Thank you for buying this Pioneer product.

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

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Dear Customer:

Selecting fine audio equipment such as the unit you’ve just purchased is only the start of your musical enjoyment. Now it’s time to consider how you can maximize the fun and excitement your equipment offers. This manufacturer and the Electronic Industries Association’s Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion and, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing “comfort level” adapts to higher volumes of sound. So what sounds “normal” can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

To establish a safe level:

- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

Once you have established a comfortable sound level:

- Set the dial and leave it there.

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

We Want You Listening For A Lifetime

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, this manufacturer and the Electronic Industries Association’s Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

Decibel

<table>
<thead>
<tr>
<th>Level</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>Quiet library, soft whispers</td>
</tr>
<tr>
<td>40</td>
<td>Living room, refrigerator, bedroom away from traffic</td>
</tr>
<tr>
<td>50</td>
<td>Light traffic, normal conversation, quiet office</td>
</tr>
<tr>
<td>60</td>
<td>Air conditioner at 20 feet, sewing machine</td>
</tr>
<tr>
<td>70</td>
<td>Vacuum cleaner, hair dryer, noisy restaurant</td>
</tr>
<tr>
<td>80</td>
<td>Average city traffic, garbage disposals, alarm clock at two feet</td>
</tr>
</tbody>
</table>

THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT EXPOSURE

<table>
<thead>
<tr>
<th>Level</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>Subway, motorcycle, truck traffic, lawn mower</td>
</tr>
<tr>
<td>100</td>
<td>Garbage truck, chain saw, pneumatic drill</td>
</tr>
<tr>
<td>120</td>
<td>Rock band concert in front of speakers, thunderclap</td>
</tr>
<tr>
<td>140</td>
<td>Gunshot blast, jet plane</td>
</tr>
<tr>
<td>180</td>
<td>Rocket launching pad</td>
</tr>
</tbody>
</table>

Information courtesy of the Deafness Research Foundation.
IMPORTANT SAFEGUARDS

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

1. Read this manual fully and carefully before operating your display.
2. Keep this manual handy as a reference for operating procedures and safety information.
3. Pay close attention to all warnings in this manual and follow the instructions carefully.
4. Do not allow other persons to use this system until they have read and understood the operating instructions.
5. Do not install the display where it may (i) obstruct the driver’s vision, (ii) impair the performance of any of the vehicle’s operating systems or safety features, including air bags, hazard lamp buttons or (iii) impair the driver’s ability to safely operate the vehicle.
6. As with any accessory in your vehicle’s interior, the display should not divert your attention from the safe operation of your vehicle. If you experience difficulty in operating the system or reading the display, please park safely before making adjustments.
7. Do not attempt to install or service your display by yourself. Installation or servicing of the display by persons without training and experience in electronic equipment and automotive accessories may be dangerous and could expose you to the risk of electric shock or other hazards and can cause damage to the system that is not covered by warranty.
8. Please remember to wear your seat belt at all times while operating your vehicle. If you are ever in an accident, your injuries can be considerably more severe if your seat belt is not properly buckled.
9. Never use headphones while driving.

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 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 it is a visible distraction 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.

This unit detects whether your vehicle’s parking brake is engaged or not, and prevents you from watching a DVD, Video CD or TV on the front display while driving. When you attempt to watch a DVD, Video CD or TV, the warning VIDEO VIEWING IS NOT AVAILABLE WHILE DRIVING 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.

When using a display connected to REAR MONITOR OUT

This unit’s REAR MONITOR OUT is for connection of a display to enable passengers in the rear seats to watch the DVD, Video CD or TV.
WARNING
NEVER install the rear display in a location that enables the driver to watch the DVD, Video CD or TV while driving.

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

WARNING
Do not use with vehicles that do not feature an ACC position.
Before You Start

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 allocated for use in North America. Use in other areas may result in poor reception.

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.

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

DVD video

Video CD

CD

Note
It is not possible to play back DVD audio disc. This player can only play back discs bearing the marks shown above.

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

When combined with a Pioneer navigation unit
We recommend that you use the latest version of the navigation map disc that is corresponding to the touch panel operation.
When you use this unit with the Pioneer DVD navigation unit, make sure that you use the map disc CNDV 21 or later. This manual explains the operations with the combined use of them.
If you do not use the map disc CNDV 21 but use an older version with the navigation unit, this unit may have some failures or inconveniences as follows:

- **ENTERTAINMENT** button and **WIDE** button cannot function as **POS** button and **NAVI MENU** button.
- **NAVI** (navigation unit), such as DVD video from the combined Pioneer navigation unit with DVD video playback, cannot be selected as a source.
- In **NAVI MIXING**, the settings other than **ALL** cannot be selected.
- Voice recognition control system of the combined Pioneer navigation unit cannot function properly. The voice operation for navigation can be used, but the voice operation related to AV equipment cannot be used.
- Route guidance of the combined Pioneer navigation unit cannot function properly when some other source images are displayed. Guidance by voice can be obtained, but on guidance by display (e.g., switching to an enlarged map of an intersection) cannot be obtained.
- **NAVI** (navigation unit wallpaper) cannot be selected as a background display.

### About this manual

This unit features a number of sophisticated functions ensuring superior reception and operation. All the functions have been designed for the easiest possible use, but many are not self-explanatory. This operation manual will help you benefit fully from this unit’s potential and to maximize your listening enjoyment.

We recommend that you familiarize yourself with the functions and their operation by reading through the manual before you begin using this unit. It is especially important that you read and observe precautions noted on the next page and in other sections.

### After-sales service for Pioneer products

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

#### U.S.A.
Pioneer Electronics (USA) Inc.
CUSTOMER SUPPORT DIVISION
P.O. Box 1780
Long Beach, CA 90801 1760
800 421 1404

#### CANADA
Pioneer Electronics of Canada, Inc.
CUSTOMER SATISFACTION DEPARTMENT
300 Allstate Parkway
Markham, Ontario L3R OP2
(905) 479 4411
1 877 283 5901

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

Precautions
WARNING:
Handling the cord on this product or cords associated with accessories sold with the product will expose you to lead, a chemical known to the State of California and other governmental entities to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

This product contains mercury. Disposal of this material may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or the Electronics Industries Alliance: www.eiae.org.

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

CAUTION:
The use of optical instruments with this product will increase eye hazard.

- Keep this manual handy as a reference for operating procedures and precautions.
- Always keep the volume low enough so 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.

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

DVD video playback
It is possible to play back DVD video, DVD R (video mode) and DVD RW (video mode). Remember that use of this system for commercial or public viewing purposes may constitute an infringement on the author’s rights protected by the Copyright Law.

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

CD playback
Music CD/CD R/CD RW playback is possible.
Before You Start

MP3 file playback
You can play back MP3 files recorded on CD ROM/CD R/CD RW (ISO9660 Level 1/Level 2 standard recordings).
- Supply of this product only conveys a license for private, non commercial use and does not convey a license nor imply any right to use this product in any commercial (i.e. revenue generating) real time broadcasting (terrestrial, satellite, cable and/or any other media), broadcasting/streaming via internet, intranets and/or other networks or in other electronic content distribution systems, such as pay audio or audio on demand applications. An independent license for such use is required. For details, please visit http://www.mp3licensing.com.

WMA file playback
You can play back WMA files recorded on CD ROM/CD R/CD RW (ISO9660 Level 1/Level 2 standard recordings).

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

Dolby Digital/DTS compatibility
When using this unit with a Pioneer multi channel processor, you can enjoy the atmosphere and excitement provided by DVD movie and music software featuring 5.1 channel recordings.
- Manufactured under license from Dolby Laboratories. “Dolby” and the double D symbol are trademarks of Dolby Laboratories.

- “DTS” is a registered trademark of Digital Theater Systems, Inc.

Multi-aspect
Switching between wide screen, letterbox and panscan display is possible.

Multi-audio
You can switch between multiple audio systems recorded on a DVD as desired.

Multi-subtitle
You can switch between multiple subtitle languages recorded on a DVD as desired.

Multi-angle
You can switch between multiple viewing angles of a scene recorded on a DVD as desired.

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

DOLBY DIGITAL

DTS

Note

DOLBY DIGITAL
Before You Start

About WMA

The Windows Media™ logo printed on the box indicates that this unit can play back WMA data.
WMA is short for Windows Media Audio and refers to an audio compression technology that is developed by Microsoft Corporation. WMA data can be encoded by using Windows Media Player version 7 or later.
Microsoft, Windows Media, and the Windows logo are trademarks, or registered trademarks of Microsoft Corporation in the United States and/or other countries.

Notes
- With some applications used to encode WMA files, this unit may not operate correctly.
- With some applications used to encode WMA files, album names and other text information may not be correctly displayed.

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

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

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

<table>
<thead>
<tr>
<th>Mark</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>🎶</td>
<td>Indicates the number of audio systems.</td>
</tr>
<tr>
<td>😎</td>
<td>Indicates the number of subtitle languages.</td>
</tr>
<tr>
<td>🎫</td>
<td>Indicates the number of viewing angles.</td>
</tr>
<tr>
<td>💥</td>
<td>Indicates the picture size (aspect ratio: screen width to height ratio) type.</td>
</tr>
<tr>
<td>🎈</td>
<td>Indicates the number of the region where playback is possible.</td>
</tr>
</tbody>
</table>

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 microprocessor to its initial settings. 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 appear on the display

1. **Turn the ignition switch OFF.**

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

   ![RESET button](image)

**Notes**

- When using with a Pioneer navigation unit, if you press **RESET**, be sure ACC OFF is selected. If ACC ON is selected, correct operation may not be possible even if you press **RESET**.
- After completing connections or when you want to erase all memorized settings or return the unit to its initial (factory) settings, switch your engine ON or set the ignition switch to ACC ON before pressing **RESET**.

