to the rear view camera video (**V IN** jack) when a rear view camera is installed on your vehicle. When the gear shift is in **REVERSE (R)** position, the video automatically switches to a rear view camera video. (For more details, consult your dealer.)

- After you set up the rear view camera setting, move the gear shift in **REVERSE (R)** and confirm if a rear view camera video can be shown on the display.
- If the display should be switched to a rear view camera video by error while you are driving forward, change the rear view camera setting.
- To end watching a rear view camera video and return to the source display, press and hold **MUTE**.
- Even while driving, rear view camera image can be displayed. To do this, touch **RearView** source icon. In this case, touch **RearView** again to turn off the rear view camera. For details, refer to *Selecting a source* on page 12.

● **Touch Camera Polarity on the system menu to select an appropriate setting.**

- **Battery** When the polarity of the connected lead is positive while the gear shift is in **REVERSE (R)** position
- **Ground** When the polarity of the connected lead is negative while the gear shift is in **REVERSE (R)** position
- **Off** When a rear view camera is not connected to this unit ■

## Introduction of entertainment settings




① **Entertainment menu display**
Shows the entertainment function names.

**1 Touch AV Menu and then touch Entertainment Menu to display the entertainment function names.**
The entertainment function names are displayed and operable ones are highlighted.

**2 Touch ESC to return to the display of each source.**
■ To return to the previous display, touch **Back**. ■

## Selecting the background display

You can switch background displays while listening to each source.

**1 Touch Background on the entertainment menu.**

**2 Touch the desired setting.**
You can select one from the following list.
- **BGP1** Background picture 1
- **BGP2** Background picture 2
- **BGP3** Background picture 3
- **BGP4** Background picture 4
- **BGV1** Background visual 1
- **BGV2** Background visual 2
- **BGV3** Background visual 3
- **Photo** JPEG image stored in this unit
- **AV Input** Video image from the external video unit that is connected to this unit

■ When the AV (AV input) is not set to **Video**, **AV Input** cannot be selected. (Refer to page 54.)
■ If no JPEG image has been stored in this unit, you cannot select **Photo**. To store JPEG image in this unit, see the following section. Refer to *Capture an image in JPEG files* on page 34. ■

## Selecting the illumination color

This unit is equipped with multiple color illumination.

### Direct selection from preset illumination color

You can select an illumination color from the color list.

**1 Touch Illumination Color on the entertainment menu.**

**2 Touch one of the color list.**
You can select one from the following list.
- **Blue** (blue)
- **Red** (red)
- **Amber** (amber)
- **Green** (green)
- **White** (white)
- **Scan** (scanning all colors)

**Notes**
- **Scan** setting cycles continuously through all the colors.
- While scanning all colors, touching **Scan** can stop the scanning. When this is done, you can select the displayed color as the background.

### Customizing the illumination color

**1 Touch Illumination Color on the entertainment menu.**

**2 Touch Custom to display the customizing menu.**

**3 Press +/– (VOL) to customize the color.**

**4 To store the customized color in memory, touch and hold one of preset keys (Memo1, Memo2 or Memo3) until the beep sounds.**
The customized color has been stored in mem ory.
The next time you touch the same preset key, the color is recalled from memory. ■

## Selecting the OSD color

You can change the OSD color.

**1 Touch Screen Color on the entertainment menu.**

**2 Touch one of the color list.**
You can select one from the following list.

- **Blue** (blue)
- **Red** (red)
- **Amber** (amber)
- **Green** (green)
- **White** (white) ■

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

If you feel that the touch panel keys on the screen deviate from the actual positions that respond to your touch, adjust the response po sitions of the touch panel. There are two ad justment methods: 4 point adjustment, in which you touch four corners of the screen; and 16 point adjustment, in which you make fine adjustments on the entire screen.

- Make sure to use the supplied pen for ad justment, and gently touch the screen. If you press the touch panel forcefully, the touch panel may be damaged. Do not use a sharp pointed tool such as ballpoint pen or a mechanical pen. Otherwise the screen is damaged.
- If touch panel adjustment cannot be per formed properly, consult your local Pioneer dealer.

**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 Press and hold ⏏ (eject).**

The 4 point touch panel adjustment screen ap pears.

**3 Touch each of the arrows on the four corners of the screen with the touch panel adjustment pen.**

■ To cancel the adjustment, press and hold **MUTE**.

**4 Press DISP OFF to complete the 4-point adjustment.**

The adjusted position data is saved.

■ Do not turn off the engine while saving the ad justed position data.

**5 Press DISP OFF to proceed to the 16-point adjustment.**

The 16 point touch panel adjustment screen appears.

■ To cancel the adjustment, press and hold **MUTE**.

**6 Gently touch the center of the + mark displayed on the screen with the touch panel adjustment pen.**

After you touch all the marks, the adjusted po sition data is saved.

■ Do not turn off the engine while saving the ad justed position data.

**7 Press and hold MUTE to complete the adjustment.** ■

## Using the AUX source

A separately sold auxiliary device such as VCR or portable device can be connected to this unit. When connected, auxiliary device is auto matically recognized as AUX source and as signed to **AUX**.

### About AUX connection method

You have two methods to connect auxiliary de vice to this unit.

### Mini pin plug cable (AUX-1)

*When connecting auxiliary device using a mini plug cable*

iPod and portable audio/video player can be connected to this unit via mini plug cable.

- If an iPod with video capabilities is con nected to this unit via 3.5 mm plug (4 pole) cable (e.g., CD V150M), you can enjoy the video contents of the iPod.
- It is possible to connect a portable audio/ video player by using a 3.5 mm plug (4 pole) to RCA cable, which is sold sepa rately. However, depending on the cable, re verse connection between red (right side audio) cable and yellow (video) cable is re quired. Otherwise, audio and video may not be correctly reproduced.

● **Insert the stereo mini plug into the AUX input jack on this unit.**
For more details, refer to *What's what* on page 11.

## IP-BUS-RCA interconnector (AUX-2)

*When connecting auxiliary device using an IP BUS RCA Interconnector (sold separately)*

● **Use an IP-BUS-RCA Interconnector such as the CD-RB20/CD-RB10 (sold separately) to connect this unit to auxiliary device featuring RCA output.**
For more details, refer to the IP BUS RCA Inter connector owner's manual.
■ You can only make this type of connection if the auxiliary device has RCA outputs.

## Selecting AUX as the source

● **Touch the source icon and then touch AUX-1/AUX-2 to select AUX as the source.**
■ If the auxiliary setting is not turned on, **AUX** cannot be selected. For more details, refer to *Switching the auxiliary setting* on page 50.

## Setting the AUX title

The title displayed for the **AUX** source can be changed.
• Each title can be up to 10 characters long.

**1 After you have selected AUX as the source, touch AV Menu and Function Menu and then touch Name Edit.**
■ When the touch panel keys are not displayed, you can display them by touching the screen.

**2 Touch ABC to select the desired character type.**
Touch **ABC** repeatedly to switch between the following character types:
Alphabet (upper case) Alphabet (lower case)
■ You can select to input numbers and symbols by touching **123**.

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

**4 Touch ◄ or ► to move the cursor.**

**5 Touch OK to store the entered title in memory.**

**6 Touch ESC to return to the ordinary display.** ■

# Using the external unit

External unit refers to a Pioneer product (such as ones available in the future) that, although incompatible as a source, enables control of basic functions with this unit. Two external units can be controlled with this unit. When two external units are connected, the external unit is automatically allocated to external unit 1 or external unit 2 by this unit.
Basic operations of the external unit are ex plained below. Allocated functions are differ ent depending on the connected external unit. For details concerning functions, refer to exter nal unit's owner's manual.

## Selecting the external unit as the source

● **Touch the source icon and then touch EXT-1/EXT-2 to select external unit as the source.**

## Basic operation

Functions allocated to the following opera tions are different depending on the con nected external unit. For details concerning functions, refer to the connected external unit's owner's manual.

● **Touch Band.**

● **Keep touching Band.**

● **Touch ◄ or ►.**

● **Keep touching ◄ or ►.**

● **Touch ▲ or ▼.**

## Using the functions allocated to 1 to 6 keys

**1 Touch NEXT.**

**2 Touch any of 1 to 6 to select a function.**

## Advanced operations

**1 Touch AV Menu and then touch Function Menu to display the function names.**

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

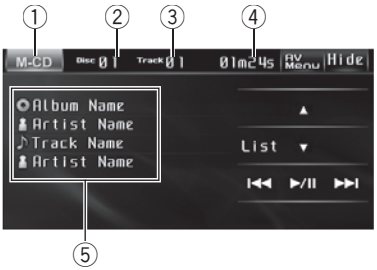
- **Function1** (function 1)
- **Function2** (function 2)
- **Function3** (function 3)
- **Function4** (function 4)
- **Auto/Manual** (auto/manual)

**2 Touch ESC to return to the ordinary display.**

■ To return to the previous display, touch **Back**. ■

# Multi-CD Player

## Listening to a CD




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

- Only functions described in this section can be operated.
- Only functions described in this manual are supported by 50 disc multi CD players.
- Only 12 disc title can be displayed even if the 50 disc multi CD player is connected to this unit.

① **Source icon**
Shows which source has been selected.

② **Disc number indicator**
Shows the number of the disc playing.

③ **Track number indicator**
Shows the number of the track playing.

④ **Play time indicator**
Shows the elapsed playing time of the cur rent track.

⑤ **Title indicator**
Shows the disc title and disc artist name of the currently playing disc only when playing CD TEXT discs.
Also, shows the track title and track artist name of the currently playing track only when playing CD TEXT discs.

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

**2 Touch ▲ or ▼ to select a disc.**

**3 To skip back or forward to another track, briefly touch ⏮ or ⏭.**
Touching ⏭ skips to the start of the next track. Touching ⏮ once skips to the start of the current track. Touching it again will skip to the previous track.
■ You can also skip back or forward to another track by pressing ◀ or ▶ (**TRK**).

**4 To perform fast forward or reverse, keep touching ⏮ or ⏭.**
■ You can also perform fast reverse/fast forward by pressing and holding ◀ or ▶ (**TRK**).

**Notes**

- When multi CD player completes preparatory operations, **Ready** is displayed.
- If an error message is 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.

## Pausing CD playback

Pause lets you temporarily stop disc playback.

● **Touch ▶/II to turn pause on.**
Playback of the current track pauses.
■ To turn pause off, touch ▶/II again.

## Selecting discs from the disc title list

Disc title list lets you see the list of disc titles and select one of them to playback.

**1 Touch List to display the disc list.**

**2 Touch your favorite disc title (track title).**
■ To return to the disc list, touch **Back**.
■ If no title is entered for a disc, **No Title** is dis played.

**3 Touch ESC to return to the ordinary display.**

## Introduction to advanced operations

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

**1 Touch AV Menu and then touch Function Menu to display the function names.**
The function names are displayed and oper able ones are highlighted.

**2 Touch ESC to return to the playback display.**
- To return to the previous display, touch **Back**.

### Function and operation

**Repeat**, **Random** and **Scan** operations are ba sically the same as that of the built in DVD player.

| Function name | Operation |
|---|---|
| **Repeat** | Refer to *Repeating play* on page 28. However, the repeat play ranges you can select are different from that of the built in DVD player. The repeat play ranges of the multi CD player are:<br>• **Multi-CD** Repeat all discs in the multi CD player<br>• **Track** Repeat just the current track<br>• **Disc** Repeat the current disc |
| **Random** | Refer to *Playing tracks in random order* on page 28. |
| **Scan** | Refer to *Scanning tracks of a CD* on page 28.<br>While you are using **Disc**, the be ginning of each track on the se lected disc plays for about 10 seconds. When you are using **Multi-CD**, the beginning of the first track of each disc is played for about 10 seconds. |

**Notes**

- If you select other discs during repeat play, the repeat play range changes to **Multi-CD**.
- If you perform track search or fast forward/re verse during **Track**, the repeat play range changes to **Disc**.
- After track or disc scanning is finished, nor mal playback of the tracks begins again.
- If the multi CD player does not support COMP/DBE, you cannot operate this function.

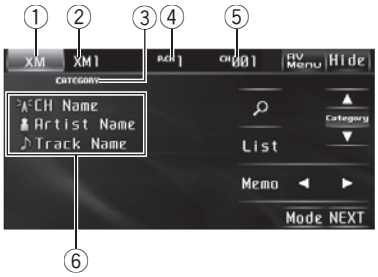
## Using compression and bass emphasis

*You can only use these functions with a multi CD player that supports them.*
COMP (compression) and DBE (dynamic bass emphasis) functions lets you adjust the sound playback quality of the multi CD player.

● **Touch Compression on the function menu to select your favorite setting.**
Touch **Compression** repeatedly to switch be tween the following settings:
**Off COMP1 COMP2 Off DBE 1 DBE 2**
- If the multi CD player does not support COMP/DBE, you cannot operate this function. ■

# XM tuner

## Listening to XM Satellite Radio




*You can use this unit to control an XM satellite digital tuner (GEX P920XM), which is sold separately.*
For details concerning operation, refer to the XM tuner's operation manuals. This section provides information on XM operations with this unit which differs from that described in the XM tuner's operation manual.

- This unit does not have the text scroll function.
- With this unit, you can operate one additional function: XM channel direct selection.

① **Source icon**
Shows which source has been selected.

② **XM band indicator**
Shows which band the tuner is tuned to.

③ **XM channel select setting indicator**
Shows what channel select setting has been selected.

④ **XM preset number indicator**
Shows which preset has been selected.

⑤ **XM channel number indicator**
Shows which channel has been selected.

⑥ **Detail information**
Shows the detail information of the broadcast channel currently being received.

**1 Touch the source icon and then touch XM to select the XM.**

**2 Touch Band to select an XM band.**
Touch **Band** repeatedly until the desired XM band is displayed, **XM1**, **XM2** or **XM3**.