Use and care of the remote control

Installing the battery

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

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

**WARNING**

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

**CAUTION**

- Use only one **CR2025 (3 V)** lithium battery.
- Remove the battery if the remote control is not used for a month or longer.
- Do not recharge, disassemble, heat or dispose of the battery in fire.
- Do not handle the battery with metallic tools.
- Do not store the battery with metallic materials.
- In the event of battery leakage, wipe the remote control completely clean and install a new battery.
- When disposing of used batteries, please comply with governmental regulations or environmental public institutions’ rules that apply in your country/area.
Using the remote control
Point the remote control in the direction of the front panel to operate.
• The remote control may not function properly in direct sunlight.

Important
• Do not store the remote control in high temperatures or direct sunlight.
• Do not let the remote control fall onto the floor, where it may become jammed under the brake or accelerator pedal.

About the XM READY mark

The XM READY mark printed on the front panel indicates that the Pioneer XM tuner (sold separately) can be controlled by this unit. Please inquire to your dealer or nearest authorized Pioneer service station regarding the XM tuner that can be connected to this unit. For XM tuner operation, please refer to the XM tuner owner’s manual.

Notes
• XM Satellite Radio is developing a new band of radio in the U.S.A.

The system will use direct satellite to receiver broadcasting technology to provide listeners in their cars and at home with crystal clear sound seamlessly from coast to coast. XM will create and package up to 100 channels of digital quality music, news, sports, talk and children’s programming.
• The XM name and related logos are trademarks of XM Satellite Radio Inc.
Head unit

1 **DISPLAY button**
Press to select different displays.

2 **PGM button**
Press to operate the preprogrammed functions for each source. (Refer to Using the PGM button on page 97.)

3 **Sub display**
Displays the basic information for the each source and the other settings when the LCD panel is closed.

4 **Ambient light sensor**
Senses ambient light. This system automatically adjusts the brightness of the display to compensate for ambient light.

5 **FLIP DOWN/CLOCK button**
Press to turn the LCD panel horizontal temporarily from upright position.

Press to turn the clock display on or off when the LCD panel is closed.

6 **OPEN/CLOSE button**
Press to open or close the LCD panel.

7 **ENTERTAINMENT button**
Press to switch between the background displays.

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

9 **V. ADJ button**
Press and hold to display the picture adjustment menu.

10 **RESET button**
Press to return to the factory settings (initial settings).
### What's What

11. **DETACH button**  
   Press to remove the front panel from the head unit.

12. **EJECT button**  
   Press to eject a disc from this unit.

13. **Joystick**  
   Move to do manual seek tuning, fast forward, reverse and track search controls.  
   Also used for controlling functions.

14. **EQ button**  
   Press to select various equalizer curves.

15. **BAND/ESC button**  
   Press to select among three FM bands and one AM band and to cancel the control mode of functions.

16. **ANGLE (+/-) button**  
   Press to change the LCD panel angle.

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

18. **BACK/TEXT button**  
   Press to return to the previous display.

19. **REAR ON button**  
   Press to watch a DVD/Video CD on a rear display if DVD (built in DVD player) is not selected as the source.

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

21. **SOURCE button**  
   This unit is turned on by selecting a source.  
   Press to cycle through all the available sources.
Remote control

1  Remote control selection switch
Switch to change the setting of the remote control. For details, refer to Setting remote control code type on page 87.

2  VOLUME buttons
Press to increase or decrease the volume.

3  REAR.S button
Press to watch a DVD/Video CD on a rear display if DVD (built in DVD player) is not selected as the source.

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

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

6  Remote control operation mode switch
Switch the operation mode between AVH, DVD and TV modes. Normally, set to AVH.
- AVH – For common operation of this unit
- DVD – Only for DVD player operation
- TV – Only for TV tuner operation
For details, refer to Using the remote control operation mode switch on the next page.

7  DIRECT button
Press to do direct channel select when using an XM tuner.

8  BOOKMARK (BOOK.M) button
AVH mode
Press to operate the preprogrammed functions for each source. (Refer to Using the PGM button on page 97.)

DVD mode
Press to turn the bookmark function on or off. For details, refer to Resume playback (Bookmark) on page 37.
9. BACK button
Press to return to the previous display.

10. BAND/ESC button
Press to select among three FM bands and one AM band and to cancel the control mode of functions.

11. ENTERTAINMENT button
Press to switch between the background displays.

12. FORWARD (▶▶) button
Press to perform fast forward.

13. STOP (■) button
Press to stop playback.

14. NEXT (▶▶) button
Press to go to the next track (chapter).

15. CLEAR button
Press to cancel the input number when 0–10 are used.

16. 0–10 buttons
Press to directly select the desired track, preset tuning or disc. Buttons 1–6 can operate the preset tuning for the tuner or disc number search for the multi CD player.

17. PREVIOUS (◀◀) button
Press to return to the previous track (chapter).

18. REVERSE (◀◀) button
Press to perform fast reverse.

19. PLAY/PAUSE (▶/II) button
Press to switch sequentially between playback and pause.

20. ANGLE button
Press to change the viewing angle during DVD playback.

21. STEP (II►/◄II) button
Press to move ahead one frame at a time during DVD/VideoCD playback. Press and hold for one second to activate slow playback.

22. SUBTITLE (S.TITLE) button
Press to change the subtitle language during DVD playback.

23. DISPLAY button
Press to select different displays.

24. AUDIO button
Press to change the audio language during DVD playback.

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

26. MENU button
Press to display the DVD menu during DVD playback.

27. TOP MENU (TOP.M) button
Press to return to the top menu during DVD playback.

Using the remote control operation mode switch
There are three remote control operation modes on the remote control.

AVH mode operation
When operating this unit by remote control, the mode is normally switched to AVH.

- The joystick on the remote control can perform the same operations as the one on the head unit. Furthermore, the joystick can perform the same operations as the touch panel keys ▲, ▼, ◀ and ►.
• 1–6 can perform the same operations as the preset tuning keys P1—P6 and the disc selection keys 01—06.
  — If you want to select a disc located at 7 to 12 by using buttons 1–6, press and hold the corresponding numbers, such as 1 for disc 7, until the disc number appears in the display.

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

• When you want to operate the following functions, switch the mode to DVD:
  • When operating the DVD menu by using the joystick. (Refer to Operating the DVD menu on page 33.)
  • When operating the PBC menu by using 0–10. (Refer to Watching a Video CD on page 38.)
  • When specifying title by using 0–10. (Refer to Specifying title on page 36.)

**Note**
With the mode switched to DVD, you cannot use these buttons: BACK, ENTERTAINMENT and DISPLAY.

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

• For details concerning operation, refer to the TV tuner’s operation manuals.
Turning the unit on and selecting a source

1 Source icon
Shows which source has been selected.

You can select a source you want to listen to. If DVD DISC AUTO is turned on, load a disc in the unit to switch to DVD (refer to Switching the automatic disc playback on page 91).

- When using the touch panel keys, touch the source icon and then touch the desired source name.
The source names are displayed and selectable ones are highlighted.
  - DVD – Built in DVD player
  - S-DVD – DVD player/multi DVD player
  - M-CD – Multi CD player
  - TUNER – Tuner
  - TV – Television
  - AV – Video input
  - EXT-1 – External unit 1
  - EXT-2 – External unit 2
  - AUX – AUX
  - XM – XM tuner
  - NAVI – Navigation unit
  - OFF – Turn the unit off
- When the source icon is not displayed, you can display it by touching the screen.
- To return to the playback display, touch ESC.

- When using the button, press SOURCE to select a source.
Press SOURCE repeatedly to switch between the following sources:
  XM (XM tuner)—TUNER (tuner)—TV (television)—AV (video input)—DVD (built in DVD player)—S-DVD (DVD player/multi DVD player)—M-CD (multi CD player)—EXT-1 (external unit 1)—EXT-2 (external unit 2)—AUX (AUX)—NAVI (navigation unit)

Notes
- In the following cases, the sound source will not change:
  - When there is no unit corresponding to the selected source connected to this unit.
  - When there is no disc in the unit.
  - When there is no disc in the DVD player.
  - When there is no magazine in the multi CD player.
  - When there is no magazine in the multi DVD player.
  - When the AUX (auxiliary input) is set to off (refer to page 89).
  - When the AV (video input) is not set to VIDEO (refer to page 93).
- External unit refers to a Pioneer product (such as one available in the future) that, although incompatible as a source, enables control of basic functions by this unit. Two external units can be controlled by this unit. When two external units are connected, the allocation of them to external unit 1 or external unit 2 is automatically set by this unit.
- When this unit’s blue/white lead is connected to the 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.
When using with a Pioneer navigation unit, the car’s antenna extends regardless of turning this unit on or off.
Loading a disc

- Insert a disc into the disc loading slot. Playback will automatically start.
  - If DVD AUTO PLAY is on, SOME DISCS MAY NOT FULLY OPERATE ON THIS SYSTEM is displayed. (Refer to Automatic playback of DVDs on page 87.)
  - When a disc is loaded in this unit, touch the source icon and then touch DVD to select DVD.
  - If DVD DISC AUTO is turned off, touch the source icon and then touch DVD to select DVD (refer to the previous page).
  - To eject a disc, press EJECT.

Notes

- The DVD player plays one, standard, 12 cm or 8 cm (single) disc at a time. Do not use an adapter when playing 8 cm discs.
- Do not insert anything other than a disc into the disc loading slot. Discs which can be played back are listed on Playable discs on page 9.
- If you cannot insert a disc completely or if after you insert a disc the disc does not play, check that the label side of the disc is up. Press EJECT to eject the disc, and check the disc for damage before inserting it again.
- If the DVD player does not operate properly, an error message such as ERROR-02 may be displayed. Refer to Error messages on page 100.
- If bookmark function is on, DVD playback resumes from the selected point. For more details, refer to Resume playback (Bookmark) on page 37.

Adjusting the volume

- Use VOLUME to adjust the sound level. With the head unit, rotate VOLUME to increase or decrease the volume. With the remote control, press VOLUME to increase or decrease the volume.

Turning the unit off

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

Using the rear display

You can watch a DVD/Video CD on the rear display regardless of whether DVD (built in DVD player) is selected as the source or not.
- To watch a DVD/Video CD on the rear display only, switch the operation mode on the remote control to DVD. And you can operate the DVD/Video CD playback on the rear display independently by the remote control. (Refer to page 19.)

⚠️ CAUTION

When you have turned the DVD/Video CD playback on by pressing REAR ON, you cannot turn it off even if you press SOURCE and hold. In this case, press REAR ON to turn the DVD/Video CD playback off.

- Press REAR ON to watch a DVD/Video CD on the rear display when DVD (built-in DVD player) is not selected as the source. DVD/Video CD playback is turned on and the illumination color of REAR ON changes into the different color than the other buttons.
  - You can also turn the DVD/Video CD playback on by pressing REAR.S on the remote control.
  - To turn the DVD/Video CD playback off, press REAR ON again.

Note

When a Pioneer navigation unit is connected to this unit, the navigation image can be displayed on the rear display. (Refer to page 94.)
Displaying the navigation image
You can display navigation map and navigation menu on this display.
- You can operate these functions only when a Pioneer navigation unit is connected to
  this unit.

Displaying navigation map
- Press WIDE to display navigation map.
  - When the map is scrolled, pressing this button returns to the display of the map of your
    surroundings.

Displaying navigation menu
- Press ENTERTAINMENT to display navigation menu when the navigation map is
  displayed.
  - You cannot use ENTERTAINMENT on the remote control.

Switching to the navigation image
- Press V.ADJ to switch the display to navigation image.
  - To return to the video of each source, press V.ADJ again.

Touch panel key basic operation

Activating the touch panel keys

1. Touch panel keys
   Touch to do various operations.

2. Touch ESC to hide the touch panel keys.
   - You can also hide the touch panel keys by pressing BAND/ESC.

Note
If you do not use the touch panel keys within 30 seconds, they will be hidden automatically.
**Operating the menu**

1. **FUNCTION key**
   Touch to select functions for each source.

2. **AUDIO key**
   Touch to select various sound quality controls.

3. **SETUP key**
   Touch to select various setup functions.

4. **BACK key**
   Touch to return to the previous display.

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

1. Touch A.MENU to display MENU. MENU appears on the display.
   - When A.MENU is not displayed, you can display it by touching the screen.

2. Touch the desired key to display the function names you want to operate.
   - To go to the next group of function names, touch NEXT.
   - To return to the previous group of function names, touch PREV.

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

**Note**

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

**Operating the menu by using the joystick**

You can also perform most of the menu items by using the joystick.
- Switch the remote control operation mode to AVH to operate the menu by using the joystick on the remote control. (Refer to page 19.)

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

2. Move the joystick up or down and then click it to display the function names you want to operate.
   - To go to the next group of function names, move the joystick to NEXT and click it.
   - To return to the previous group of function names, move the joystick to PREV and click it.

3. Press BAND/ESC to return to the display of each source.
   - You can return to the previous display by pressing BACK/TEXT.

**Opening and closing the LCD panel**

The LCD panel will be opened or closed automatically with the turning of the ignition switch on or off. You can turn off the automatic close/open function. (Refer to page 94.)
- Do not close the LCD panel with hands by force. That cause malfunction.
- The automatic close/open function will operate the display as follows.
— When the ignition switch is turned OFF while the LCD panel is opened, the LCD panel will close after six seconds.
— When the ignition switch is turned ON again (or turned to ACC), the LCD panel will be opened automatically.
— Removing or attaching the front panel will automatically close or open the LCD panel. (Refer to page 27.)

- When the ignition switch is turned OFF after the LCD panel has been closed, turning the ignition switch ON again (or turning it to ACC) will not open the LCD panel. In this case, press OPEN/CLOSE to open the LCD panel.
- When closing the LCD panel, check to make sure that it has closed completely. If the LCD panel has stopped halfway, leaving it like this could result in damage.

- Press OPEN/CLOSE to open the LCD panel.
  - To close the LCD panel, press OPEN/CLOSE again.

### Adjusting the LCD panel angle

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

- Press ANGLE (+/−) to adjust the LCD panel to an easily viewable angle. The LCD panel angle continues changing as long as you press ANGLE (+/−) and hold.

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

### Turning the LCD panel horizontal

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

- Press FLIP DOWN/CLOCK to turn the LCD panel horizontal.
  - To return to original position, press FLIP DOWN/CLOCK again.
  - The LCD panel returns to the original position automatically with beeping sound 10 seconds after operation.

### Changing the wide screen mode

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

- Press WIDE to select the desired setting.
Press WIDE repeatedly to switch between the following settings:
FULL (full)—JUST (just)—CINEMA (cinema)—ZOOM (zoom)—NORMAL (normal)
- When a Pioneer navigation unit is connected to this unit, press WIDE and hold to select the desired setting. Press and hold WIDE repeatedly to switch between the settings.
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 captions 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.
• Video will appear grainy when viewed in CINEMA or ZOOM mode.
• The navigation map and the backup camera picture is always FULL.

Adjusting the picture adjustment
You can adjust BRIGHT (brightness), CONTRAST (contrast), COLOR (color) and HUE (hue) for each source and rear view camera.

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

1. Press V.ADJ and hold to display PICTURE ADJUST.
Press V.ADJ until PICTURE ADJUST appears in the display.
  ▪ You cannot use MENU on the remote control.

2. Touch any of the following touch panel keys to select the function to be adjusted.
The adjustment function names are displayed and adjustable ones are highlighted.
  • BRIGHT – Adjust the black intensity
  • CONTRAST – Adjust the contrast
  • COLOR – Adjust the color saturation
  • HUE – Adjust the tone of color (red is emphasized or green is emphasized)
  • DIMMER – Adjust the brightness of display
  • B.CAMERA – Switch to the picture adjustment display for the rear view camera
  • SOURCE – Return to the picture adjustment display for each source

  ▪ You can adjust the picture adjustment for rear view camera only when BACK UP CAMERA is turned on. (Refer to Setting for rear view camera on page 93.)
  ▪ With some backup cameras, picture adjustment may not be possible.
Basic Operations

3 Touch « or » to adjust the selected item.
Each time you touch « or » it increases or decreases the level of selected item. +24 – –24 is displayed as the level is increased or decreased.

4 Touch ESC to hide the touch panel keys.

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

1 Press V. ADJ and hold to display PICTURE ADJUST.
Press V. ADJ until PICTURE ADJUST appears in the display.

2 Touch DIMMER.
The ambient light level used as the standard for adjusting DIMMER appears above the level bar.
- Orange sun ☼ – Adjust the brightness for bright ambient light (daytime)
- Red sun ☼ – Adjust the brightness for intermediate brightness (evening)
- Yellow moon ☼ – Adjust the brightness for dark ambient light (nighttime)

3 Touch « or » to adjust the brightness.
Each time you touch « or » moves yellow towards the left or the right.
The level indicates the brightness of the screen being adjusted. The farther yellow moves to the right, the brighter the screen.

4 Touch ESC to hide the touch panel keys.

Note
The icons indicating the current ambient brightness used for adjusting BRIGHT and CONTRAST may differ from DIMMER slightly.

Protecting your unit from theft
The front panel can be detached from the head unit to discourage theft.
- If the front panel is not detached from the head unit within five seconds of turning off the ignition, a warning tone will sound.
- You can turn off the warning tone. See Switching the warning tone on page 89.

Important
- Never use force or grip the display and the buttons too tightly when removing or attaching.
- Avoid subjecting the front panel to excessive shocks.
- Keep the front panel out of direct sunlight and high temperatures.
- If removed, replace the front panel on the unit before starting up your vehicle.

Removing the front panel
1 Press DETACH to remove the front panel.
Press DETACH and the right side of the front panel is removed from the head unit.

2 Gently grip the right side of the front panel and slowly pull it outward.
Take care not to grip it too tightly or to drop the front panel and protect it from contact with water or other fluids to prevent permanent damage.
Basic Operations

Attaching the front panel

- Replace the front panel by holding it upright to the unit and clipping it securely into the mounting hooks.■
Listening to the radio

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 to which frequency the tuner is tuned.

5. **Preset list display**
   Shows the preset list.

6. **STEREO indicator**
   Shows that the frequency selected is being broadcast in stereo.

7. **LOCAL indicator**
   Shows when local seek tuning is on.

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1. **Touch the source icon and then touch TUNER to select the tuner.**
   - When the source icon is not displayed, you can display it by touching the screen.

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

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

4. **To perform manual tuning, briefly touch ◄ or ►.**
   The frequencies move up or down step by step.
   - You can also perform manual tuning by moving the joystick left or right.

5. **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 stations. Seek tuning starts as soon as you release the key.
   - You can also perform seek tuning by holding the joystick left or right.

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**Note**

If you do not use the touch panel keys within 30 seconds, they will be hidden automatically.
Introduction of advanced tuner operation

1. Function display
   Shows the function names.

- Touch A.MENU and then touch FUNCTION to display the function names.
  The function names are displayed and operable ones are highlighted.
  - When A.MENU is not displayed, you can display it by touching the screen.
  - You can also display MENU by clicking the joystick.
  - To return to the previous display, touch BACK.
  - To return to the frequency display, touch ESC.

**Notes**
- Up to 18 FM stations, six for each of the three FM bands, and six AM stations can be stored in memory.
- You can also use ▲ and ▼ to recall radio station frequencies assigned to preset tuning keys P1—P6.