**3 Touch ◄ or ► to select a desired channel.**
The channels move up or down step by step. Channels that cannot currently be selected are skipped, and the next channel is selected.
■ If you touch and hold ◄ or ►, you can increase or decrease the channel number continuously.
■ You can also select a channel by pressing ◄ or ► (**TRK**).
■ You can also perform tuning from a desired channel category. (Refer to *Selecting a channel in the channel category* on the next page.)

## Storing and recalling broadcast stations

You can easily store up to six broadcast stations for later recall.

- Six stations for each band can be stored in memory.

**1 Touch List to display the preset list.**

**2 When you find a station that you want to store in memory keep touching one of preset tuning keys P1 to P6 until the beep sounds.**
The selected station has been stored in memory.
The next time you touch the same preset tuning key **P1** to **P6** the station is recalled from memory.
■ When **P1** to **P6** are not displayed, you can display them by touching **List**.
■ You can also use ▲ and ▼ to recall stations assigned to preset tuning keys **P1** to **P6** when the **ALL-CH** mode is selected.

**3 Touch ESC to return to the ordinary display.**

## Switching the XM channel select mode

You have two methods for selecting a channel: by number and by category. When selecting by number, channels in any category can be selected. Select by category to narrow your search down to only channels in a particular category.

● **Touch Mode to select the desired channel select mode.**
Touch **Mode** repeatedly to switch between the following channel select modes:
**ALL-CH** (channel number select setting)
**Category** (channel category select setting)

### Selecting a channel in the channel category

**1 Touch Mode to select the channel category select mode.**
Touch **Mode** repeatedly to switch between the following channel select modes:
**ALL-CH** (channel number select setting)
**Category** (channel category select setting)

**2 Touch ▲ or ▼ to select the desired channel category.**

**3 Touch ◄ or ► to select the desired channel in the selected channel category.**

### Selecting a channel from the XM channel list display

The list content can be switched so you can search for the track you want to listen to not only by the channel name but also by the artist name or song title.
- This function is available for GEX P920XM.
- The channel list shows all the channels during the **ALL-CH** mode, and the channels included in the selected category during the **Category** mode. To switch the channel mode, touch **Mode**.

**1 Touch 🔎.**
XM channel list appears in the display.
Each touch of 🔎 changes the following set tings as follows:
Channel name Song title Artist name

**2 Touch the desired channel that you want to listen to.**
■ When the **Category** mode is selected, touch ▲ or ▼ to switch to another category.

## Selecting an XM channel directly

You can select an XM channel directly by en tering the desired channel number.

**1 Touch Direct.**

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

**3 Touch ↵.**
The XM channel of entered number is selected.

## Using the MyMix function

The MyMix function allows you to make the MyMix song playlist. When the song in the MyMix playlist is being broadcast on a station other than the one you are listening to, you will be alerted, and you can tune to the station to listen to that song.
- This function is available for GEX P920XM.
- A track itself is NOT downloaded BUT only the song title and the artist name are mem orized.

### Making the MyMix playlist

You can add a song that is being broadcast to the MyMix playlist. When it is added, the song title and its artist name is memorized to this unit. The MyMix function will start on the song that matches the song title and its artist name in the MyMix playlist.

**1 When a desired song is broadcast, touch and hold Memo.**
The song title and artist name of the song you are listening to are memorized, and a confir mation message appears.
■ The song title and artist name of up to 12 tracks can be memorized. Trying to save more than 12 tracks will overwrite old ones.
■ You cannot memorize the song title or the ar tist name when “ ” is displayed on the title information.

■ You cannot memorize the song title or the ar tist name of the channel 000.
■ It is possible that the memorized title is not displayed correctly.

**2 Touch OK to confirm.**
- To delete the song from the MyMix playlist, refer to *Deleting the song from the MyMix playlist* on this page.

### When the song in the MyMix playlist is broadcast

As soon as the song in the MyMix playlist starts broadcast on a different station, a mes sage is displayed. Touch **Yes** to switch to that station, and you can listen to that song.
- If you would rather not to tune to that sta tion, touch **No**.
- If an alert for the song in the MyMix playlist is set up to off, no alert will be provided even when the song is broadcast. Refer to *Setting up a song alert* on page 68.
- If there is slight difference between the memorized title and the title of the song being broadcast, no alert will be provided even though they are the same song.

### Setting up a song alert

You can set up an alert on or off by each song in the MyMix playlist. First, display the MyMix playlist and then change each alert setting. Set up an alert to on so you can receive the alert when the song is broadcast, or set it up to off to stop the alert for that song.

**1 Touch Memo Edit.**
The MyMix playlist is displayed.

**2 Touch the song title that you want to set up the alert to off.**
The check mark is removed, and the alert for that song is off.

### Deleting the song from the MyMix playlist

You can delete each song in the MyMix playlist.

**1 Touch Memo Edit.**
The MyMix playlist is displayed.

**2 Touch Delete next to the song title you want to delete.**
That song will be deleted from the MyMix playlist.
■ To delete all the songs in the MyMix playlist, touch **Delete All**.

**3 A message will appear asking you to confirm to delete it. Touch Yes.**
■ To cancel the deleting, touch **No**.

## Displaying the Radio ID

### Channel number select setting

If you select **CH000**, the ID code is displayed.

● **Touch ◄ or ► to select CH000.**

### Channel category select setting

**RADIO ID** is provided as a channel category for displaying the ID code.

● **Touch ▲ or ▼ to select RADIO ID from channel category.**
Display of the ID code repeats displaying **RADIO ID** and the ID code one after the other.
■ If you select another channel, display of the ID code is canceled.

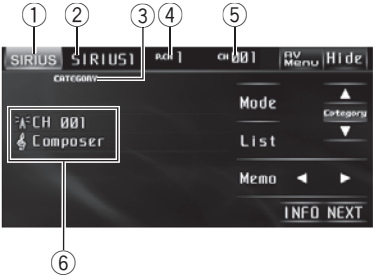
## Switching the XM display

- This function is available for GEX P910XM.

● **Touch INFO to switch the XM display.**
Channel name → Artist name/feature → Song/ program title → Additional information → Chan nel number ■

# SIRIUS Satellite Radio tuner

## Listening to SIRIUS Satellite Radio




*You can use this unit to control a SIRIUS Satellite Radio tuner, which is sold separately.*
When the SIRIUS tuner is used together with this unit, some operations differ slightly from those described in the SIRIUS operation manual. This manual provides information on these points. For all other information on using the SIRIUS tuner, please refer to the SIRIUS operation manual.

- This unit does not have the text scroll function.
- With this unit, you can operate one additional function: SIRIUS channel direct selection. Refer to *Selecting a SIRIUS channel directly* on the next page.

① **Source icon**
Shows which source has been selected.

② **SIRIUS band indicator**
Shows which band the tuner is tuned to.

③ **SIRIUS channel select setting indicator**
Shows what channel select setting has been selected.

④ **SIRIUS preset number indicator**
Shows which preset has been selected.

⑤ **SIRIUS channel number indicator**
Shows which channel has been selected.

⑥ **Detail information**
Shows the detail information of the broadcast channel currently being received.

**1 Touch the source icon and then touch SIRIUS to select SIRIUS.**

**2 Touch Band to select a band.**
Touch **Band** repeatedly until the desired SIRIUS band is displayed, **SIRIUS1**, **SIRIUS2** or **SIRIUS3**.

**3 Touch ◄ or ► to select a desired channel.**
The channels move up or down step by step. Channels that cannot currently be selected are skipped, and the next channel is selected.

- If you touch and hold ◄ or ►, you can increase or decrease the channel number continuously.
- You can also select a channel by pressing ◄ or ► (**TRK**).
- You can also perform tuning from a desired channel category. (Refer to *Selecting a channel in the channel category* on the next page.)
- It may take a few seconds before you can hear anything while this unit acquires and processes the satellite signal.

## Storing and recalling broadcast stations

You can easily store up to six broadcast stations for later recall.

- Six stations for each band can be stored in memory.
- Channels are stored and recalled on a broadcast station basis. This means that if the broadcast station you stored has been assigned to a different channel by SIRIUS, you can still recall the same broadcast station (though a different channel number may appear in the display).

**1 Touch List to display the preset list.**

**2 When you find a station that you want to store in memory keep touching one of preset tuning keys P1 to P6 until the beep sounds.**
The selected station has been stored in memory.
The next time you touch the same preset tuning key **P1** to **P6** the station is recalled from memory.

- When **P1** to **P6** are not displayed, you can display them by touching **List**.

■ You can also use ▲ and ▼ to recall stations assigned to preset tuning keys **P1** to **P6** when the **ALL-CH** mode is selected.

**3 Touch ESC to return to the ordinary display.**

## Selecting the SIRIUS channel select mode

You have two methods for selecting a channel: by number and by category. When selecting by number, channels in any category can be selected. Select by category to narrow your search down to only channels in a particular category.

● **Touch Mode to select the desired channel select mode.**
Touch **Mode** repeatedly to switch between the following channel select modes:
**ALL-CH** (channel number select setting)
**Category** (channel category select setting)

### Selecting a channel in the channel category

Channels are organized into various program categories, e.g. Rock, Classic, Jazz. You can specify channels by selecting the desired category.

**1 Touch Mode to select the channel category select mode.**
Touch **Mode** repeatedly to switch between the following channel select modes:
**ALL-CH** (channel number select setting)
**Category** (channel category select setting)

**2 Touch ▲ or ▼ to select the desired channel category.**

**3 Touch ◄ or ► to select the desired channel in the selected channel category.**

## Selecting a SIRIUS channel directly

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

**1 Touch Direct.**

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

**3 Touch ↵.**
The SIRIUS channel of entered number is selected.

## Using the MyMix function

The MyMix function allows you to make the MyMix song playlist. When the song in the MyMix playlist is being broadcast on a station other than the one you are listening to, you will be alerted, and you can tune to the station to listen to that song.
- This function is available for CD SB10/SIR PNR2/SIR PNR2C.
- A track itself is NOT downloaded BUT only the song title and the artist name are mem orized.

### Making the MyMix playlist

You can add a song that is being broadcast to the MyMix playlist. When it is added, the song title and its artist name is memorized to this unit. The MyMix function will start on the song that matches the song title and its artist name in the MyMix playlist.

● **When a desired song is broadcast, touch and hold Memo.**
The song title and artist name of the song you are listening to are memorized, and a confir mation message appears.
■ The song title and artist name of up to 10 tracks can be memorized. When you try to save more than 10 tracks, **Full** is displayed and that song being broadcast cannot be saved.
■ You cannot memorize the song title or the ar tist name of the channel 000.
■ It is possible that the memorized title is not displayed correctly.

### When the song in the MyMix playlist is broadcast

As soon as the memorized song starts broad cast on a different station, a song alert is dis played. Touch **Jump** to switch to that station, and you can listen to that track.

- If you would rather not to tune to that sta tion, touch **Stay**.
- If an alert for the song in the MyMix playlist is set up to off, no alert will be provided even when the song is broadcast. Refer to *Setting up a song alert* on this page.
- If there is slight difference between the memorized title and the title of the song being broadcast, no alert will be provided even though they are the same song.

### Turning the MyMix function on or off

You can turn the MyMix function off and stop this unit to alert you for all the songs in the MyMix playlist. To restart, turn this function on.

- The MyMix function is on at the default setting.

**1 Touch Memo Edit.**
The display is switched to the memo edit mode.

**2 Touch Alert Off to turn the MyMix function off.**
The MyMix function is now off.
■ To turn the MyMix function on, touch **Alert On**.

### Setting up a song alert

You can set up an alert on or off by each song in the MyMix playlist. First, display the MyMix playlist and then change each alert setting. Set up an alert to on so you can receive the alert when the song is broadcast, or set it up to off to stop the alert for that song.

**1 Touch Memo Edit.**
The display is switched to the memo edit mode.

**2 Touch ◄ or ► to select the song title that you want to turn the alert off.**

**3 Touch On/Off to turn the alert off.**
The alert for the song is turned off.

### Deleting the song from the MyMix playlist

You can delete each song in the MyMix playlist.

**1 Touch Memo Edit.**
The song title in the MyMix playlist is dis played.

**2 Touch ◄ or ► to select the song title that you want to delete.**

**3 Touch Delete.**

**4 A message will appear asking you to confirm to delete it. Touch Yes.**
The selected song is deleted.
■ To cancel the deleting, touch **No**.

## Using the Game Alert function

This system can alert you when games invol ving your favorite teams are about to start. To use this function you need in advance to set up a game alert for the teams.

- This function is available for CD SB10/SIR PNR2/SIR PNR2C.

### Selecting teams for Game Alert

**1 Touch Team Set.**

**2 Touch ◄ or ► on League to select a desired league.**
League names are switched in the display.

**3 Touch ◄ or ► on Team to select a desired team.**
Teams in the selected category are switched in the display.

**4 Touch On/Off to store the selected team in memory.**
**On** is displayed with the selected team, and the Game Alert function will start on that team.
■ To turn the Game Alert off of the selected team, touch **On/Off** again.
■ When you have already made 12 team selec tions, **Full** is displayed and additional team selec tion is not possible. In this case, first delete the team selection and then try again.

**5 Repeat these steps for selecting other teams.**
Up to 12 teams can be selected.

### Switching the Game Alert on or off

Once you made team selections, you need to turn the Game Alert function on.
- The Game Alert function is on at the default setting.

**1 Touch Team Set.**

**2 Touch Alert On to turn the Game Alert on.**
The Game Alert function is now on.
■ To turn the Game Alert function off, touch **Alert Off**.

### When the game of the selected team starts

When a game of the selected team is about to start (or is currently playing) on a different sta tion, a game alert is displayed. Touch **Jump** to switch to that station, and you can listen to that game.
- If you would rather not to tune to that sta tion, touch **Stay**.