Storing and recalling broadcast frequencies

If you touch any of the preset tuning keys P1—P6 you can easily store up to six broadcast frequencies for later recall with the touch of a key.

- When you find a frequency that you want to store in memory keep touching one of preset tuning keys P1—P6 until the preset number stops flashing.
  The number you have touched will flash in the preset number indicator and then remain lit.
  The selected radio station frequency has been stored in memory.
  The next time you touch the same preset tuning key the radio station frequency is recalled from memory.
  - When the touch panel keys are not displayed, you can display them by touching the screen.
  - When P1—P6 are not displayed, you can display them by touching DISP.

**Tuning in strong signals**

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

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

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

3. Touch ◀ or ▶ to set the sensitivity.
   There are four levels of sensitivity for FM and two levels for AM:
   FM: 1—2—3—4
   AM: 1—2
Storing the strongest broadcast frequencies

BSM (best stations memory) lets you automatically store the six strongest broadcast frequencies under preset tuning keys P1—P6 and once stored there you can tune in to those frequencies with the touch of a key.

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

2 Touch ▲ to turn BSM on.
BSM begins to flash. While BSM is flashing the six strongest broadcast frequencies will be stored under preset tuning keys P1—P6 in order of their signal strength. When finished, BSM stops flashing.
- To cancel the storage process, touch ▼.

Note
Storing broadcast frequencies with BSM may replace broadcast frequencies you have saved using P1—P6.
Watching a DVD video

These are the basic steps necessary to play a DVD video with your DVD player. More advanced DVD video operation is explained starting on page 34.

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

2. **DVD-V indicator**
   Shows when a DVD video is playing.

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

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

5. **Play time indicator**
   Shows the elapsed playing time of the current chapter.

6. **Viewing angle indicator**
   Shows which viewing angle has been selected.

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

8. **Audio language indicator**
   Shows which audio language has been selected.

1. **Touch the source icon and then touch DVD to select the DVD player.**
   - When the source icon is not displayed, you can display it by touching the screen.
   - If no disc is loaded in the unit, you cannot select DVD (DVD player). Insert a disc in the unit. (Refer to page 22.)
   - With some discs, a menu may be displayed. (Refer to Operating the DVD menu on the next page.)

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

3. **To skip back or forward to another chapter, touch ◀ or ▶.**
   Touching ▶ 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. Chapter numbers are displayed for eight seconds.
   - You can also skip back or forward to another chapter by moving the joystick left or right.

4. **Touch → to display ◀ and ▶.**
   Touch → until ◀ and ▶ appear in the display.

5. **To perform fast forward or reverse, keep touching ◀ or ▶.**
   If you keep touching ◀ or ▶ for five seconds, the icon ◀ or ▶ changes into reversal indication. When this happens, fast reverse/fast forward continues even if you release ◀ or ▶. To resume playback at a desired point, touch ▶/II.
   - You can also perform fast reverse/fast forward by holding the joystick left or right.
Playing DVD video discs

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

Note
If you do not use the touch panel keys within 30 seconds, they will be hidden automatically.

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.M while a disc is playing. Touching either of these keys again lets you start playback from the location selected from the menu. For details, refer to the instructions provided with the disc.

1  Touch ←→ to display touch panel keys to operate the DVD menu.
   - When the touch panel keys are not displayed, you can display them by touching the screen.

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

3  Touch ENTER.
Playback starts from the selected menu item.
- If you switch the remote control operation mode to DVD, the joystick on the remote control can also operate the DVD menu. (Refer to page 19.)
- You cannot operate the DVD menu from the joystick on the head unit.
- The way to display the menu differs depending on the disc.

Skipping back or forward to another title
- To skip back or forward to another title, touch ▲ or ▼.
Touching ▲ skips to the start of the next title.
Touching ▼ skips to the start of the previous title.
Title numbers are displayed for eight seconds.
- You can also skip back or forward to another title by moving the joystick up or down.

Stopping playback
- Touch ■.
- When you stop DVD playback by touching ■, that location on the disc is memorized, enabling playback from that point when you play the disc again.
- To play back the disc again, touch ▶/II.
Introduction of advanced DVD video operation

1. Function display
   Shows the function names.

2. Touch A.MENU and then touch FUNCTION to display the function names.
   The function names are displayed and operable ones are highlighted.
   - When A.MENU is not displayed, you can display it by touching the screen.
   - You can also display MENU by clicking the joystick.
   - To go to the next group of function names, touch NEXT.
   - To return to the previous group of function names, touch PREV.
   - To return to the previous display, touch BACK.
   - To return to the playback display, touch ESC.

Notes
- If you perform chapter search or fast forward/reverse, the repeat play range changes to REPEAT OFF.
- You cannot operate repeating play when DVD DISC AUTO is on (refer to Automatic playback of DVDs on page 87).

Pausing DVD video playback

Pause lets you temporarily stop disc playback.

- Touch ▶/II during playback.
  The icon II is displayed and playback is paused, letting you view a still image.
  - To resume playback at the same point that you turned pause on, touch ▶/II again.

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

Repeating play

There are two repeat play ranges for the DVD playback: TITLE (title repeat) and CHAPTER (chapter repeat).
Playing DVD video discs

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

- Touch II► during playback.
  Each time you touch II►, you move ahead one frame.
  - To return to normal playback, touch ►/II.

Notes
- Depending on the disc and the playback location on the disc, the icon □ may be displayed, indicating that frame by frame playback is not possible.
- With some discs, images may be unclear during frame by frame playback.

Slow motion playback
This lets you slow down playback speed.

1  Keep touching II► until ► is displayed during playback.
The icon ► is displayed, forward slow motion playback begins.
  - To return to normal playback, touch ►/II.

2  Touch ◄II or ►II to adjust playback speed during slow motion playback.
Each time you touch ◄II or ►II, it changes the speed in four steps in the following order: 1/16—1/8—1/4—1/2

Notes
- There is no sound during slow motion playback.
- Depending on the disc and the playback location on the disc, the icon □ may be displayed, indicating that slow motion playback is not possible.
- With some discs, images may be unclear during slow motion playback.
- Reverse slow motion playback is not possible.

Searching for a desired scene, starting playback from a specified time
You can use the search function to search for a desired scene by specifying a title or chapter, and the time search function to specify the time on a disc at which playback starts.
- Chapter search and time search are not possible when disc playback has been stopped.

1  Touch A.MENU and FUNCTION and then SEARCH.

2  Touch TITLE (title), CHAP. (chapter) or TIME (time).

3  Touch 0—9 to input the desired number.
For titles and chapters
- To select 3, touch 3.
- To select 10, touch 1 and 0 in that order.
- To select 23, touch 2 and 3 in that order.

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

4  While the inputted number is displayed, touch ENTER.
This starts playback from the selected scene.
Playing DVD video discs

**Notes**

- With discs featuring a menu, you can also touch **MENU** or **TOP.M** and then make selections from the displayed menu.
- With some discs, the icon  may be displayed, indicating that titles, chapters and time cannot be specified.

**Specifying title**

You can use the direct search function to search for a desired scene by specifying a title.
- **Notes**
  - You can also switch between languages/audio systems using **AUDIO** on the remote control.
  - The number in the \( \text{③} \) mark on a DVD’s package indicates the number of recorded languages/audio systems.
  - With some DVDs, switching between languages/audio systems may only be possible using a menu display.
  - You can also switch between languages/audio systems using **DVD SETUP**. For details, refer to **Setting the audio language** on page 85.
  - Only digital output of DTS audio is possible. If this unit’s optical digital outputs are not connected, 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 reverse, pause or slow motion playback returns you to normal playback.

- Press 0–10 corresponding to a desired title number when the disc is stopped.
  - Title number is displayed for eight seconds and playback starts from the selected title.
  - To select 3, press 3.
  - To select 10, press 10 and 0 in that order.
  - To select 23, press 10, 10 and 3 in that order.

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

DVDs can provide audio playback with different languages and different systems (Dolby Digital, DTS etc.). With DVDs featuring multi audio recordings, you can switch between languages/audio systems during playback.

- Touch **AUDIO** during playback.
  - Each time you touch **AUDIO** it switches between audio systems.

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

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

- Touch **SUB.T** during playback.
  - Each time you touch **SUB.T** it switches between subtitle languages.

**Notes**

- You can also switch between subtitle languages using **SUBTITLE (S.TITLE)** on the remote control.
Changing the viewing angle during playback (Multi-angle)

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

- During playback of a scene shot from multiple angles, the angle icon  is displayed. Turn angle icon display on or off using DVD SETUP. For details, refer to Setting angle icon display on page 86.

- Touch ANGLE during playback of a scene shot from multiple angles. Each time you touch ANGLE it switches between angles.

Resume playback (Bookmark)

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

- During playback, press BOOKMARK (BOOK.M) at the point you want to resume playback next time.
The selected scene will be bookmarked so that playback resumes from that point next time. You can bookmark up to five discs. After that, the oldest bookmark is replaced by the new one.
  - To clear the bookmark on a disc, press and hold BOOKMARK (BOOK.M) during playback.
  - You can also bookmark a disc by pressing and holding EJECT at the point you want to bookmark. Next time you load the disc, playback will resume from the bookmarked point. Note that you can only bookmark one disc using this method. To clear the bookmark on a disc, press EJECT.

Selecting audio output

You can switch between stereo and monaural audio output.

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

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

2. Touch L/R SELECT.

3. Touch L+R (left and right), L (left) and R (right).

Note

Depending on the disc and the playback location on the disc, the icon  may be displayed, indicating that operating this function is not possible.
Watching a Video CD

![Diagram of Video CD controls]

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

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

2. **Video CD indicator**
   Shows when a Video CD is playing.

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

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

5. **Audio output indicator**
   Shows the output channel selected currently.