### Displaying game information

If games of your selected teams are currently playing, you can display information of the games and tune to the broadcast channel.

**1 Touch Game INFO.**
The game information of your selected team is displayed.

**2 Touch PREV or NEXT to select a game.**
The game is displayd, followed by more de tailed game information.
- Game score will be updated automatically.

**3 Touch Tune To to switch to that station to listen to the game.**
■ If you have not made any team selections, **Not Set** is displayed.
■ When games involving your favorite teams are not currently playing, **No Game** is displayed.

## Displaying the Radio ID

If you select **CH000**, the ID code is displayed.

● **Touch ◄ or ► to select CH000.**
■ To select **CH000**, set the channel select setting to **ALL-CH**. About the channel select setting, refer to *Selecting the SIRIUS channel select mode* on page 67.

## Switching the SIRIUS display

- This function is available for SIR PNR1.

● **Touch INFO to switch the SIRIUS display.**

Channel name  Artist name/feature  Song/ program title  Channel category

## Using Instant Replay function

Following functions can be operated during the Instant Replay mode.
- To use this function, Pioneer SIRIUS bus in terface (e.g. CD SB10) is required.
- To use this function, SIRIUS plug and play unit with Instant Replay Function is re quired.
- For details, refer to SIRIUS plug and play unit's manuals.

● **Touch Instant Replay.**
Instant Replay mode is deiplayed. Now, Instant Replay mode can be performed.
■ In the following conditions, tuner exits from the Instant Replay mode.
When **Live** is touched
When another source is selected

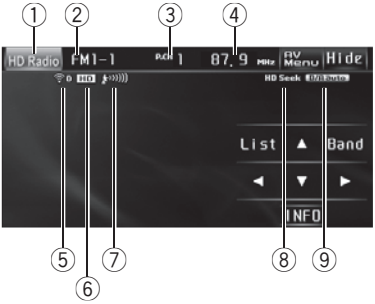
● **Select a track**
Touch ◄ or ►.

● **Fast forward or reverse**
Touch and hold ◄ or ► for about one second and release.

● **Pause and play**
Touch ►/II. ■

# HD Radio™ tuner

## Listening to HD Radio




*You can use this unit to control an HD Radio tuner (GEX P10HD), which is sold separately.* For details concerning operation, refer to the HD Radio tuner's operation manual.

① **Source icon**
Shows which source has been selected.

② **Band indicator**
Shows which band the radio is tuned to, AM or FM.

③ **Preset number indicator**
Shows which preset has been selected.

④ **Frequency indicator**
Shows the frequency to which the tuner is tuned.

⑤ **(signal reception status) indicator**
When digital signal is received, is displayed. Otherwise, is displayed.

⑥ **HD (HD station) indicator**
Shows when the tuner is tuned to HD radio station.

⑦ **(radio field strength) indicator**
Shows the radio field strength.

⑧ **HD Seek/All Seek (seek mode) indicator**
Shows the seek mode status.

⑨ **D/A auto / Analog (reception mode) indicator**
Shows the setup value of reception mode.

**1 Touch the source icon and then touch HD Radio to select the HD Radio.**

**2 Touch Band to select a band.**
Touch **Band** until the desired band (**FM1**, **FM2**, **FM3** for FM or **AM**) is displayed.

**3 To perform manual tuning, briefly touch ◄ or ►.**
- You can also perform manual tuning by press ing ◄ or ► (**TRK**).

**4 To perform seek tuning, keep touching ◄ or ► for about one second and release.**
The tuner will scan the frequencies until a broadcast strong enough for good reception is found.
- You can cancel seek tuning by briefly touching either ◄ or ►.
- If you keep touching ◄ or ► you can skip sta tions. Seek tuning starts as soon as you release the key.
- You can also perform seek tuning by pressing and holding ◄ or ► (**TRK**).

## Storing and recalling broadcast frequencies

The operation is the same as that of the tuner. (Refer to *Storing and recalling broadcast fre quencies* on page 17.)

## Displaying text information

Desired information can be displayed.

● **Touch INFO repeatedly to switch between the following settings:**
Call sign  artist name  song title  program type

■ Only when the tuner has been tuned in to an HD Radio broadcasting, display can be changed.
■ When the tuner has been tuned in to an HD Radio broadcasting, default display is changed into station name instead of frequency.

## Introduction of advanced tuner operation

**1 Touch AV Menu and then touch Function Menu to display the function names.**
The function names are displayed and oper able ones are highlighted.

**2 Touch ESC to return to the frequency display.**
■ To return to the previous display, touch **Back**.

## Storing the strongest broadcast frequencies

The operation is the same as that of the tuner. (Refer to *Storing the strongest broadcast fre quencies* on page 18.)

## Tuning in strong signals

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

**1 Touch Local on the function menu.**

**2 Touch ► on Local to turn on.**
■ To turn off, touch ◄.

**3 Touch ◄ or ► on Level to select the desired level.**
**1 2 3 4**
Larger setting number is higher level. The highest level setting allows reception of only the strongest stations, while lower settings let you receive progressively weaker stations.

## Switching the seek mode

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

● **Touch Seek on the function menu to select your favorite setting.**
**All HD**

## Switching the reception mode

If a digital broadcast reception condition gets poor, this unit automatically switches to the analog broadcast of the same frequency level. If this function is set to **D/A Auto**, the tuner switches between digital broadcast and ana log broadcast automatically. If this function is **Analog**, reception will be conducted within an analog broadcast.

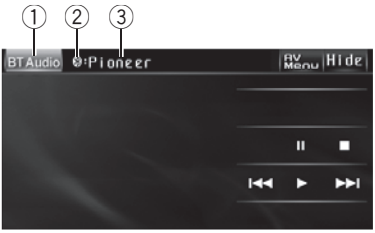
● **Touch Blending on the function menu to select your favorite setting.**
**D/A Auto Analog**

**Note**

If **Seek** is set to **HD** and **Blending** is set to **Analog**, the tuner can not receive broadcasts. In this case, the seek mode or reception mode is changed automatically as follows:
- When **Seek** is set to **HD**, if you switch **Blending** from **D/A Auto** to **Analog**, **Seek** is changed to **All**.
- When **Blending** is set to **Analog**, if you switch **Seek** from **All** to **HD**, **Blending** is changed to **D/A Auto**. ■

# Bluetooth Audio

## Basic Operations




- *If you connect a Bluetooth adapter (e.g. CD BTB200) to this unit, you can control Blue tooth audio players via Bluetooth wireless technology.*
- *In some countries, CD BTB200 is not sold on the market.*

**Important**

- Depending on the Bluetooth audio player con nected to this unit, the operations available with this unit are limited to the following two levels:
  A2DP profile (Advanced Audio Distribution Profile): Only playing back songs on your audio player is possible.
  AVRCP profile (Audio/Video Remote Con trol Profile): Playing back, pausing, select ing songs, etc., are possible.
- Since there are a number of Bluetooth audio players available on the market, operations with your Bluetooth audio player using this unit vary extensively. Refer to the instruction manual that came with your Bluetooth audio player as well as this manual while operating your player on this unit.
- Information about songs (e.g. the elapsed playing time, song title, song index, etc.) can not be displayed on this unit.
- While you are listening to songs on your Blue tooth audio player, refrain from using on your cellular phone as much as possible. If you use your cellular phone, the signal from your cel lular phone may cause noise on the song play back.
- When you are talking on a cellular phone con nected to this unit via Bluetooth wireless tech nology, song playback from your Bluetooth audio player connected to this unit is muted.
- Even if you are listening to a song on your Bluetooth audio player and you switch to an other source, song playback continues.

For details concerning operation, refer to the Bluetooth adapter's operation manual. This section provides brief information on Blue tooth audio player operations with this unit, which slightly differs or is abbreviated from that described in the Bluetooth adapter's op eration manual.

- Even though your audio player does not contain a Bluetooth module, you can still control it from this unit via Bluetooth wire less technology. To control your audio player using this unit, connect a product featuring Bluetooth wireless technology (available on the market) to your audio player and connect the Bluetooth adapter (e.g. CD BTB200) to this unit.

① **Source icon**
Shows which source has been selected.

② **Connection indicator**
Shows the Bluetooth wireless connection status.

③ **Device name**
Shows the device name of the connected Bluetooth audio player (or Bluetooth adap ter).

**1 Touch the source icon and then touch BT Audio to select the Bluetooth audio source.**

■ For this unit to control your Bluetooth audio player it needs to establish a Bluetooth wireless connection. (Refer to *Connecting a Bluetooth audio player* on the next page.)

**2 Touch ►.**
Playback starts.

**3 To skip back or forward to another track, briefly touch I◄◄ or ►►I.**
■ You can also skip back or forward to another track by pressing ◄ or ► (**TRK**).

**4 To perform fast forward or reverse, keep touching I◄◄ or ►►I.**
■ You can also perform fast reverse/fast forward by pressing and holding ◄ or ► (**TRK**).

**5 To stop playback, touch ■.**

## Pausing playback

● **Touch II during playback.**
■ To resume playback at the same point that you turned pause on, touch ►.

## Introduction to advanced operations

**1 Touch AV Menu and then touch Function Menu to display the function names.**
The function names are displayed and oper able ones are highlighted.

**2 Touch ESC to return to the ordinary display.**
■ To return to the previous display, touch **Back**.

## Connecting a Bluetooth audio player

● **Touch Connection Open on the function menu to turn the connection open on.**
**Connection Waiting** is displayed. This unit is now on standby for connection from Bluetooth audio player.
If your Bluetooth audio player is set ready for Bluetooth wireless connection, connection to this unit is automatically established.

**Note**

Before you can use audio players you may need to enter the PIN code into this unit. If your player requires a PIN code to establish a connection, look for the code on the player or in its accompa nying documentation. Refer to *Entering PIN code for Bluetooth wireless connection* on page 51.

## Disconnecting a Bluetooth audio player

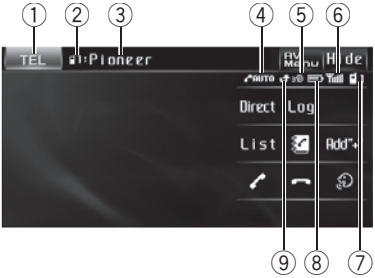
● **Touch Disconnect on the function menu.**
After the disconnection is completed, **No Connection** is displayed.

## Displaying BD (Bluetooth Device) information

● **Touch Device Information on the function menu to display the BD address.**
Various information regarding the Bluetooth wireless technology are displayed.
- **Device Name** (device name of this system)
- **BD Address** (address of Bluetooth device)
- **System Version** (system version)
- **BT Module Version** (version of Bluetooth module) ■

# Bluetooth Telephone

## Basic Operations




- *If you use a Bluetooth adapter (e.g. CD BTB200), you can connect a cellular phone featuring Bluetooth wireless technology to this unit for hands free, wireless calls, even while driving.*
- *In some countries, CD BTB200 is not sold on the market.*

**Important**

- Since this unit is on standby to connect with your cellular phone via Bluetooth wireless technology, using this unit without running the engine can result in battery drainage.
- Advanced operations that require your attention such as dialing numbers on the monitor, using phone book, etc., are prohibited while you are driving. When you need to use these advanced operations, stop your vehicle in a safe place.

① **Source icon**
Shows which source has been selected.

② **User number indicator**
Shows the registration number of the cellular phone.

③ **Device name**
Shows the device name of the cellular phone.

④ **Automatic answering/Automatic rejecting indicator**
Shows when the automatic answering function is on (for more details, refer to *Setting automatic answering* on page 80).
Shows when the automatic rejecting function is on (for more details, refer to *Setting automatic rejecting* on page 80).

⑤ **Voice recognition indicator**
Shows when the voice recognition function is on (for more details, refer to *Voice recognition* on the next page).

⑥ **Signal level indicator**
Shows the signal strength of cellular phone.
- The level shown on the indicator may differ form the actual signal level.
- Depending on the cellular phones featuring Bluetooth wireless technology, radio field intensity is not available. In this case, the signal level indicator does not appear.
- If your cellular phone is out of service, ✕ is displayed.

⑦ **Telephone indicator**
Shows when a phone connection using Bluetooth wireless technology is established (for more details, refer to *Connecting a cellular phone* on page 76).
- While connecting automatically, telephone indicator is flashing.

⑧ **Battery strength indicator**
Shows the battery strength of cellular phone.
- The level shown on the indicator may differ from the actual battery strength.
- If the battery strength is not available, nothing is displayed in the battery strength indicator area.

⑨ **Incoming call notice indication**
Shows when an incoming call has been received and not checked yet.
- Incoming call notice is not displayed for calls made when your cellular phone is disconnected from this unit.

For details concerning operation, refer to the Bluetooth adapter's operation manual. This section provides brief information on the hands free phoning operations with this unit which slightly differs or is cut short from that described in the Bluetooth adapter's operation manual.
- This unit is not compatible with registration for guest phone.

- This unit does not have the name edit function of a Phone Book entry.

● **Touch the source icon and then touch TEL to select the telephone.**

**Note**

The equalizer curve for the phone source is fixed. When selecting the phone source, you cannot perform the operation in the following section. Refer to *Using the equalizer* on page 43.
When the multi channel processor is connected to this unit, you can operate the equalizer function even when selecting the phone source. Refer to *Recalling equalizer curves* on page 89.

## Setting up for hands-free phoning

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

**1 Connection**
For detailed instructions on connecting your phone to this unit via Bluetooth wireless technology, refer to *Connecting a cellular phone* on the next page.
■ Your phone should now be temporarily connected. However, to make best use of the technology, we recommend you register the phone to this unit.

**2 Registration**
To register your temporarily connected phone, refer to *Registering a connected cellular phone* on the next page.

**3 Volume adjustment**
Adjust the earpiece volume on your cellular phone for comfort. When adjusted, the volume level is recorded in this unit as the default setting.
■ Caller's voice volume and ring volume may vary depending on the type of cellular phone.
■ If the difference between the ring volume and caller's voice volume is big, overall volume level may become unstable.
■ Before disconnecting the cellular phone from this unit, make sure to adjust the volume to a proper level. If the volume is muted (zero level) on your cellular phone, the volume level of your cellular phone remains muted even after the cellular phone is disconnected.

## Making a phone call

### Voice recognition

**1 Touch to turn the voice recognition function on.**
Voice dial icon appears on the information bar. Voice recognition function is now ready.
■ To cancel the voice recognition function, touch again.

**2 Pronounce the name of your contact.**

## Taking a phone call

### Answering an incoming call

**1 When a call comes in, touch .**
■ You can also perform the same operation by pressing ◄ (**TRK**).
■ If private mode is selected on the cellular phone, hands free phoning may not be performed.

**2 To end the call, touch .**
■ You can also perform the same operation by pressing ► (**TRK**).

### Rejecting an incoming call

● **When a call comes in, touch .**
The call is rejected.
■ You can also perform the same operation by pressing ► (**TRK**).

### Answering a call waiting

**1 Touch to answer a call waiting.**
■ You can also perform the same operation by pressing ◄ (**TRK**).

**2 Touch to end all calls.**
■ The caller you have been talking to is now on hold. To end the call, both you and your caller need to hang up the phone.
■ While your callers hold the line, touching switches between callers.

■ You can also perform the same operation by pressing ► (**TRK**).

### Rejecting call waiting

● **Touch ⌐ to reject a call waiting.**
■ You can also perform the same operation by pressing ► (**TRK**).

## Introduction to advanced operations

**1 Touch AV Menu and then touch Function Menu to display the function names.**
The function names are displayed and oper able ones are highlighted.

**2 Touch ESC to return to the telephone standby display.**
■ To return to the previous display, touch **Back**.

## Connecting a cellular phone

### Searching for available cellular phones

**1 Touch Phone Connect on the function menu.**

**2 Touch Search to search for available cellular phones.**
While searching, **Searching** flashes. When available cellular phones featuring Bluetooth wireless technology are found, device name or **Name Not Found** (if names cannot be ob tained) is displayed.
■ If this unit fails to find any available cellular phones, **Not Found** is displayed.
■ You can display the BD address by touching **BD ADDR**. To return to the device name, touch **Phone Name**.

**3 Touch the device name you want to connect.**
While connecting, **Connecting** flashes. To complete the connection, check the device name (**Pioneer BT unit**) and enter the link code on your cellular phone.
■ Up to five peripheral cellular phones are dis played.
■ PIN code is set to **0000** as the default. You can change this code in the initial setting. Refer to *Entering PIN code for Bluetooth wireless con nection* on page 51.

### Using a cellular phone to initiate a connection

**1 Touch Phone Connect on the function menu.**

**2 Touch Connection Open.**
**Connection Waiting** flashes and the unit is now on standby for connection from a cellular phone.

**3 Use cellular phone to connect to this unit.**
■ To cancel this function, touch **Connection Open** again.
■ PIN code is set to **0000** as the default. You can change this code in the initial setting. Refer to *Entering PIN code for Bluetooth wireless con nection* on page 51.

## Disconnecting a cellular phone

**1 Touch Phone Connect on the function menu.**

**2 Touch Disconnect to disconnect the currently connected cellular phone from this unit.**
After disconnection is completed, **No Connection** is displayed.

## Registering a connected cellular phone

**1 Touch Phone Register on the function menu.**
Registration assignments for user phone 1, 2 and 3 appear on the display.

**2 Touch and hold one of the registration assignments to register the currently connected phone.**
If the registration is succeeded, the device name of the connected phone is displayed in the selected assignment.

■ If the assignment is empty, the device name is not displayed. If the assignment is already taken, the device name appears. To replace an assign ment with a new phone, first delete the current assignment. For more detailed instructions, see *Deleting a registered phone* on this page.
■ If the registration failed, device name of the connected phone is not displayed in the selected assignment. In this case, return to step 1 and try again.

## Deleting a registered phone

**1 Touch Phone Register on the function menu.**

**2 Touch Delete next to the device name you want to delete.**
A confirmation display appears. Touch **OK** to delete the phone.
■ To cancel deleting a registered phone, touch **Cancel**.

## Connecting to a registered cellular phone

### Connecting to a registered phone manually

**1 Touch Phone Connect on the function menu.**

**2 Touch Direct Connect.**

**3 Touch the device name you want to connect.**
While connecting, **Connecting** is flashing.
■ If connection fails, **Connection Error** is dis played.

### Connecting to a registered phone automatically

● **Touch Auto Connect on the function menu to turn the Automatic Connection function on.**
If your cellular phone is ready for Bluetooth wireless connection, connection to this unit is automatically established.
■ To turn automatic connection off, touch **Auto Connect** again.

## Using the phone book

### Transferring entries to the phone book

The Phone Book can hold a total of 500 en tries. 300 from User 1, 150 from User 2, and 50 from User 3.

**1 Touch Phone Book Transfer on the func- tion menu.**

**2 Touch Start to turn the Phone Book Transfer function on.**
The Phone Book Transfer is now on standby.

**3 Use the cellular phone to perform phone book transfer.**
Perform phone book transfer using the cellu lar phone. For detailed instructions, refer to the instruction manual that came with your cellular phone.
■ The display indicates how many entries have been transferred and the total number to be transferred.
■ To cancel the transferring process, touch **Stop**.

**4 When you are done transferring Phone Book entries, touch ESC.**

**Note**

When the phone book transfer is complete, the connection to your cellular phone is off. To use the Phone Book, connect to your cellular phone once again, referring to *Connecting to a registered cellular phone* on this page.

### Changing the phone book display order

● **Touch Phone Book Name View on the function menu to change the name view order.**
**Inverted** is displayed and the name view order is changed.
■ To change to the original order (**Original**), touch **Phone Book Name View** again.

### Calling a number in the phone book

**Important**

Be sure to park your vehicle and apply the park ing brake when performing this operation.

**1 Touch to display the Phone Book.**

**2 Touch ◄ or ► to select the first letter of the name you are looking for.**

**3 Touch Enter to show entries starting with the letter you chose.**
The display shows the first six Phone Book en tries starting with that letter (e.g. “Ben”, “Brian” and “Burt” when “B” is selected).
- To refine the search with a different letter, touch **Clear**.

**4 Touch a Phone Book entry you want to call.**
The display is switched to the Phone Book de tail display.

**5 Touch phone number of the Phone Book entry you want to call.**
If several phone numbers are entered to an entry, touch one you want to call.
The display returns to the normal display and the Phone Book entry you selected is dis played on the information bar.

**6 Touch to make a call.**
- For an international call, touch **Add “+”** to add **+** to the phone number.

**7 To end the call, touch .**

## Editing phone numbers

**Important**

Be sure to park your vehicle and apply the park ing brake when performing this operation.

You can edit the numbers of Phone Book en tries. Each phone number can be up to 24 di gits long.

**1 Touch to display the Phone Book.**

**2 Select a Phone Book entry you want to edit.**
Please see Steps 2 to 4 of the following section for how to do this. Refer to *Calling a number in the phone book* on the previous page.

**3 Touch Edit next to the phone number you want to edit.**
The display is changed to the Phone Book dial edit display.

**4 Touch 0 to 9 to input numbers.**
- For an international call, touch **Add “+”** to add **+** to the phone number.
- Touch **Clear** to delete the number. Touch and hold **Clear** to delete all the input numbers.

**5 Touch OK to store the new number.**

## Clearing a phone book entry

**Important**

Be sure to park your vehicle and apply the park ing brake when performing this operation.

**1 Touch to display the Phone Book.**

**2 Select a Phone Book entry you want to delete.**
Please see Steps 2 to 4 of the following section for how to do this. Refer to *Calling a number in the phone book* on the previous page.

**3 Touch Delete to delete the Phone Book entry.**
A confirmation display appears. Touch **Yes** to delete the entry.
- If you do not want to clear a Phone Book entry that you have selected, touch **No**.

# Using the call history

**Important**

Be sure to park your vehicle and apply the park ing brake when performing this operation.

The 6 most recent calls made (dialed), re ceived and missed, are stored in the Call His tory. You can browse the Call History and call numbers from it.

**1 Touch Log to display the Call History.**
Touching **Log** repeatedly switches between the following call histories:
**Missed Calls** (missed call) **Dialed Calls** (dia led call) **Received Calls** (received call)
- You can switch between phone number and name (if entered) by touching **ABC/123**.
- If no phone numbers have been stored in the selected list, nothing is displayed.

**2 Touch a phone number or name (if entered) you want to call.**
The display returns to the normal display and the phone number you selected is displayed on the information bar.

**3 Touch ✆ to make a call.**
■ For an international call, touch **Add "+"** to add **+** to the phone number.

**4 To end the call, touch ⌐.**

## Using preset numbers

**Important**
Be sure to park your vehicle and apply the park ing brake when performing this operation.

### Assigning preset numbers

Numbers that you dial frequently can be as signed to presets for quick recall.
You can assign up to 6 frequently called phone numbers to number presets.

**1 Select a desired phone number from the phone book or the call history. Or directly enter a desired phone number.**
To select a desired phone number from the Phone Book or the Call History, see the in structions explained in previous pages. To di rectly enter a desired phone number, please see the following section. Refer to *Making a call by entering phone number* on this page.
The display should now be the normal display and the selected phone number is displayed on the information bar.

**2 Touch List to display preset assignments.**
Preset assignments appear in the display (if not displayed yet).

**3 Keep touching one of preset assignments to store the phone number.**
The phone number you selected is stored in presets.
■ **No Data** is displayed for empty assignment.
Even if the assignment is taken, you can replace it to the new one by keeping touching the assign ment.

### Recalling preset numbers

**1 Touch List to display preset assignments.**
Preset assignments appear in the display (if not displayed yet).

**2 Touch one of preset assignments.**
The selected phone number should now be displayed on the information bar.

**3 Touch ✆ to make a call.**

**4 To end the call, touch ⌐.**

## Making a call by entering phone number

**Important**
Be sure to park your vehicle and apply the park ing brake when performing this operation.

**1 Touch Direct to display the direct dial display.**

**2 Touch 0 to 9 to input numbers.**
■ For an international call, touch **Add "+"** to add **+** to the phone number.
■ Touch **Clear** to delete the number. Touch and hold **Clear** to delete all the input numbers.
■ Up to 24 digits can be entered.
■ If you want to store the entered phone number to preset assignment, touch **Set** here. The display returns to the normal display and the phone num ber you entered is selected.

**3 When you completed entering the number, touch ✆ to make a call.**

**4 To end the call, touch ⌐.**

## Clearing memory

**1 Touch Clear Memory on the function menu.**

**2 Touch Clear next to the item you want to delete from the memory.**
Select from the following:
- **Phone Book** (phone book)
- **Dialed Calls** (dialed call history)
- **Received Calls** (received call history)
- **Missed Calls** (missed call history)

- **Dial Preset** (preset phone numbers)

After selecting a desired item, a confirmation display appears. Touch **OK** to delete the mem ory.

■ If you do not want to clear memory that you have selected, touch **Cancel**.

■ If you want to clear all the Phone Book, dia led/received/missed call history list and preset phone number, touch **Clear All**.

## Setting automatic answering

● **Touch Auto Answer on the function menu to turn the automatic answer on.**

■ To turn the automatic answer off, touch **Auto Answer** again.

## Setting automatic rejecting

● **Touch Refuse All Calls to turn the automatic call rejection on.**

■ To turn the automatic call rejection off, touch **Refuse All Calls** again.

## Switching the ring tone

● **Touch Ring Tone to turn the ring tone on.**

■ To turn the ring tone off, touch **Ring Tone** again.

## Echo canceling and noise reduction

● **Touch Echo Cancel to turn Echo Cancel function on.**

■ To turn echo canceling off, touch **Echo Cancel** again.

## Displaying BD (Bluetooth Device) address

### Displaying BD address of this system

● **Touch Device Information to display the BD address.**

Various information regarding the Bluetooth wireless technology are displayed.

- **Device Name** (device name of this system)
- **BD Address** (address of Bluetooth device)
- **System Version** (version of this unit's mi croprocessor)
- **BT Module Version** (version of Bluetooth module)

### Displaying BD address of your cellular phone

**1 Touch Phone Connect on the function menu.**

**2 Touch BD Address to display the BD address.**

12 digit hexadecimal string is displayed.

■ To return to the device name, touch **Phone Name**. ■

## TV tuner

**Important**

This manual describes analog TV tuner operation. If you are already using a Pioneer analog TV tuner, such as the GEX P5700TV, read this section. However, please read the important information below.

- Pioneer stopped selling analog TV tuners in the U.S. in 2006, and analog TV tuners are also no longer available in Canadian markets. Pioneer does not sell a digital TV tuner in the U.S. or in Canada.
- In the U.S., the switch from analog TV to digi tal TV broadcasting is planned for February 17, 2009.
- In Canada, the switch from analog TV to digi tal TV broadcasting is planned for August 31, 2011.
- THIS MEANS THAT AFTER THE DATES SPECI FIED ABOVE (SUBJECT TO CHANGE), YOU CAN NO LONGER USE THIS UNIT WITH AN ANALOG TV TUNER TO WATCH ALMOST ALL TV PROGRAMMING BROADCAST OVER THE AIR.

## Basic Operations

*You can use this unit to control a TV tuner (e.g. GEX P5700TV), which is sold separately.*
For details concerning operation, refer to the TV tuner's operation manual. This section pro vides information on TV operations with this unit, which differs from that described in the TV tuner's operation manual.

① **Source icon**
Shows which source has been selected.

② **Band indicator**
Shows which band the TV tuner is tuned to.