1. Touch the source icon and then touch DVD to select the DVD player.
   - When the source icon is not displayed, you can display it by touching the screen.
   - If no disc is loaded in the unit, you cannot select DVD (DVD player). Insert a disc in the unit. (Refer to page 22.)

2. **Switch the remote control operation mode to DVD and then press 0–10 to select the desired menu item.**
   Playback starts from the selected menu item.
   - When the menu is two or more pages long, touch << or >> to switch between displays.
   - You can display the menu by pressing RETURN during PBC playback. For details, refer to the instructions provided with the disc.
   - After operating the menu, we recommend that you switch remote control operation mode to AVH. (Refer to page 19.)

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

4. **To skip back or forward to another track, 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.
   Track numbers are displayed for eight seconds.
   - You can also skip back or forward to another track by moving the joystick left or right.
   - During PBC playback, a menu may be displayed if you perform these operations.

5. **Touch → to display << and >>.**
   Touch → until << and >> appear in the display.

6. **To perform fast forward or reverse, keep touching << or >>.**
   If you keep touching << or >> for five seconds, the icon << or >> changes into reverse. When this happens, fast reverse/fast forward continues even if you release << or >>. To resume playback at a desired point, touch >/II.
Playing Video CDs

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

Note
If you do not use the touch panel keys within 30 seconds, they will be hidden automatically.

Stopping playback

● Touch ■.
- When you stop Video CD playback (during PBC playback only) by touching ■, that location on the disc is memorized, enabling playback from that point when you play the disc again.
- To play back the disc again, touch ▶/II.

PBC playback

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

Note
PBC playback of Video CD cannot be cancelled.

Introduction of advanced Video CD operation

1 Function display
Shows the function names.

- Touch A.MENU and then touch FUNCTION to display the function names. The function names are displayed and operable ones are highlighted.
- When A.MENU is not displayed, you can display it by touching the screen.
- You can also display MENU by clicking the joystick.
- To go to the next group of function names, touch NEXT.
- To return to the previous group of function names, touch PREV.
- To return to the previous display, touch BACK.
- To return to the playback display, touch ESC.

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

Repeating play

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

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

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

2  Touch either of the following touch panel keys to select the repeat range.
   - TRACK – Repeat just the current track
   - DISC – Repeat the current disc

Note
If you perform track search or fast forward/reverse, the repeat play range changes to DISC.

Pausing Video CD playback
Pause lets you temporarily stop disc playback.

- Touch ▶/II during playback.
The icon II is displayed and playback is paused, letting you view a still image.
  - To resume playback at the same point that you turned pause on, touch ▶/II again.

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

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

- Touch ▶/II during playback. Each time you touch ▶/II, you move ahead one frame.
  - To return to normal playback, touch ▶/II.

Notes
- Depending on the disc and the playback location on the disc, the icon ◊ may be displayed, indicating that frame by frame playback is not possible.
- With some discs, images may be unclear during frame by frame playback.

Slow motion playback
This lets you slow down playback speed.

1  Keep touching ▶ until ◊ is displayed during playback.
The icon ◊ is displayed, forward slow motion playback begins.
  - To return to normal playback, touch ▶/II.

2  Touch ◊ or ▶ to adjust playback speed during slow motion playback.
Each time you touch ◊ or ▶, it changes the speed in four steps in the following order: 1/16—1/8—1/4—1/2

Notes
- There is no sound during slow motion playback.
- Depending on the disc and the playback location on the disc, the icon ◊ may be displayed, indicating that slow motion playback is not possible.
- With some discs, images may be unclear during slow motion playback.
- Reverse slow motion playback is not possible.
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 playback starts.
- During playback of Video CDs featuring PBC (playback control), this function can not be operated.
- Time search is not possible when disc playback has been stopped.

1 Touch A.MENU and FUNCTION and then SEARCH.

2 Touch TRACK (track) or TIME (time).

3 Touch 0—9 to input the desired number.
   **For tracks**
   - To select 3, touch 3.
   - To select 10, touch 1 and 0 in that order.
   - To select 23, touch 2 and 3 in that order.
   **For time (time search)**
   - To select 21 minutes 43 seconds, touch 2, 1, 4 and 3 in that order.
   - To select 1 hour 11 minutes, convert the time into 71 minutes 00 seconds and touch 7, 1, 0 and 0 in that order.
   ▪ To cancel the inputted numbers, touch C.
   ▪ You can also input the desired number by using the joystick and 0-9.

4 While the inputted number is displayed, touch ENTER.
   This starts playback from the selected scene.

Selecting audio output

You can switch between stereo and monaural audio output.
- This function is not possible when disc playback has been stopped.

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

2 Touch L/R SELECT.

3 Touch L+R (left and right), L (left) and R (right).

**Notes**
- You can also switch between stereo and monaural audio output using AUDIO on the remote control.
- Depending on the disc and the playback location on the disc, the icon ○ may be displayed, indicating that operating this function is not possible. □
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 on the next page.

1 Source icon
   Shows which source has been selected.

2 CD indicator
   Shows when a CD is playing.

3 Track number indicator
   Shows the track currently playing.

4 Play time indicator
   Shows the elapsed playing time of the current track.

5 Disc title indicator
   Shows the title of the currently playing disc.

6 Repeat indicator
   Shows when repeat range is selected to current track.

1 Touch the source icon and then touch DVD to select the DVD player.
   - When the source icon is not displayed, you can display it by touching the screen.

2 Touch the screen to display the touch panel keys.

3 To skip back or forward to another track, touch ⅛ or ⅛. Touching ⅛ skips to the start of the next track. Touching ⅛ once skips to the start of the current track. Touching it again will skip to the previous track.
   Track numbers are displayed for eight seconds.
   - You can also skip back or forward to another track by moving the joystick left or right.

4 Touch → to display ⅛ and ⅛. Touch → until ⅛ and ⅛ appear in the display.

5 To perform fast forward or reverse, keep touching ⅛ or ⅛.
   - You can also perform fast reverse/fast forward by holding the joystick left or right.

Notes

- When playing discs with MP3/WMA files and audio data (CD DA) such as CD EXTRA and MIXED MODE CDs, both types can be played only by switching mode between MP3/WMA and CD DA by touching DA-ROM or pressing BAND/ESC. This function can be operated only when the disc is playing.
- If you do not use the touch panel keys within 30 seconds, they will be hidden automatically.
Stopping playback

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

Introduction of advanced CD operation

1. Function display
   Shows the function names.

- Touch A.MENU and then touch FUNCTION to display the function names. The function names are displayed and operable ones are highlighted.
  - When A.MENU is not displayed, you can display it by touching the screen.
  - You can also display MENU by clicking the joystick.
  - To go to the next group of function names, touch NEXT.
  - To return to the previous group of function names, touch PREV.
  - To return to the previous display, touch BACK.
  - To return to the playback display, touch ESC.

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

Repeating play
Repeat play lets you hear the same track over again.
1 Touch A.MENU and FUNCTION and then touch REPEAT.

2 Touch either of the following touch panel keys to select the repeat range.
   - TRACK – Repeat just the current track
   - DISC – Repeat the current disc

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

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

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

2 Touch ▲ to turn random play on.
Tracks will play in a random order.
   - To turn random play off, touch ▼.

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

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

2 Touch ▲ to turn scan play on.
The first 10 seconds of each track is played.

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

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

Pausing CD playback
Pause lets you temporarily stop disc playback.
- Touch ►/II during playback.
  PAUSE appears in the display. Play of the current track pauses.
  - To resume playback at the same point that you turned pause on, touch ►/II again.

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

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

1 Touch A.MENU and FUNCTION and then SEARCH.

2 Touch TRACK.

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

4 While the inputted number is displayed, touch ENTER.
This starts playback from the selected track.

Entering disc titles
You can input CD titles and display the title.
The next time you insert a CD for which you have entered a title, the title of that CD will be displayed.
Use the disc title input feature to store up to 48 CD titles in the unit. Each title can be up to 10 characters long.
• When playing a CD TEXT disc, you cannot switch to TITLE EDIT. The disc title will have already been recorded on a CD TEXT disc.
• If no title has been entered for the currently playing disc, NO TITLE is displayed.

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

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

3 Touch TITLE EDIT.

4 Touch ABC to select the desired character type.
Touch ABC repeatedly to switch between the following character types:
Alphabet (upper case), numbers and symbols—Alphabet (lower case)—European letters, such as those with accents (e.g., á, à, â, ç)
□ You can select to input numbers and symbols by touching 123.

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

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

7 Touch OK to store the entered title in memory.

8 Touch ESC to return to the playback display.

Notes
• Titles remain in memory, even after the disc has been removed from the unit, and are recalled when the disc is reinserted.
• After data for 48 discs has been stored in memory, data for a new disc will overwrite the oldest one.

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

- Touch DISP.
  Touch DISP repeatedly to switch between the following settings:
  Disc Title (disc title)—Disc Artist (disc artist name)—TrackTitle (track title)—Track Artist (track artist name)
  - If specific information has not been recorded on a CD TEXT disc, NO XXXX will be displayed (e.g., NO ARTIST).

Scrolling titles in the display

This unit can display the first 30 letters only of Disc Title, Disc Artist, TrackTitle and Track Artist. When the recorded information is longer than 30 letters, you can scroll the text to the left so that the rest of the title can be seen.

- Keep touching DISP until the title begins to scroll to the left.
The rest of the title will appear in the display.

Selecting tracks from the track title list

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

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

2  Touch ← or → to switch between the lists of titles.

3  Touch your favorite track title.
That selection will begin to play.
Listening to MP3/WMA

These are the basic steps necessary to play an MP3/WMA with your built-in DVD player. More advanced MP3/WMA operation is explained starting on page 49.

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

2. **ROM indicator**
   Shows when the MP3/WMA file is playing. When playing discs with MP3/WMA files and audio data (CD DA) such as CD EXTRA and MIXED MODE CDs, CD-ROM is displayed.

3. **Folder number indicator**
   Shows the number of folder currently playing.

4. **Track number indicator**
   Shows the track (file) currently playing.

5. **Play time indicator**
   Shows the elapsed playing time of the current track (file).

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

7. **Repeat indicator**
   Shows the selected repeat range.

1. Touch the source icon and then touch DVD to select the DVD player.
   - When the source icon is not displayed, you can display it by touching the screen.
   - If no disc is loaded in the unit, you cannot select DVD (DVD player). Insert a disc in the unit. (Refer to page 22.)

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

3. To skip back or forward to another track, touch ▶️ or ▶️.
   Touching ▶️ skips to the start of the next track. Touching ▶️ once skips to the start of the current track. Touching it again will skip to the previous track.
   Track numbers are displayed for eight seconds.
   - You can also skip back or forward to another track by moving the joystick left or right.

4. Touch → to display ▲, ▼, ▶️ and ▶️.
   Touch → until ▲, ▼, ▶️ and ▶️ appear in the display.

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

6. Touch ▲ or ▼ to select a folder.
   - You can also select a folder by moving the joystick up or down.
   - To return to folder 001 (ROOT), press and hold BAND/ESC. However, if folder 001 (ROOT) contains no files, playback commences with folder 002.
Playing MP3/WMA

- You cannot select a folder that does not have an MP3/WMA file recorded in it.

Notes

- When playing discs with MP3/WMA files and audio data (CD DA) such as CD EXTRA and MIXED MODE CDs, both types can be played only by switching mode between MP3/WMA and CD DA by touching DA-ROM or pressing BAND/ESC. This function can be operated only when the disc is playing.
- If you have switched between playback of MP3/WMA files and audio data (CD DA), play back starts at the first track on the disc.
- This DVD player can play back an MP3/WMA file recorded on CD ROM. (Refer to page 103 for files that can be played back.)
- There is sometimes a delay between starting up CD playback and the sound being issued. When being read in, FORMAT READ is displayed.
- Playback is carried out in order of file number. Folders are skipped if they contain no files. (If folder 001 (ROOT) contains no files, playback commences with folder 002.)
- This unit does not play back WMA files recorded as VBR (variable bit rate).
- When playing back files recorded as VBR (variable bit rate) files, the play time will not be correctly displayed if fast forward or reverse operations are used.
- If the inserted disc contains no files that can be played back, NO AUDIO is displayed.
- If the inserted disc contains WMA files that are protected by digital rights management (DRM), TRK SKIPPED is displayed while the protected file is skipped.
- If all the files on the inserted disc are secured by DRM, PROTECT is displayed.
- When a disc contains both WMA files which are protected by DRM and audio data (CD DA), both types cannot be switched. In this case, only audio data will be played back.
- There is no sound on fast forward or reverse.

Stopping playback

- Touch ■.
  - When you stop MP3/WMA playback by touching ■, that location on the disc is memorized, enabling playback from that point when you play the disc again.
  - To play back the disc again, touch ►/II.
Introduction of advanced built-in DVD player (MP3/WMA) operation

1 Function display
   Shows the function names.

- Touch A.MENU and then touch FUNCTION to display the function names.
  The function names are displayed and operable ones are highlighted.
  - When A.MENU is not displayed, you can display it by touching the screen.
  - You can also display MENU by clicking the joystick.
  - To go to the next group of function names, touch NEXT.
  - To return to the previous group of function names, touch PREV.
  - To return to the previous display, touch BACK.
  - To return to the playback display, touch ESC.

Note

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

Repeating play

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

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

2 Touch any of the following touch panel keys to select the repeat range.
   - FOLDER – Repeat the current folder
   - TRACK – Repeat just the current track
   - DISC – Repeat all tracks

Notes

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

Playing tracks in a random order

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

1 Select the repeat range.
   Refer to Repeating play on this page.

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

3 Touch ▲ to turn random play on.
   Tracks will play in a random order within the previously selected FOLDER or DISC ranges.
   - To turn random play off, touch ▼.
Scanning folders and tracks
While you are using FOLDER, the beginning of each track in the selected folder plays for about 10 seconds. When you are using DISC, the beginning of the first track of each folder is played for about 10 seconds.

1 Select the repeat range.
Refer to Repeating play on the previous page.

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

3 Touch ▲ to turn scan play on.
The first 10 seconds of each track of the current folder (or the first track of each folder) is played.

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

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

Searching for a desired track in the current folder
You can use the search function to specify a track to search for a desired track.
• Track search is not possible when disc playback has been stopped.

1 Touch A.MENU and FUNCTION and then SEARCH.

2 Touch TRACK.

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

4 While the inputted number is displayed, touch ENTER.
This starts playback from the selected track.

Pausing MP3/WMA playback
Pause lets you temporarily stop disc playback.

• Touch ►/II during playback.
PAUSE appears in the display. Play of the current track pauses.

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

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

Displaying text information on MP3/WMA disc
Text information recorded on a MP3/WMA disc can be displayed.

• Touch DISP.
Touch DISP repeatedly to switch between the following settings:
Folder Name (folder name)—File Name (file name)—Track Title (track title)—Artist Name (artist name)—Album Title (album title)—Comment (comment)—Bit Rate (bit rate)

• When playing back WMA files, album title and comment are not displayed.
• When playing back MP3 files recorded as VBR (variable bit rate) files, the bit rate value is not dis
played even after switching to bit rate. (VBR will be displayed.)
- If specific information has not been recorded on an MP3/WMA disc, NO XXXX will be displayed (e.g., NO NAME).
- Press and hold BACK/TEXT displays TRACK (track title), ARTIST (artist name) and ALBUM (album title) at a time.

3 Touch your favorite file name (or folder name).
When you select the file, that selection will begin to play.
- When you have selected a folder, a list of the names of the files (or the folders) in it can be viewed. Repeat 2 and 3 to select the desired file name.
- To return to the previous list (the folder one level higher), touch  

Scrolling text information in the display
This unit can display the first 30 letters only of Folder Name, File Name, Track Title, Artist Name, Album Title and Comment.
When the recorded information is longer than 30 letters, you can scroll the text to the left so that the rest of the text information can be seen.

- Keep touching DISP until the text information begins to scroll to the left.
The rest of the text information will appear in the display.

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

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

2 Touch or  to switch between the lists of names.
**Listening to a CD**

You can use this unit to control a multi-CD player, which is sold separately. These are the basic steps necessary to play a CD with your multi CD player. More advanced CD operation is explained starting on the next page.

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

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

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

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

5. **Disc list display**
   Shows the disc title list.

1. **Touch the source icon and then touch M-CD to select the multi-CD player.**
   - When the source icon is not displayed, you can display it by touching the screen.

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

3. **Touch any of 01—06 to select a disc you want to listen to.**
   If you want to select a disc located at 7 to 12, touch PREV or NEXT to display 07—12.
   - When 01—06 and 07—12 are not displayed, you can display them by touching DISP.
   - You can also sequentially select a disc by using ▲/▼.

4. **To skip back or forward to another track, touch ◀ or ▶.**
   Touching ▶ skips to the start of the next track. Touching ◀ once skips to the start of the current track. Touching again will skip to the previous track.
   - You can also skip back or forward to another track by moving the joystick left or right.

5. **To perform fast forward or reverse, keep touching ◀ or ▶.**
   - You can also perform fast reverse/fast forward by holding the joystick left or right.

**Notes**

- When the multi CD player performs the preparatory operations, READY is displayed.
- If the multi CD player does not operate properly, an error message such as ERROR-02 may be displayed. Refer to the multi CD player owner’s manual.
- If there are no discs in the multi CD player magazine, NO DISC is displayed.
- If you do not use the touch panel keys within 30 seconds, they will be hidden automatically.

**50-disc multi-CD player**

Only those functions described in this manual are supported for 50 disc multi CD players. This unit is not designed to operate disc title list functions with a 50 disc multi CD player.
Multi-CD Player

Introduction of advanced multi-CD player operation

1  Function display
   Shows the function names.

- Touch A.MENU and then touch FUNCTION to display the function names.
   The function names are displayed and operable ones are highlighted.
   - When A.MENU is not displayed, you can display it by touching the screen.
   - You can also display MENU by clicking the joystick.
   - To go to the next group of function names, touch NEXT.
   - To return to the previous group of function names, touch PREV.
   - To return to the previous display, touch BACK.
   - To return to the playback display, touch ESC.

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

Repeating play
   There are three repeat play ranges for the multi CD player: M-CD (multi CD player repeat), TRACK (one track repeat) and DISC (disc repeat).

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

2  Touch ‹ › to select the repeat range.
   Touch ‹ › repeatedly until the desired repeat range appears in the display.
   - M-CD – Repeat all discs in the multi CD player
   - TRACK – Repeat just the current track
   - DISC – Repeat the current disc
   - You can also select the repeat range by moving the joystick left or right.

Notes
   - If you select other discs during repeat play, the repeat play range changes to M-CD.
   - If you perform track search or fast forward/reverse during TRACK, the repeat play range changes to DISC.

Playing tracks in a random order
   Random play lets you play back tracks in a random order within the repeat range, M-CD and DISC.

1  Select the repeat range.
   Refer to Repeating play on this page.

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

3  Touch ▲ to turn random play on.
   Tracks will play in a random order within the previously selected M-CD or DISC ranges.
   - To turn random play off, touch ▼.
Scanning CDs and tracks
While you are using DISC, the beginning of each track on the selected disc plays for about 10 seconds. When you are using M-CD, the beginning of the first track of each disc is played for about 10 seconds.