③ **Preset number indicator**
Shows which preset has been selected.

④ **Channel indicator**
Shows which channel the TV tuner is tuned.

**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, briefly touch ◄ or ►.**

■ You can also perform manual tuning by press ing ◄ or ► (**TRK**).

**5 To perform seek tuning, keep touching ◄ or ► for about one second and release.**
The tuner will scan the channels until a broad cast strong enough for good reception is found.
■ You can cancel seek tuning by briefly touching either ◄ or ►.
■ 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 pressing and holding ◄ or ► (**TRK**).

## Storing and recalling broadcast stations

You can easily store up to 12 broadcast sta tions for later recall.
- Six stations for each band can be stored in memory.

**1 Touch List to display the preset list.**

**2 When you find a station that you want to store in memory, keep touching one of preset tuning keys P01 to P12 until the beep sounds.**
The selected broadcast station has been stored in memory.
The next time you touch the same preset tun ing key the station is recalled from memory.
■ When **P01** to **P06** and **P07** to **P12** are not dis played, you can display them by touching **List**.
■ To switch between **P01** to **P06** and **P07** to **P12**, touch ▲ or ▼.

## Storing the strongest broadcast stations sequentially

**1 Touch AV Menu and then touch Function Menu to display the function names.**

**2 Touch BSSM on the function menu 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 **BSSM** again.

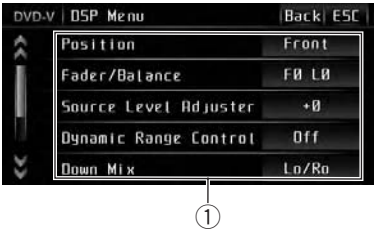
**3 Touch ESC to return to the frequency display.**
■ To return to the previous display, touch **Back**.

**Note**

Storing broadcast stations with BSSM may re place broadcast stations you have saved using **P01** to **P12**. ■

# Digital Signal Processor

## Introduction of DSP adjustments




*You can use this unit to control multi channel processor (DEQ P8000), which is sold sepa rately.*

① **DSP display**
Shows the DSP function names.

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

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

**1 Touch AV Menu and then touch DSP Menu to display the DSP function names.**

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

- To go to the next group of function names, touch ▼.
- To return to the previous group of function names, touch ▲.
- 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 canceled.
- When playing discs recorded with more than 96 kHz sampling frequency, audio is outputted from front speakers only.
- When selecting FM as the source, you cannot switch to **Source Level Adjuster**.
- When playing other than the DVD disc, you cannot switch to **Dynamic Range Control**.
- When neither **Front-L** nor **Front-R** is selected in **Position**, you cannot switch to **Time Alignment**.
- When both the center speaker and the rear speaker are set to OFF in the speaker setting, you cannot switch to **Dolby Pro Logic II**.

**2 Touch ESC to return to the ordinary display.**

- To return to the previous display, touch **Back**.

## 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 automati cally adjust the speaker output levels and in serts a delay time to match the number and position of occupied seats. When used in con junction with the SFC, the feature will make the sound image more natural and offer a pa noramic sound that envelops you.

**1 Touch Position on the DSP function menu.**

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

Touch one of these, ◄/►/▲/▼, to select a lis tening position as listed in the table.

| Key | Display | Position |
|---|---|---|
| ◄ | **Front-L** | Front seat left |
| ► | **Front-R** | Front seat right |
| ▲ | **Front** | Front seats |
| ▼ | **All** | All seats |

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

**Note**

When you make adjustments to the listening po sition, the speaker outputs are automatically set for appropriate levels. You can tailor the levels more precisely referring to *Adjusting the speaker output levels using a test tone* or *Adjusting the speaker output levels*.

## Using balance adjustment

You can change the fader/balance setting so that it can provide the ideal listening environ ment in all occupied seats.

**1 Touch Fader/Balance on the DSP function menu.**

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

Each time you touch ▲ or ▼ it moves the front/rear speaker balance towards the front or the rear.

**Front:25** to **Rear:25** is displayed as the front/rear speaker balance moves from front to rear.

- **FR: 0/LR: 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 ► it moves the left/right speaker balance towards the left or the right.

**Left:25** to **Right:25** is displayed as the left/right speaker balance moves from left to right.

## Using the sound field control

The SFC function creates the sensation of a live performance.

- The acoustics of different performance en vironments are not the same and depend on the extent and contour of space through which sound waves move and on how sounds bounce off the stage, walls, floors and ceilings. At a live performance you hear music in three stages: direct sound, early reflections, and late reflections, or re verberations. Those factors are programed into the SFC circuitry to recreate the acous tics of various performance settings.

● **Touch SFC on the DSP function menu to select the setting.**

Touch **SFC** until the desired setting appears in the display.

**Musical Drama Action Jazz Hall Club Off**

| Display | Setting |
|---|---|
| **Musical** | Musical |
| **Drama** | Drama |
| **Action** | Action |
| **Jazz** | Jazz |
| **Hall** | Hall |
| **Club** | Club |
| **Off** | Off |

**Note**

If the source is a 2 channel LPCM audio or a 2 channel Dolby Digital audio and you select SFC effects that are most applicable for 5.1 channel audio (i.e., **Musical**, **Drama** or **Action**), we re commend turning Dolby Pro Logic II on. On the other hand, when selecting SFC effects that are intended for use with 2 channel audio (i.e., **Jazz**, **Hall** or **Club**), we recommend turning Dolby Pro Logic II off.

## 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 volume level, which remains unchanged.

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

**2 Touch Source Level Adjuster on the DSP function menu.**

**3 Touch ◄ or ► to adjust the source volume.**
Each time you touch ◄ or ► it increases or de creases the source volume.
**+4** to **–4** is displayed as the source volume is increased or decreased.

**Notes**

- The AM volume level can also be adjusted with source level adjustments.
- Video CD, CD, compressed audio and DivX 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 (AV input) are set to the same source level adjustment volume automatically.

## 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.
- When playing other than the DVD disc, you cannot switch to **Dynamic Range Control**.

**1 Touch Dynamic Range Control on the DSP function menu.**

**2 Touch ► to turn the dynamic range control on.**

■ To turn dynamic range control off, touch ◄.

## Using the down-mix function

The down mix function allows you to play back multi channel audio in 2 channels.

**1 Touch Down Mix on the DSP function menu.**

**2 Touch ◄ or ► to select the desired level.**

- **Lo/Ro** Stereo mix the original audio that do not contain channel modes such as sur round components.
- **Lt/Rt** Down mix so that the surround components can be restored (decoded).

## Using the direct control

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

- All audio functions are locked out when the direct control is on except **VOL** and **Dolby Pro Logic II**.

**1 Touch Digital Direct on the DSP function menu.**

**2 Touch ► to turn the direct control on.**

■ To turn direct control off, touch ◄.

## Using the Dolby Pro Logic II

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

- Dolby Pro Logic II supports up to 48 kHz sampling rate stereo source and has no ef fect on other types of source.
- When both the center speaker and the rear speaker are set to OFF in the speaker set ting, you cannot switch to **Dolby Pro Logic II**.

**1 Touch Dolby Pro Logic II.**

**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 for when 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 with the fol lowing 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 gra dually adjust the sound field either towards the front or the rear.
- Center Width Control (**Center Width**) al lows center channel sounds to be posi tioned between the center speaker and the left/right speakers. It improves the left cen ter right stage presentation for both the dri ver and the front passenger.

**1 Touch Dolby Pro Logic II.**

**2 Touch Music and then touch Music Adjust.**

■ You can operate **Music Adjust** only when **Music** has been selected.

**3 Touch ▲ or ▼ to select Panorama (panorama).**

Each time you touch ▲ or ▼ selects the item in the following order:

**Panorama** (panorama) **Dimension** (dimen sion) **Center Width** (center width)

**4 Touch ► to turn the panorama control on.**

■ To turn the panorama control off, touch ◄.

**5 Touch ▼ to select Dimension and then touch ◄ or ► to adjust front/rear speaker balance.**

Each time you touch ◄ or ► it moves the sound towards the front or the rear.

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

**6 Touch ▼ to select Center Width and then touch ◄ or ► to adjust the center image.**

Each time you touch ◄ or ► it gradually spreads the center channel sound into the front left and right speakers over a range **0** to **7**.

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

## 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 Speaker Setting.**

**2 Touch ▲ or ▼ to select the speaker to be adjusted.**

Each time you touch ▲ or ▼ selects the speak er in the following order:

**Front** (front speakers) **Center** (center speak er) **Rear** (rear speakers) **Subwoofer** (sub woofer) **Phase** (subwoofer setting)

■ You can switch to **Phase** only when the sub woofer has been set to **On**.

**3 Touch ◄ or ► to select the correct size for the selected speaker.**

Each time you touch ◄ or ► selects the size in the following order:

**Off** (off) **Small** (small) **Large** (large)

■ You cannot select **Off**, when **Front** (front speakers) have been selected.
■ You can select **On** or **Off**, when **Subwoofer** (subwoofer) has been selected.
■ You can switch **Reverse** (reverse phase) or **Normal** (normal phase), when **Phase** (subwoofer setting) 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 Speaker Setting.**

**2 Touch ▲ or ▼ to select Subwoofer (subwoofer).**
Each time you touch ▲ or ▼ selects the speak er in the following order:
**Front** (front speakers) **Center** (center speak er) **Rear** (rear speakers) **Subwoofer** (sub woofer) **Phase** (subwoofer setting)

**3 Touch ► to turn subwoofer output on.**
■ To turn subwoofer output off, touch ◄.

**4 Touch ▼ and then touch ◄ or ► to select the phase of subwoofer output.**
Touch ► to select normal phase and **Normal** appears in the display. Touch ◄ to select re verse phase and **Reverse** appears in the dis play.

**Note**

When playing a 2 channel mono source with Dolby Pro Logic II turned on, there may be occa sions when the following will occur:
- No audio is outputted if the center speaker setting is **Small** or **Large** and no center speak er is installed.
- Audio is heard only over the center speaker if installed and the center speaker setting is **Small** or **Large**.

## Adjusting the speaker output levels

Speaker level can be adjusted finely by listen ing to an audio output. First, use test tone to adjust the approximate speaker level, and then use this function to adjust finely.

**1 Touch Speaker Level.**

**2 Touch ▲ or ▼ to select the speaker to be adjusted.**
Each time you touch ▲ or ▼ selects the speak er in the following order:
**Front-L** (front speaker left) **Center** (center speaker) **Front-R** (front speaker right) **Rear-R** (rear speaker right) **Rear-L** (rear speaker left) **Subwoofer** (subwoofer)
■ You cannot select speakers whose size is set to **Off**. (Refer to *Setting the speaker setting* on the previous page.)

**3 Touch ◄ or ► to adjust the speaker output level.**
Each time you touch ◄ or ► it increases or de creases the equalizer level. **+10** to **–10** is dis played as the level is increased or decreased.


**Note**

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

## Selecting a cross-over 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 repro duced through a **Large** speaker or subwoofer.

**1 Touch Cross Over.**

**2 Touch ▲ or ▼ to select the speaker to be adjusted.**
Each time you touch ▲ or ▼ selects the speak er in the following order:

**Front** (front speakers) **Center** (center speak er) **Rear** (rear speakers) **Subwoofer** (sub woofer)

**3 Touch ◄ or ► to select cross-over frequency.**
Each time you touch ◄ or ► selects cross over frequencies in the following order:
**63Hz 80Hz 100Hz 125Hz 160Hz 200Hz**

**Note**

Selecting a cross over frequency is to set a cross over frequency of the subwoofer's L.P.F. (low pass filter) and that of the **Small** speaker H.P.F. (high pass filter). The cross over frequency setting has no effect if the subwoofer is set to **Off** and other speakers are set to **Large** or **Off**.

## Adjusting the speaker output levels using a test tone

This function allows you to easily get the over all balance right among the speakers.

**1 Touch Test Tone.**

**2 Touch Start to start the test tone output.**
The test tone is outputted. It rotates from speaker to speaker in the following sequence at intervals of about two seconds. The current settings for the speaker over which you hear the test tone are shown in the display.
**Front-L** (front speaker left) **Center** (center speaker) **Front-R** (front speaker right) **Rear-R** (rear speaker right) **Rear-L** (rear speaker left) **Subwoofer** (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 to **Off**. (Refer to *Setting the speaker setting* on page 86.)

**3 Touch ◄ or ► to adjust the speaker output level.**
Each time you touch ◄ or ► it increases or de creases the equalizer level. **+10** to **–10** is dis played as the level is increased or decreased.
■ The test tone rotates to the next speaker after about two seconds from the last operation.

**4 Touch Stop to stop the test tone output.**

**Notes**

- 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 in this mode is the same as making the speaker out put levels at **Speaker Level** (speaker output level). Both provide the same results.

## Using the time alignment

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

**1 Touch Time Alignment.**

**2 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 page 90.)
- **Custom** Adjusted time alignment that you can create for yourself
- **Off** Turn the time alignment off
- **TA Adjust** Adjust the time alignment as desired

■ You cannot select **Auto TA** if auto TA and EQ has not been carried out.
■ You cannot select **TA Adjust** when neither **Front-L** nor **Front-R** 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 Time Alignment and then touch TA Adjust.**

■ You cannot select **TA Adjust** when neither **Front-L** nor **Front-R** is selected in **Position**.

**2 Touch ▲ or ▼ to select the speaker to be adjusted.**

Each time you touch ▲ or ▼ selects the speaker in the following order:
**Front-L** (front speaker left) **Center** (center speaker) **Front-R** (front speaker right) **Rear-R** (rear speaker right) **Rear-L** (rear speaker left) **Subwoofer** (subwoofer)

■ You cannot select speakers whose size is set to **Off**. (Refer to *Setting the speaker setting* on page 86.)