1 Select the repeat range.
Refer to Repeating play on the previous page.

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

3 Touch ▲ to turn scan play on.
The first 10 seconds of each track of the current disc (or the first track of each disc) is played.

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

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

Pausing CD playback
Pause lets you temporarily stop disc playback.

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

2 Touch ▲ to turn pause on.
Play of the current track pauses.
■ To turn pause off, touch ▼.

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

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

1 Play a CD that you want to program.
Touch ▲ or ▼ to select the CD.

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

3 Touch ITS MEMORY.

4 Touch ◀ or ► to select the desired track.

5 Touch ▲ to store the currently playing track in the playlist.
MEMORY▲ is highlighted and the currently playing selection is added to your playlist. The display then shows track number again.

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

Playback from your ITS playlist
ITS play lets you listen to the tracks that you have entered into your ITS playlist. When you turn on ITS play, tracks from your ITS playlist in the multi CD player will begin to play.
1 Select the repeat range.
Refer to Repeating play on page 53.

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

3 Touch ITS PLAY.

4 Touch ▲ to turn ITS play on.
Playback begins of those tracks from your playlist within the previously selected M-CD or DISC ranges.
- If no tracks in the current range are programmed for ITS play then ITS EMPTY is displayed.
- To turn ITS play off, touch ▼.

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

1 Play the CD that you want to delete.
Touch ▲ or ▼ to select the CD.

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

3 Touch ITS MEMORY.

4 Touch ▼ to erase all tracks on the currently playing CD from your ITS playlist.
All tracks on the currently playing CD are erased from your playlist.

Using disc title functions
You can input CD titles and display the titles. Then you can easily search for and play a desired disc.

Entering disc titles
Use the disc title input feature to store up to 100 CD titles (with ITS playlist) into the multi CD player. Each title can be up to 10 characters long.
- When playing a CD TEXT disc on a CD TEXT compatible multi CD player, you cannot switch to TITLE EDIT. The disc title will have already been recorded on a CD TEXT disc.
1. Play the CD that you want to enter a title for.
   Touch ▲ or ▼ to select the CD.

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

3. Touch TITLE EDIT.

4. Touch ABC to select the desired character type.
   Touch ABC repeatedly to switch between the following character types:
   Alphabet (upper case), numbers and symbols—Alphabet (lower case)—European letters,
   such as those with accents (e.g., á, à, â, ç)
   ▪ You can select to input numbers and symbols by touching 123.

5. Touch ◀ or ▶ to select a letter of the alphabet.
   Each time you touch ◀ it will display a letter of the alphabet in A B C ... X Y Z, numbers
   and symbols in 1 2 3 ... { } ~ order. Each time you touch ▶ it will display a letter in the re
   verse order, such as Z Y X ... C B A.

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

7. Touch OK to store the entered title in memory.

8. Touch ESC to return to the playback display.

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

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

- Touch DISP.
  Touch DISP repeatedly to switch between the following settings:
  DISC LIST (disc list)—Disc Title (disc title)
  When you select Disc Title, the title of the currently playing disc is shown in the display.
  ▪ If no title has been entered for the currently playing disc, NO TITLE is displayed.

Using CD TEXT functions
You can use these functions only with a CD TEXT compatible multi-CD player.
Some discs have certain information encoded on the disc during manufacture. These discs
may contain such information as the CD title, track title, artist’s name and playback time
and are called CD TEXT discs. Only these specially encoded CD TEXT discs support the
functions listed below.
Displaying titles on CD TEXT discs

- Touch DISP.
Touch DISP repeatedly to switch between the following settings:
  - DISC LIST (disc list)—Disc Title (disc title)
  - Disc Artist (disc artist name)—Track Title
  - Track Artist (track artist name)
  - If specific information has not been recorded on a CD TEXT disc, NO XXXX will be displayed (e.g., NO ARTIST).

Scrolling titles in the display
This unit can display the first 30 letters only of Disc Title, Disc Artist, Track Title and Track Artist. When the recorded information is longer than 30 letters, you can scroll the text to the left so that the rest of the title can be seen.

- Keep touching DISP until the title begins to scroll to the left.
The rest of the title will appear in the display.

Selecting tracks from the track title list
Track title list lets you see the list of track titles on a CD TEXT disc and select one of them to play back.

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

2 Touch ‹ or › to switch between the lists of titles.

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

Using compression and bass emphasis
You can use these functions only with a multi-CD player that supports them.
Using COMP (compression) and DBE (dynamic bass emphasis) functions lets you adjust the sound playback quality of the multi CD player. Each of the functions has a two step adjustment. The COMP function balances the output of louder and softer sounds at higher volumes. DBE boosts bass levels to give playback a fuller sound. Listen to each of the effects as you select them and use the one that best enhances the playback of the track or CD that you are listening to.

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

2 Touch ‹ › to select your favorite setting.
Touch ‹ › repeatedly to switch between the following settings:
  - COMP OFF—COMP 1—COMP 2—
  - COMP OFF—DBE 1—DBE 2
  - You can also select the desired setting by moving the joystick left or right.
Listening to the XM

You can use this unit to control a XM satellite digital tuner (GEX-P910XM), 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 what the source has been selected.

② XM band indicator
Shows the XM band which has been selected.

③ XM preset number indicator
Shows what XM preset has been selected.

④ XM channel number indicator
Shows to which XM channel number the tuner is tuned.

⑤ XM channel select setting indicator
Shows what channel select setting has been selected. CH-Number is displayed when CHNUMBER is selected, and Category is displayed when CATEGORY is selected.

⑥ XM channel name
Shows the channel name of broadcast channel.

1 Touch the source icon and then touch XM to select the XM.
- 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 XM band.
Touch BAND repeatedly until the desired XM band is displayed, XM1, XM2 or XM3.

4 To perform manual tuning, briefly touch ◀ or ▶.
The channels move up or down step by step. Channels that cannot currently be selected are skipped, and the next channel is selected.
- To perform seek tuning, keep touching ◀ or ▶ for about one second and release.
- You can also perform manual tuning by moving the joystick left or right.
- You can also perform tuning from a desired channel category. (Refer to Selecting the channel in the channel category on page 60.)

Notes
- If you do not use the touch panel keys for 30 seconds, they will be hidden automatically.
- You can go to the next group of touch panel keys by touching➡️.➡️
Introduction of advanced XM tuner operation

1 Function display
Shows the function names.

- Touch A.MENU and then touch FUNCTION to display the function names.
The function names are displayed and operable ones are highlighted.
  - When A.MENU is not displayed, you can display it by touching the screen.
  - You can also display MENU by clicking the joystick.
  - To return to the previous display, touch BACK.
  - To return to the channel display, touch ESC.

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

Switching the XM display

- Touch DISP to switch the XM display.
Each time you touch DISP changes the XM display in the following order:
Channel name—Artist name/feature—Song/program title—Channel category

Storing and recalling broadcast stations

If you touch any of the preset tuning keys P1—P6 you can easily store up to six broadcast stations for later recall with the touch of a key.

- When you find a station that you want to store in memory keep touching a preset tuning key P1—P6 until the XM preset number stops flashing.
The number you have touched will flash in the XM preset number indicator and then remain lit. The selected station has been stored in memory.
The next time you touch the same preset tuning key P1—P6 the station is recalled from memory.
  - When the touch panel keys are not displayed, you can display them by touching the screen.
  - When P1—P6 are not displayed, you can display them by touching →.

Notes
- Up to 18 stations, six for each of three XM bands can be stored in memory.
- You can also use ▲ and ▼ to recall stations assigned to preset tuning keys P1—P6.

Switching the XM channel select setting

You can switch if you select a channel with a channel number or from a channel category when you select a channel.

- Touch MODE to select the desired channel select setting.
Touch MODE repeatedly to switch between the following channel select settings:
XM tuner

CHNUMBER (channel number select setting) — CATEGORY (channel category select setting)

Note
You can also perform the same operations using CH MODE. To display CH MODE, touch A.MENU and then touch FUNCTION.

Selecting the channel in the channel category

1 Touch MODE to select the channel category select setting. Touch MODE repeatedly to switch between the following channel select settings: CHNUMBER (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 the XM channel directly

You can select the XM channel directly by entering the desired channel number.

1 Touch DIRECT. CHANNEL INPUT appears in the display.

2 Touch 0—9 to input the desired channel number.

3 While the input number is displayed, touch ENTER. The entered XM channel is selected.

Notes
- You can also perform the same operations using CH INPUT. To display CH INPUT, touch A.MENU and then touch FUNCTION.
- You can also perform this operation by pressing DIRECT on the remote control.

Display the ID code

Channel number select setting

If you select CH : 000, the ID code is displayed.

- Touch ◀ or ▶ to select CH : 000.

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.

- If you select another channel, display of the ID code is canceled.

- Display of the ID code repeats displaying RADIO ID and the ID code one after the other.
Watching the TV tuner

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

1. **Source icon**
   - Shows 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.

5. **Preset list display**
   - Shows the preset list.

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

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

3. **Touch BAND to select a band.**
   - Touch BAND repeatedly until the desired band is displayed, TV1 or TV2.

4. **To perform manual tuning, briefly touch ◀ or ▶.**
   - The channels move up or down step by step.
   - You can also perform manual tuning by moving the joystick left or right.

5. **To perform seek tuning, keep touching ◀ or ▶ for about one second and release.**
   - The tuner will scan the channels 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 broadcasting channels. Seek tuning starts as soon as you release the keys.
   - You can also perform seek tuning by holding the joystick left or right.

**Note**

If you do not use the touch panel keys within 30 seconds, they will be hidden automatically.
Introduction of advanced TV tuner operation

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

- **Touch A.MENU and then touch FUNCTION to display the function names.**
  The function names are displayed and operable ones are highlighted.
  - When **A.MENU** is not displayed, you can display it by touching the screen.
  - You can also display **MENU** by clicking the joystick.
  - To return to the previous display, touch **BACK**.
  - To return to the TV picture, touch **ESC**.