**3 Touch ◄ or ► to adjust the distance between the selected speaker and the listening position.**

Each time you touch ◄ or ► increases or decreases the distance. **0.0inch** to **200.0inch** is displayed as the distance is increased or decreased.

## Using the equalizer

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

### Recalling equalizer curves

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

| Display | Equalizer curve |
|---|---|
| **Powerful** | Powerful |
| **Natural** | Natural |
| **Vocal** | Vocal |
| **Flat** | Flat |
| **Custom1** | Custom 1 |
| **Custom2** | Custom 2 |
| **Super Bass** | Super bass |

- **Custom1** and **Custom2** 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.

**1 Touch Parametric EQ.**

**2 Touch ▲ or ▼ to select the desired item.**

Each time you touch ▲ or ▼ selects the item in the following order:
**Equalizer** (equalizer) **SP-Select** (speakers) **Band** (bands) **Frequency** (center frequency) **Level** (equalizer level) **Q. Factor** (Q factor)

**3 Touch ► to select the equalizer.**

Touch ► repeatedly to switch between the following equalizers:
**Powerful** **Natural** **Vocal** **Flat** **Custom1** **Custom2** **Super Bass**

### Adjusting 3-band parametric equalizer

For **Custom1** and **Custom2** equalizer curves, you can adjust the front, rear and center equalizer curves separately by selecting a center frequency, an equalizer level and a Q factor for each band.

- A separate **Custom1** curve can be created for each source.
- A **Custom2** curve 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 Parametric EQ.**

**2 Touch ▲ or ▼ to select the desired item.**
Each time you touch ▲ or ▼ selects the item in the following order:
**Equalizer** (equalizer) **SP-Select** (speakers) **Band** (bands) **Frequency** (center frequency) **Level** (equalizer level) **Q. Factor** (Q factor)

**3 Touch ► to select the equalizer.**
Touch ► repeatedly to switch between the fol lowing equalizers:
**Powerful Natural Vocal Flat Custom1 Custom2 Super Bass**

**4 Touch ▼ and then touch ◄ or ► to select the speaker to be adjusted.**
Touch ◄ or ► until the desired speaker ap pears in the display.
**Rear** (rear speakers) **Center** (center speaker) **Front** (front speakers)
■ You cannot select speakers whose size is set to **Off**. (Refer to *Setting the speaker setting* on page 86.)

**5 Touch ▼ and then touch ◄ or ► to select the equalizer band to be adjusted.**
Each time you touch ◄ or ► selects equalizer bands in the following order:
**Low** (low) **Mid** (mid) **High** (high)

**6 Touch ▼ and then touch ◄ or ► to select the center frequency of selected band.**
Touch ◄ or ► until the desired frequency ap pears in the display.
**40Hz 50Hz 63Hz 80Hz 100Hz 125Hz 160Hz 200Hz 250Hz 315Hz 400Hz 500Hz 630Hz 800Hz 1kHz 1.25kHz 1.6kHz 2kHz 2.5kHz 3.15kHz 4kHz 5kHz 6.3kHz 8kHz 10kHz 12.5kHz**

**7 Touch ▼ and then touch ◄ or ► to adjust the equalizer level.**
Each time you touch ◄ or ► it increases or de creases the equalizer level. **+12** to **-12** is dis played as the level is increased or decreased.

**8 Touch ▼ and then touch ◄ or ► to select the desired Q factor.**
Each time you touch ◄ or ► switches between the following Q factor:
**Narrow** (narrow) **Wide** (wide)
■ You can adjust parameters for each band of the other speakers in the same way.

**Note**

You can select a center frequency for each band. You can change the center frequency in 1/3 oc tave steps, but you cannot select frequencies that have intervals shorter than 1 octave among the center frequencies of the three bands.

## 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 this page).
You can turn the auto equalizer on or off.

**1 Touch Auto EQ.**
■ 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 ◄.

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

The auto time alignment is automatically ad justed for 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 outputted 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.

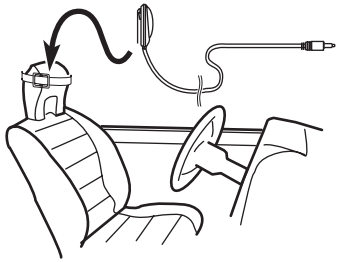
### Before operating the auto TA and EQ function

- 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 vehi cle is strong and delays occur.
  When delays occur for low sounds due to the influence of the LPF on active subwoofers or external amps.
- Auto TA and EQ changes the audio settings as below:
  The fader/balance settings return to the center position. (Refer to page 84.)
  The equalizer curve switches to **Flat**. (Refer to page 89.)
  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 EQ.
- Press **SRC/OFF** to turn the source on if this unit is turned off.

**4 Select the position for the seat on which the microphone is placed.**
Refer to *Using the position selector* on page 83.
- If no position is selected before you start auto TA and EQ, **Front-L** is selected automatically.

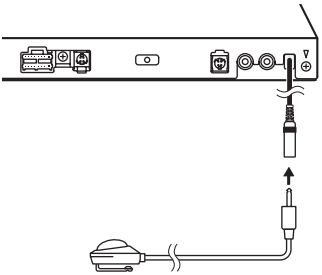
**5 Touch the source icon and then touch Off to turn this unit off.**

**6 Touch the screen to display the touch panel keys.**

**7 Touch AV Menu and then touch Initial Menu to display the function names.**

**8 Touch Auto EQ&TA to enter the auto TA and EQ measurement mode.**

**9 Plug the microphone into the microphone input jack on the multi-channel processor.**



For details concerning operation, refer to the multi channel processor's operation manual.

**10 Touch Start to start the auto TA and EQ.**

**11 Get out of the car and close the door within 10 seconds when the 10-second count-down starts.**
The measurement tone (noise) is outputted from the speakers, and auto TA and EQ be gins.
- When all speakers are connected, auto TA and EQ is completed in about nine minutes.
- To stop auto TA and EQ, touch **Stop**.
- To cancel auto TA and EQ on the way, touch **Back** or **ESC**.

**12 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 98.)

**13 Touch ESC to cancel the auto TA and EQ mode.**

**14 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. ■

# Troubleshooting

## Common

| Symptom | Cause | Action (See) |
|---|---|---|
| Power doesn't turn on.<br>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 a fuse with the same rating. |
| | Noise and other factors are causing the built in microprocessor to oper ate incorrectly. | Press **RESET**. (Page 10) |
| Operation with the remote con trol isn't possible.<br>The unit does not operate cor rectly even when the appropriate remote control buttons are pressed. | The remote control operation mode is incorrect. | Switch to the correct remote control mode. |
| | The remote control code is incor rect. | Make sure the remote control selection switch setting and code type setting are the same. |
| | Battery power is low. | Load new battery. |
| | Some operations are prohibited with certain discs. | Check by using another disc. |
| Playback is not possible. | The disc is dirty. | Clean disc. (Page 100) |
| | 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.<br>The volume level will not rise. | Cables are not connected correctly. | Connect the cables correctly. |
| | 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. |
| There is 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. |
| The icon ⊘ 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 sible during playback. | After stopping playback once, start playback once more. |
| There is no sound.<br>Volume level is low. | The volume level is low. | Adjust the volume level. |
| | The attenuator is on. | Turn the attenuator off. |
| There is audio and video skip ping. | The unit is not firmly secured. | Secure the 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 47) |
| When the ignition switch is turned ON (or turned to ACC), the motor sounds. | The unit is confirming whether a disc is loaded or not. | This is a normal operation. |

| | | |
|---|---|---|
| Nothing is displayed.<br>The touch panel keys cannot be used. | The rear view camera is not con nected.<br>**Camera Polarity** is at incorrect set ting. | Connect a rear view camera.<br>Press and hold **MUTE** to return to the source display and then select the correct setting for **Camera Polarity**. (Page 55) |

### Problems during DVD playback

| 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 7, Page 112) |
| 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 48) |
| Parental lock cannot be can celed. | The code number is incorrect. | Input the correct code number. (Page 48) |
| | You have forgotten your code num ber. | Touch **C** 10 times to cancel the code number. (Page 48) |
| 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 are not 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 **Setup**. | The DVD playing does not feature dialog or subtitles in the language selected in **Setup**. | Switching to a selected language is not possi ble if the language selected in **Setup** is not recorded on the disc. |
| 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 |
|---|---|---|
| The PBC (playback control) menu display cannot be called up. | The Video CD playing does not fea ture PBC. | This operation is not possible with Video CDs not featuring PBC. |
| Repeat play and track/time search are not possible. | The Video CD playing features PBC. | This operation is not possible with Video CDs featuring PBC. |

### Problems during iPod playback

| Symptom | Cause | Action |
|---|---|---|
| iPod doesn't operate correctly. | Cables are incorrectly connected. | Disconnect the cable from iPod. Once iPod main menu is displayed, connect the cable again.<br>Reset the iPod. |
| | The iPod version is old. | Update the iPod version. |

### Problems during multi-channel processor connection

| Symptom | Cause | Action (See) |
|---|---|---|
| No sounds are heard.<br>The volume level will not rise. | Optical cables are not connected correctly. | Connect the cables correctly. |
| Even if multi channel audio is selected, 2 channel audio is out put. | Digital output setting is set to **Linear PCM**. | Normally, set the digital output setting to **Stream**. (Page 49) |

■

## Error messages

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

### Built-in DVD player

| Message | Cause | Action |
|---|---|---|
| **Different Region Disc** | The disc does not have the same re gion number as this unit | Replace the DVD video with one bearing the correct region number. |
| **Error-02-XX/FF-FF** | Dirty disc | Clean disc. |
| | Scratched disc | Replace disc. |
| | The disc is loaded upside down | Check that the disc is loaded correctly. |
| | Electrical or mechanical | Press **RESET**. |
| **Unplayable Disc** | This type of disc cannot be played by this unit | Replace the disc with one this unit can play. |
| | The inserted disc does not contain any files that can be played back | Replace disc. |
| **Protect** | All the files on the inserted disc are secured by DRM | Replace disc. |
| **Skipped** | The inserted disc contains WMA files that are protected by DRM | Replace disc. |
| **Temp** | The temperature of this unit is out side the normal operating range | Wait until the unit's temperature returns to within normal operating limits. |
| **Rental Expired.** | The inserted disc that contains ex pired DivX VOD content. | Replace disc. |
| **File Not Playable-High Definition** | The inserted disc contains high defi nition DivX file. | This unit cannot play DivX HD file. Replace the disc with one this unit can play. |

| | | |
|---|---|---|
| **It is not possible to write it in the flash.** | This unit's flash memory used for temporary storage area is full. | Select the playable file. |
| **Authorization Error** | This unit's DivX registration code has not been authorized by DivX VOD contents provider. | Register this unit to DivX VOD contents provi der. (Page 49) |
| **Unplayable File** | This type of file cannot be played by this unit. | Select the playable file. |

### USB audio player/USB memory

| Message | Cause | Action |
|---|---|---|
| **Unplayable File** | This type of file cannot be played by this unit. | Select the playable file. |
| | No songs | Transfer the audio files to the USB portable audio player/USB memory and connect. |
| | USB memory with security enabled is connected | Follow the USB memory instructions to dis able the security. |
| **Skipped** | The connected USB portable audio player/USB memory contains WMA files that are protected by Windows Media™ DRM 9/10 | Play an audio file not protected by Windows Media DRM 9/10. |
| **Protect** | All the files on the connected USB portable audio player/USB memory are protected by Windows Media DRM 9/10 | Transfer audio files not protected by Windows Media DRM 9/10 to the USB portable audio player/USB memory and connect. |
| **N/A USB** | The USB device connected to is not supported by this unit. | Connect a USB portable audio player or USB memory that is USB Mass Storage Class compliant. |
| | USB device is not formatted with FAT16 or FAT32 | USB device should be formatted with FAT16 or FAT32. |
| **Check USB** | The USB connector or USB cable is short circuited. | Confirm that the USB connector or USB cable is not caught in something or da maged. |
| | The connected USB portable audio player/USB memory consumes more than 500 mA (maximum allow able current). | Disconnect the USB portable audio player/ USB memory and do not use it. Turn the igni tion switch to OFF, then to ACC or ON and then connect the compliant USB portable audio player/USB memory. |
| **Error-02-9X/-DX** | Communication failure | Perform one of the following operations.<br>Turn the ignition switch OFF and back ON.<br>Disconnect the USB portable audio player/ USB memory.<br>Change to a different source.<br>Then, return to the USB portable audio player/USB memory. |

### iPod

| Message | Cause | Action |
|---|---|---|
| **Error-02-6X/-9X/-DX** | Communication failure | Disconnect the cable from iPod. Once iPod main menu is displayed, connect the cable again.<br>Reset the iPod. |
| | iPod failure | Disconnect the cable from iPod. Once iPod main menu is displayed, connect the cable again.<br>Reset the iPod. |
| **Error-02-67** | Old version of iPod | Update the iPod version. |
| **No Songs** | No songs | Transfer the songs to iPod. |
| **Stop** | No songs in the current list | Select a list that contains the songs. |

■

## 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, 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. Please check MIC.** | Microphone is not connected. | Plug the supplied microphone securely into the jack. |
| **Error. Please check Front speaker.**, **Error. Please check Front-L speaker.**, **Error. Please check Front-R speaker.**, **Error. Please check Center speaker.**, **Error. Please check Rear speaker.**, **Error. Please check Rear-L speaker.**, **Error. Please check Rear-R speaker.**, **Error. Please check Subwoofer.** | The microphone cannot pick up the measuring tone of a speaker. | • Confirm that the speakers are connected correctly.<br>• Correct the input level setting of the power amp connected to the speakers.<br>• Set the microphone correctly. |
| **Error. Please check noise.** | The surrounding noise level is too high. | • Stop your car in a place that is as quiet as possible, and switch off the engine, air condi tioner or heater.<br>• Set the microphone correctly. |

■

## Understanding messages

| Messages | Translation |
|---|---|
| CAUTION: Screen image may appear reversed. | Pioneer recommends the use of a camera which outputs mirror reversed images, otherwise screen image may appear reversed. |

## Handling guideline of discs and player

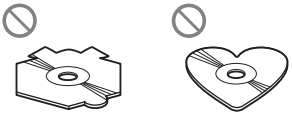
- Use only discs featuring any of following logos.

**DVD video**

**Video CD**

**CD**

- 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 warping before playing. Discs that have cracks, scratches or are warped may not play properly. Do not use such discs.
- Avoid touching the recorded (non printed) 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 a disc, wipe the disc with a soft cloth outward from the center.

- If the heater is used in cold weather, con densation 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 it 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.
- It is not possible to play back DVD ROM/ DVD RAM discs. ■

## DVD-R/DVD-RW discs

- Unfinalized DVD R/ RW discs which have been recorded with the Video format (video mode) cannot be played back.
- DVD R/ RW discs which have been re corded with the Video Recording format (VR mode) cannot be played back.
- It may not be possible to play back DVD R/ DVD RW discs, because of disc character istics, 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.)
- For more information about recording mode, please contact manufacture of DVD recorder or application. ■

## AVCHD recorded discs

- This unit is not compatible with discs re corded in AVCHD (Advanced Video Codec High Definition) format. Do not insert AVCHD discs. If inserted, the disc may not be ejected. ■

## 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 vehicle.
- 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)).
- Read the precautions with CD R/CD RW discs before using them. ■

## Dual Discs

- Dual Discs are two sided discs that have a recordable CD for audio on one side and a recordable DVD for video on the other.
- Playback of the DVD side is possible with this unit. However, since the CD side of Dual Discs is not physically compatible with the general CD standard, it may not be possible to play the CD side with this unit.
- Frequent loading and ejecting of a Dual Disc may result in scratches on the disc. Serious scratches can lead to playback pro blems on this unit. In some cases, a Dual Disc may become stuck in the disc loading slot and will not eject. To prevent this, we recommend you refrain from using Dual Disc with this unit.
- Please refer to the information from the disc manufacturer for more detailed infor mation about Dual Discs. ■

## Compressed audio compatibility

### WMA

- Compatible format: WMA encoded by Windows Media Player
- File extension: .wma
- Bit rate: 5 kbps to 320 kbps (CBR), VBR
- Sampling frequency: 8 kHz to 48 kHz
- Windows Media Audio 9 Professional, Loss less, Voice: No

### MP3

- File extension: .mp3
- Bit rate: 8 kbps to 320 kbps (CBR), VBR

- Sampling frequency: 8 kHz to 48 kHz (32, 44.1, 48 kHz for emphasis)
- Compatible ID3 tag version: 1.0, 1.1, 2.2, 2.3 (ID3 tag Version 2.x is given priority than Version 1.x.)
- M3u playlist: No
- MP3i (MP3 interactive), mp3 PRO: No

**AAC**

- Compatible format: AAC encoded by iTunes
- File extension: .m4a
- Bit rate: 8 kbps to 320 kbps
- Sampling frequency: 8 kHz to 44.1 kHz
- Transmission rate: 16 kbps to 320 kbps
- Apple Lossless: No ■

## Handling guideline and supplemental information

- There may be a slight delay when starting playback of audio files encoded with image data.
- Only 32 characters from beginning can be displayed as a file name (including the file extension) or a folder name.
- The text information of some audio files may not be correctly displayed.
- This unit may not operate correctly depend ing on the application used to encode WMA files.

### Compressed audio files on the disc

- ISO 9660 Level 1 and 2 compliant. Romeo and Joliet file systems are both compatible with this player.
- Multi session playback is possible.
- Compressed audio files are not compatible with packet write data transfer.
- Regardless of the length of blank section between the songs of original recording, compressed audio discs play with a short pause between songs.

### USB audio player/USB memory

**⚠ CAUTION**

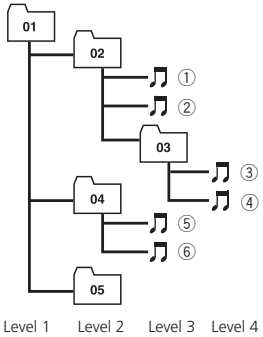
Pioneer accepts no responsibility for data lost on the USB memory/USB portable audio player even if that data is lost while using this unit.

- This unit can play back files in the USB por table audio player/USB memory that is USB Mass Storage Class. However, copy right protected files that are stored in above mentioned USB devices cannot be played back.
- You cannot connect a USB portable audio player/USB memory to this unit via a USB hub.
- Partitioned USB memory is not compatible with this unit.
- Depending on the kind of USB portable audio player/USB memory you use, this unit may not recognize the USB audio player/USB memory or audio files may not be played back properly.
- Do not leave the USB portable audio player/USB memory in direct sunlight for extended amounts of time. Extended expo sure to direct sunlight can result in USB portable audio player/USB memory mal function due to the resulting high tempera ture.
- Do not leave the USB portable audio player/USB memory in high temperature.
- Firmly secure the USB portable audio player/USB memory when driving. Do not let the USB portable audio player/USB memory fall onto the floor, where it may be come jammed under the brake or accelera tor pedal.
- Depending on the USB devices connected to this unit, it may generate noise in the radio.
- There may be a slight delay when starting playback of audio files on a USB portable audio player/USB memory with numerous folder hierarchies.
- Do not connect anything other than the USB portable audio player/USB memory.

- Operations may vary depending on the kind of USB audio player and a USB mem ory. ■

## Example of a hierarchy

: Folder
: Compressed audio file




### The sequence of audio files on the disc

- This unit assigns folder numbers. The user cannot assign folder numbers.
- Folder selection sequence or other opera tion may be altered depending on the en coding or writing software.
- Up to 3 500 files on a DVD ( R/ RW) can be played back.
- Up to 999 files on a CD ( R/ RW) can be played back.
- Up to 700 folders on a disc can be played back.

### The sequence of audio files on USB memory

*For USB portable audio players, the sequence is different from that of USB memory and de pends on the player.*

- 01 to 05 represent assigned folder num bers. ① to ⑥ represent the playback se quence. The user cannot assign folder numbers and specify the playback se quence with this unit.
- Playback sequence of the audio file is the same as recorded sequence in the USB de vice.
- To specify the playback sequence, the fol lowing method is recommended.
  1 Create the file name including numbers that specify the playback sequence (e.g., 001xxx.mp3 and 099yyy.mp3).
  2 Put those files into a folder.
  3 Record the folder containing files into the USB device.

  However, depending on the system environ ment, you cannot specify the file playback sequence.
- Up to 65 535 files on a USB portable audio player/USB memory can be played back.
- Up to 6 000 folders on a USB portable audio player/USB memory can be played back. ■

## iPod compatibility

- This unit supports only the following iPods. Supported iPod software versions are shown below. Older versions of iPod soft ware may not be supported.
  iPod nano first generation (software ver sion 1.3.1)
  iPod nano second generation (software version 1.1.3)
  iPod nano third generation (software version 1.1.2)
  iPod fifth generation (software version 1.3.0)
  iPod classic (software version 1.1.2)
  iPod touch (software version 2.0)
  iPhone 3G (software version 2.0)
  iPhone (software version 2.0)
- Depending on the generation or version of the iPod, some functions can not be oper ated.
- Operations may vary depending on the soft ware version of iPod.
- When using an iPod, iPod Dock Connector to USB Cable is required.

- Pioneer CD IU50 interface cable is also available. For details, consult your deal er. ■

## About handling the iPod

**CAUTION**

- Pioneer accepts no responsibility for data lost on the iPod even if that data is lost while using this unit.
- Do not leave the iPod in direct sunlight for ex tended amounts of time. Extended exposure to direct sunlight can result in iPod malfunc tion due to the resulting high temperature.
- Do not leave the iPod in a high temperature.
- Firmly secure the iPod when driving. Do not let the iPod fall onto the floor, where it may be come jammed under the brake or accelerator pedal.

For details, refer to the iPod's manuals.

### About iPod settings

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

## JPEG picture files

- JPEG is short for Joint Photographic Ex perts Group and refers to a still image com pression technology standard.
- Files are compatible with Baseline JPEG and EXIF 2.1 still image up to resolution of 8 192 × 7 680. (EXIF format is used most commonly with digital still cameras.)
- EXIF format that processed by the personal computer may not be played back.
- There is no progressive JPEG compatibility.

**Important**

- When naming a JPEG picture file, add the cor responding filename extension (.jpg, .jpeg, .jpe or .jfif).
- This unit plays back files with the filename ex tension (.jpg, .jpeg, .jpe or .jfif) as a JPEG pic ture file. To prevent malfunctions, do not use these extensions for files other than JPEG pic ture files. ■

## DivX video files

- Depending on the file information composi tion such as the number of audio stream, there may be a slight delay in the start of playback on discs.
- Some special operation may be prohibited because of the composition of DivX files.
- DivX files downloaded only from DivX part ner site are guarantee of proper operation. Unauthorized DivX file may not operate properly.
- DRM rental file cannot be operated until starting playing back.
- This unit corresponds to a DivX file display up to 1 590 minutes 43 seconds. Also, search operation beyond this time limit is prohibited.
- If a file contains more than 4 GB, playback is stopped on the way.
- DivX VOD file playback requires ID code of this unit to DivX VOD provider. About ID code, refer to *Displaying your DivX® VOD re gistration code* on page 49.
- For more details about DivX, visit the follow ing site:
  http://www.divx.com/

### DivX compatibility

- Compatible format: DivX video format im plemented in relation to DivX standards
- File extensions: .avi or .divx
- DivX Ultra format: No
- DivX HD format: No
- DivX files without video data: No
- Compatible audio codec: MP2, MP3, Dolby Digital

- LPCM: No
- Bit rate: 8 kbps to 320 kbps (CBR), VBR
- Sampling frequency: 8 kHz to 48 kHz
- Compatible external subtitle file extension: .srt ■

## Using the display correctly

**CAUTION**

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

### Handling the display

- 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.
- Never touch the screen with anything be sides your finger when operating the touch panel function. The screen can scratch ea sily.
- 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. You should avoid exposing the display unit to direct sunlight as much as possible.
- The display should be used within the tem perature ranges shown below.
  Storage temperature range: 20 °C to +80 °C
  At temperatures higher or lower than the operating temperature range, the display may not operate normally.
- The LCD screen is exposed in order to in crease its visibility within the vehicle. Please do not press strongly on it as this may damage it.
- Do not push the LCD screen forcefully as this may scratch it.

### Liquid crystal display (LCD) screen

- Heat from the heater may damage the LCD screen, and cool air from the cooler may cause moisture to form inside the display resulting in possible damage. 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 inside 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.

### LED (light-emitting diode) backlight

- At low temperatures, using the LED back light may increase image lag and degrade the image quality because of the character istics of the LCD screen. Image quality will improve with an increase in temperature.
- To protect the LED backlight, display will darken in the following environment:

In the direct sunlight
Near the heater vent

- The product lifetime of the LED backlight is more than 10 000 hours. However, it may decrease if used in high temperatures.
- If the LED backlight reaches the end of its product lifetime, the screen will become dark and the image will no longer be pro jected. In this case, please consult your dealer or the nearest authorized PIONEER Service Station.

## Changing the wide screen size

By changing the screen size from 4:3 to 16:9, you can adjust the screen so that the screen can fit to the video image you are playing.
For details concerning operation, refer to *Changing the wide screen mode* on page 53.

## Changing the picture adjustment

You can make the best adjustment to the pic ture display by the **Brightness**, **Contrast**, **Color**, **Hue**, **Temperature** and **Black Level**.
You can also dim or brighten the overall pic ture the **Dimmer**.
For details concerning operation, refer to *Changing the picture adjustment* on page 54.

## Keeping the display in good condition

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

## 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 PIONEER Service Station. ■

## Language code chart for DVD

| Language (code), input code | Language (code), input code | Language (code), input code |
|---|---|---|
| Japanese (ja), **1001** | Guarani (gn), **0714** | Pashto, Pushto (ps), **1619** |
| English (en), **0514** | Gujarati (gu), **0721** | Quechua (qu), **1721** |
| French (fr), **0618** | Hausa (ha), **0801** | Rhaeto Romance (rm), **1813** |
| Spanish (es), **0519** | Hindi (hi), **0809** | Kirundi (rn), **1814** |
| German (de), **0405** | Croatian (hr), **0818** | Romanian (ro), **1815** |
| Italian (it), **0920** | Hungarian (hu), **0821** | Kinyarwanda (rw), **1823** |
| Chinese (zh), **2608** | Armenian (hy), **0825** | Sanskrit (sa), **1901** |
| Dutch (nl), **1412** | Interlingua (ia), **0901** | Sindhi (sd), **1904** |
| Portuguese (pt), **1620** | Interlingue (ie), **0905** | Sangho (sg), **1907** |
| Swedish (sv), **1922** | Inupiak (ik), **0911** | Serbo Croatian (sh), **1908** |
| Russian (ru), **1821** | Indonesian (in), **0914** | Sinhalese (si), **1909** |
| Korean (ko), **1115** | Icelandic (is), **0919** | Slovak (sk), **1911** |
| Greek (el), **0512** | Hebrew (iw), **0923** | Slovenian (sl), **1912** |
| Afar (aa), **0101** | Yiddish (ji), **1009** | Samoan (sm), **1913** |
| Abkhazian (ab), **0102** | Javanese (jw), **1023** | Shona (sn), **1914** |
| Afrikaans (af), **0106** | Georgian (ka), **1101** | Somali (so), **1915** |
| Amharic (am), **0113** | Kazakh (kk), **1111** | Albanian (sq), **1917** |
| Arabic (ar), **0118** | Greenlandic (kl), **1112** | Serbian (sr), **1918** |
| Assamese (as), **0119** | Cambodian (km), **1113** | Siswati (ss), **1919** |
| Aymara (ay), **0125** | Kannada (kn), **1114** | Sesotho (st), **1920** |
| Azerbaijani (az), **0126** | Kashmiri (ks), **1119** | Sundanese (su), **1921** |
| Bashkir (ba), **0201** | Kurdish (ku), **1121** | Swahili (sw), **1923** |
| Byelorussian (be), **0205** | Kirghiz (ky), **1125** | Tamil (ta), **2001** |
| Bulgarian (bg), **0207** | Latin (la), **1201** | Telugu (te), **2005** |
| Bihari (bh), **0208** | Lingala (ln), **1214** | Tajik (tg), **2007** |
| Bislama (bi), **0209** | Laothian (lo), **1215** | Thai (th), **2008** |
| Bengali (bn), **0214** | Lithuanian (lt), **1220** | Tigrinya (ti), **2009** |
| Tibetan (bo), **0215** | Latvian (lv), **1222** | Turkmen (tk), **2011** |
| Breton (br), **0218** | Malagasy (mg), **1307** | Tagalog (tl), **2012** |
| Catalan (ca), **0301** | Maori (mi), **1309** | Setswana (tn), **2014** |
| Corsican (co), **0315** | Macedonian (mk), **1311** | Tonga (to), **2015** |
| Czech (cs), **0319** | Malayalam (ml), **1312** | Turkish (tr), **2018** |
| Welsh (cy), **0325** | Mongolian (mn), **1314** | Tsonga (ts), **2019** |
| Danish (da), **0401** | Moldavian (mo), **1315** | Tatar (tt), **2020** |
| Bhutani (dz), **0426** | Marathi (mr), **1318** | Twi (tw), **2023** |
| Esperanto (eo), **0515** | Malay (ms), **1319** | Ukrainian (uk), **2111** |
| Estonian (et), **0520** | Maltese (mt), **1320** | Urdu (ur), **2118** |
| Basque (eu), **0521** | Burmese (my), **1325** | Uzbek (uz), **2126** |
| Persian (fa), **0601** | Nauru (na), **1401** | Vietnamese (vi), **2209** |
| Finnish (fi), **0609** | Nepali (ne), **1405** | Volapük (vo), **2215** |
| Fiji (fj), **0610** | Norwegian (no), **1415** | Wolof (wo), **2315** |
| Faroese (fo), **0615** | Occitan (oc), **1503** | Xhosa (xh), **2408** |
| Frisian (fy), **0625** | Oromo (om), **1513** | Yoruba (yo), **2515** |
| Irish (ga), **0701** | Oriya (or), **1518** | Zulu (zu), **2621** |
| Scots Gaelic (gd), **0704** | Panjabi (pa), **1601** | |
| Galician (gl), **0712** | Polish (pl), **1612** | |

## Copyright and trademark notice

- This product incorporates copyright protec tion technology that is protected by method claims of certain U.S. patents and other in tellectual 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 engi neering or disassembly is prohibited.

**DVD video**

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

**WMA**

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

- This product includes technology owned by Microsoft Corporation and cannot be used or distributed without a license from Microsoft Licensing, Inc.

**MP3**

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 broadcasting (terrestrial, satellite, cable and/or any other media), broad casting/streaming via internet, intranets and/ or other networks or in other electronic con tent distribution systems, such as pay audio or audio on demand applications. An indepen dent license for such use is required. For de tails, please visit http://www.mp3licensing.com.

**iTunes**

iTunes is a trademark of Apple Inc., registered in the U.S. and other countries.

**iPod**

iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

**iPhone**

iPhone is a trademark of Apple Inc.

# Additional Information

### Dolby Pro Logic II

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

### DTS Digital Out

Manufactured under license under U.S. Patent #: 5,451,942 & other U.S. and worldwide pa tents issued & pending. DTS and DTS Digital Out are registered trademarks and the DTS logos and Symbol are trademarks of DTS, Inc. © 1996 2007 DTS, Inc. All Rights Reserved.

### DivX

DivX, DivX Certified, and associated logos are trademarks of DivX, Inc. and are used under li cense.

### SAT Radio

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

### HD Radio Technology

- HD Radio™ and the HD Radio Ready logo are proprietary trademarks of iBiquity Digi tal Corp. ■

## Terms

### AAC
AAC is short for Advanced Audio Coding and refers to an audio compression technology standard used with MPEG 2 and MPEG 4.

### 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 (bits per second) units. 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.

### 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.

### DivX
DivX is a popular media technology created by DivX, Inc. DivX media files contain highly com pressed video with high visual quality that maintains a relatively small file size. DivX files can also include advanced media features like menus, subtitles, and alternate audio tracks. Many DivX media files are available for down load online, and you can create your own using your personal content and easy to use tools from DivX.com.

### DivX Certified
DivX Certified products are officially tested by the creators of DivX and guaranteed to play all versions of DivX video, including DivX 6.

### 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 II
Dolby Pro Logic II can create five full band width output channels from two channel sources. This new technology enables a dis crete 5 channel playback with 2 front chan nels, 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.

### EXIF (Exchangeable image file)
A file format developed by Fuji Photo Film for digital still cameras. Digital cameras from var ious manufacturers use this compressed file format which carries date, time and thumbnail information, as well as the picture data.

### ID3 tag
This is a method of embedding track related information in an 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 as to the num ber of characters, the information can be viewed when the track is played back.

# Additional Information

**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 charac ters).
**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.

**JPEG**
This stands for Joint Photographic Experts Group, and is an international still image com pression standard.

**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 Stan dards Organization). MP3 is able to compress audio data to about 1/10th the level of a con ventional 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.

**MS ADPCM**
This stands for Microsoft adaptive differential pulse code modulation, which is the signal re cording system used for the multimedia soft ware of Microsoft Corporation.

**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 multi ple 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 on one disc.

**Multi-subtitle**
Subtitles in up to 32 languages can be re corded on a single DVD, letting you choose as desired.

**Number of quantization bits**
The number of quantization bits is one factor in the overall sound quality; the higher the “bit depth”, the better the sound quality. How ever, increasing the bit depth also increases the amount of data and therefore storage space required.

# Additional Information

**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 num ber as the DVD player.

**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 func tions.

**VBR**
VBR is short for variable bit rate. Generally speaking CBR (constant bit rate) is more widely used. But by flexibly adjusting the bit rate according to the needs of audio compres sion, it is possible to achieve compression priority sound quality.

**WMA**
WMA is short for Windows Media™ Audio and refers to an audio compression technol ogy that is developed by Microsoft Corporation. WMA data can be encoded by using Windows Media Player version 7 or later.
Windows Media and the Windows logo are tra demarks or registered trademarks of Microsoft Corporation in the United States and/or other countries. ■

# Additional Information

## Specifications

### General

Power source ..... 14.4 V DC (10.8 V to 15.1 V allowable)
Grounding system ..... Negative type
Max. current consumption ..... 10.0 A
Dimensions (W × H × D):
DIN
Chassis ..... 178 mm × 100 mm × 165 mm (7 in. × 3 7/8 in. × 6 1/2 in.)
Nose ..... 171 mm × 97 mm × 8 mm (6 3/4 in.× 3 7/8 in.× 3/8 in.)
Weight ..... 1.7 kg (3.7 lbs)

### Display

Screen size/aspect ratio ..... 5.8 inch wide/16:9 (effective display area: 128.1 × 71 mm)
Pixels ..... 336 960 (1 440 × 234)
Display method ..... TFT active matrix
Color system ..... NTSC
Durable temperature range (power off) ..... 20 °C to +80 °C

### Audio

Maximum power output ..... 50 W × 4
50 W × 2/4 Ω + 70 W × 1/2 Ω (for subwoofer)
Continuous power output ... 22 W × 4 (1 kHz, 5% THD, 4 Ω load, both channels dri ven)
Load impedance ..... 4 Ω to 8 Ω × 4
4 Ω to 8 Ω × 2 + 2 Ω × 1
Preout max output level ..... 4.0 V
Equalizer (3 Band Parametric Equalizer):
Low
Frequency ..... 40/80/100/160 Hz
Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain ..... ±12 dB
Mid
Frequency ..... 200/500/1k/2k Hz
Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain ..... ±12 dB
High
Frequency ..... 3.15k/8k/10k/12.5k Hz
Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain ..... ±12 dB
HPF:
Frequency ..... 50/63/80/100/125 Hz
Slope ..... 12 dB/oct
Subwoofer (mono):
Frequency ..... 50/63/80/100/125 Hz
Slope ..... 18 dB/oct
Gain ..... +6 dB to 24 dB
Phase ..... Normal/Reverse
Bass boost:
Gain ..... +12 dB to 0 dB

### DVD Player

System ..... DVD video, Video CD, CD, WMA, MP3, AAC, DivX, JPEG system
Usable discs ..... DVD video, Video CD, CD, CD R/RW, DVD R/RW/RDL
Region number ..... 1
Frequency response ..... 5 Hz to 44 000 Hz (with DVD, at sampling frequency 96 kHz)
Signal to noise ratio ..... 96 dB (1 kHz) (IHF A net work) (RCA level)
Output level:
Video ..... 1.0 Vp p/75 Ω (±0.2 V)
Number of channels ..... 2 (stereo)
MP3 decoding format ..... MPEG 1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11 (2ch audio) (Windows Media Player)
AAC decoding format ..... MPEG 4 AAC (iTunes en coded only) (.m4a) (Ver. 8.0 and earlier)
DivX decoding format ..... Home Theater Ver. 3, 4, 5.2, 6 (.avi, .divx)

### USB

USB standard specification ..... USB 1.1, USB 2.0 full speed
Maximum current supply .... 500 mA
USB Class ..... MSC (Mass Storage Class)
File system ..... FAT16, FAT32
MP3 decoding format ..... MPEG 1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11 (2ch audio) (Windows Media Player)
AAC decoding format ..... MPEG 4 AAC (iTunes en coded only) (.m4a) (Ver. 8.0 and earlier)

### FM tuner

Frequency range ..... 87.9 MHz to 107.9 MHz
Usable sensitivity ..... 9 dBf (0.8 μV/75 Ω, mono, S/N: 30 dB)

Signal to noise ratio ..... 72 dB (IHF A network)

### AM tuner

Frequency range ..... 530 kHz to 1 710 kHz (10 kHz)
Usable sensitivity ..... 25 μV (S/N: 20 dB)
Signal to noise ratio ..... 62 dB (IHF A network)

### CEA2006 Specifications

Power output ..... 14 W RMS × 4 Channels (4 Ω and ≦ 1 % THD+N)
S/N ratio ..... 91 dBA (reference: 1 W into 4 Ω)

**Note**

Specifications and the design are subject to mod ifications without notice due to improvements. ■

**A**
Angle icon ..... 22, 47
Aspect ratio ..... 47, 110
Audio language ..... 21, 34, 46

**B**
Bookmark ..... 20
Brightness ..... 54

**C**
Chapter ..... 110
Code number ..... 48
Color ..... 54
Contrast ..... 54

**D**
DivX ..... 15, 109, 110
DivX Certified ..... 110
Dolby Digital ..... 9, 110
Dolby Pro Logic II ..... 109, 110
DTS ..... 9, 110
Dynamic range control ..... 110

**E**
EXIF ..... 110

**H**
Hue ..... 54

**J**
JPEG ..... 111

**L**
Language code chart ..... 107
Linear PCM (LPCM) ..... 111

**M**
Menu language ..... 47
MPEG ..... 111
Multi angle ..... 22, 111
Multi audio ..... 21, 34, 111
Multi subtitle ..... 22, 34, 111

**P**
Parental lock ..... 48, 112
PBC (playback control) ..... 24
Playback control (PBC) ..... 112

**R**
Region number ..... 7, 112

**S**
Subtitle language ..... 22, 34, 46

**T**
Title ..... 112
TV aspect ..... 47

**V**
Video CD ..... 100

**W**
Wide screen mode ..... 53

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

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

*See "Visit our website" page*
*Voir la page "Visitez notre site Web"*
*Consulte la página sobre "Visite nuestro sitio Web"*

**PIONEER CORPORATION**
4-1, MEGURO 1-CHOME, MEGURO-KU
TOKYO 153-8654, JAPAN

**PIONEER ELECTRONICS (USA) INC.**
P.O. Box 1540, Long Beach, California 90801-1540, U.S.A.
TEL: (800) 421-1404

**PIONEER EUROPE NV**
Haven 1087, Keetberglaan 1, B-9120 Melsele, Belgium/Belgique
TEL: (0) 3/570.05.11

**PIONEER ELECTRONICS ASIACENTRE PTE. LTD.**
253 Alexandra Road, #04-01, Singapore 159936
TEL: 65-6472-7555

**PIONEER ELECTRONICS AUSTRALIA PTY. LTD.**
178-184 Boundary Road, Braeside, Victoria 3195, Australia
TEL: (03) 9586-6300

**PIONEER ELECTRONICS OF CANADA, INC.**
300 Allstate Parkway, Markham, Ontario L3R 0P2, Canada
TEL: 1-877-283-5901
TEL: 905-479-4411

**PIONEER ELECTRONICS DE MEXICO, S.A. de C.V.**
Blvd.Manuel Avila Camacho 138 10 piso
Col.Lomas de Chapultepec, Mexico, D.F. 11000
TEL: 55-9178-4270

**先鋒股份有限公司**
總公司：台北市中山北路二段44號13樓
電話：(02) 2521-3588

**先鋒電子（香港）有限公司**
香港九龍尖沙嘴海港域世界商業中心
9樓901-6室
電話：(0852) 2848-6488

Published by Pioneer Corporation.
Copyright © 2008-2009 by Pioneer Corporation. All rights reserved.

Printed in Thailand
<KOKZX> <09A00000>
<CRB2864-B/N> UC