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

- **When you find a station that you want to store in memory, keep touching one of preset tuning keys P01—P12 until the preset number stops flashing.**
  The number you have touched will flash in the preset number indicator and then remain lit.
  The selected station has been stored in memory.
  The next time you touch the same preset tuning key the station is recalled from memory.
  - To switch between **P01—P06** and **P07—P12**, touch ▲ or ▼.
  - When the touch panel keys are not displayed, you can display them by touching the screen.
  - When **P01—P06** and **P07—P12** are not displayed, you can display them by touching **DISP**.

**Notes**
- Up to 24 stations, 12 for each of two TV bands, can be stored in memory.
- You can also use ▲ and ▼ to recall stations assigned to preset tuning keys P01—P12.

Storing the strongest broadcast stations sequentially

1. **Touch A.MENU and FUNCTION and then touch BSSM.**

2. **Touch ▲ to turn BSSM on.**
   BSSM begins to flash. While **BSSM** is flashing the 12 strongest broadcast stations will be stored in order from the lowest channel up.
   When finished, **BSSM** disappears.
   - To cancel the storage process, touch ▼.

**Note**
Storing broadcast stations with **BSSM** may replace broadcast stations you have saved using P01—P12.
Playing a disc

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

- Switch the remote control selection to suitable setting to operate DVD players. (Refer to page 87.)
- Switch the remote control operation mode to DVD to operate the DVD player by using remote control. (Refer to page 19.)

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

2. **Disc type indicator**
   Shows the type of the currently playing disc.

3. **Disc number indicator**
   Shows the disc currently playing when using a multi DVD player.

4. **Title number indicator**
   Shows the title currently playing during DVD video playback.

5. **Chapter/track number indicator**
   Shows the chapter/track currently playing.

6. **Play time indicator**
   Shows the elapsed playing time of the current chapter/track.

1. Touch the source icon and then touch S-DVD to select the DVD player.
   - When the source icon is not displayed, you can display it by touching the screen.

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

3. To skip back or forward to another chapter/track, briefly touch ◀ or ▶.
   - You can also skip back or forward to another chapter/track by moving the joystick left or right. When using the joystick on the remote control, switch the remote control operation mode to AVH. (Refer to page 19.)

4. To perform fast forward or reverse, keep touching ◀ or ▶ for about one second and release.
   - You can also perform fast reverse/fast forward by holding the joystick left or right. When using the joystick on the remote control, switch the remote control operation mode to AVH. (Refer to page 19.)

**Note**
If you do not use the touch panel keys within 30 seconds, they will be hidden automatically.

**Turning the DVD player on or off**

- Only the remote control can operate this function. To perform this function, switch the remote control operation mode to DVD. (Refer to page 19.)
● Press REAR.S to turn the DVD player on.
  - To turn the DVD player off, press REAR.S again.

Selecting a disc
● You can operate this function only when a multi DVD player is connected to this unit.

● Touch ▲ or ▼ to select a disc.
  - You can also skip back or forward to another disc by moving the joystick up or down.
  - When using the joystick on the remote control, switch the remote control operation mode to AVH. (Refer to page 19.)
  - You can also select a disc by pressing BACK or ENTERTAINMENT on the remote control when the remote control operation mode is switched to DVD.

Introduction of advanced DVD player operation

1. Function display
   Shows the function names.

● Touch A.MENU and then touch FUNCTION to display the function names.
The function names are displayed and operable ones are highlighted.
  - When A.MENU is not displayed, you can display it by touching the screen.
  - You can also display MENU by clicking the joystick.
  - To go to the next group of function names, touch NEXT.
  - To return to the previous group of function names, touch PREV.
  - To return to the previous display, touch BACK.
  - To return to the playback display, touch ESC.

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

Repeating play
● During playback of Video CDs featuring PBC (playback control), this function can not be operated.
1 Touch A.MENU and FUNCTION and then touch REPEAT.

2 Touch ( ) to select the repeat range. During DVD video playback
   - TITLE – Repeat just the current title
   - CHAPTER – Repeat just the current chapter
   - DISC – Repeat the current disc
During Video CD or CD playback
   - TRACK – Repeat just the current track
   - DISC – Repeat the current disc

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

Pausing disc playback
1 Touch A.MENU and FUNCTION and then touch PAUSE.

2 Touch ▲ to turn pause on.
   ▪ To turn pause off, touch ▼.

Playing tracks in a random order
- You can operate this function only during CD playback.

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

2 Touch ▲ to turn random play on.
   Tracks will play in a random order.
   ▪ To turn random play off, touch ▼.

Scanning tracks of a CD
- You can operate this function only during CD playback.

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

2 Touch ▲ to turn scan play on.
The first 10 seconds of each track is played.

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

Using ITS playlists
- You can operate these functions only when a multi DVD player is connected to this unit.
- This function differs slightly from ITS playback with a multi CD player. With multi DVD player, ITS playback applies only to the CD playing. For details, refer to Using ITS playlists on page 54.

Using disc title functions
You can input CD titles and display the titles. Then you can easily search for and play a desired disc.

Entering disc titles
Disc title input lets you input CD titles up to 10 letters long into the multi DVD player. For details concerning operation, refer to Using disc title functions on page 55.
- You can operate this function only when a multi DVD player is connected to this unit.
Introduction of audio adjustments

Audio display
Shows the audio function names.

Important
If the multi channel processor (DEQ P8000) is connected to this unit, the audio function will be changed into the multi channel processor’s audio menu. For details, refer to Introduction of DSP adjustments on page 72.

- Touch A.MENU and then touch AUDIO to display the audio function names. The audio function names are displayed and operable ones are highlighted.
  - When A.MENU is not displayed, you can display it by touching the screen.
  - You can also display MENU by clicking the joystick.
  - To go to the next group of function names, touch NEXT.
  - To return to the previous group of function names, touch PREV.
  - If EQ EX function has been selected and only when EQ EX is turned on and CUSTOM is selected as the equalizer curve, you can switch to BASS and TREBLE.
  - Only when the subwoofer controller setting is FULL, NON FADING will be displayed instead of SUB WOOFER. (Refer to Setting the rear output and subwoofer controller on page 89.)

- When selecting the FM tuner as the source, you cannot switch to SLA.
- To return to the previous display, touch BACK.
- To return to the display of each source, touch ESC.

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

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

1 Touch A.MENU and AUDIO and then touch FADER/BALANCE.
  - When the rear output setting is SUB. W, BALANCE will be displayed instead of FADER/BALANCE. Refer to Setting the rear output and subwoofer controller on page 89.

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:15 – REAR:15 is displayed as the front/rear speaker balance moves from front to rear.
  - FR:00 is the proper setting when only two speakers are used.
  - When the rear output setting is SUB. W, you cannot adjust front/rear speaker balance. Refer to Setting the rear output and subwoofer controller on page 89.
Audio Adjustments

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:09 – RIGHT:09 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 car interior acoustic characteristics as desired.

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

<table>
<thead>
<tr>
<th>Display</th>
<th>Equalizer curve</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPER BASS</td>
<td>Super bass</td>
</tr>
<tr>
<td>POWERFUL</td>
<td>Powerful</td>
</tr>
<tr>
<td>NATURAL</td>
<td>Natural</td>
</tr>
<tr>
<td>VOCAL</td>
<td>Vocal</td>
</tr>
<tr>
<td>CUSTOM</td>
<td>Custom</td>
</tr>
<tr>
<td>FLAT</td>
<td>Flat</td>
</tr>
</tbody>
</table>

- CUSTOM is an adjusted equalizer curve that you create.
- A separate CUSTOM curve can be created for each source. If you make adjustments, the equalizer curve settings will be memorized in CUSTOM.
- When FLAT is selected no supplement or correction is made to the sound. This is useful to check the effect of the equalizer curves by switching alternatively between FLAT and a set equalizer curve.

- Press EQ to select the equalizer.
Press EQ repeatedly to switch between the following equalizers:
SUPER BASS—POWERFUL—NATURAL—VOCAL—CUSTOM—FLAT

Adjusting equalizer curves
You can adjust the currently selected equalizer curve setting as desired. Adjusted equalizer curve settings are memorized in CUSTOM.
- You can adjust the center frequency and the Q factor (curve characteristics) of each currently selected curve band (LOW/MID/HIGH).

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

2 Touch ◄ or ► to select the desired item.
Each time you touch ◄ or ► selects the item in the following order:
BAND (bands)—LEVEL (equalizer level)—FREQUENCY (center frequency)—Q. FACTOR (Q factor)

3 Touch ◄ or ► to select the equalizer band to adjust.
Each time you touch ◄ or ► selects equalizer bands in the following order:
LOW (low)—MID (mid)—HIGH (high)

4 Touch ◄ and then touch ◄ or ► to adjust the level of the equalizer band.
Each time you touch ◄ or ► increases or decreases the level of the equalization band.
+6 – –6 is displayed as the level is increased or decreased.

5 Touch ⇑ and then touch ⇐ or ⇒ to select the desired frequency.
Touch ⇐ or ⇒ until the desired frequency appears in the display.
Low: 40Hz—80Hz—100Hz—160Hz
Mid: 200Hz—500Hz—1kHz—2kHz
High: 3.15kHz—8kHz—10kHz—12.5kHz

6 Touch ⇑ and then touch ⇐ or ⇒ to select the desired Q factor.
Touch ⇐ or ⇒ until the desired Q factor appears in the display.
2W—1W—1N—2N

Note
If you make adjustments, CUSTOM curve is updated.

Adjusting bass and treble
You can adjust bass and treble settings.
- If EQ EX function has been selected and only when EQ EX is turned on and CUSTOM is selected as the equalizer curve, you can adjust bass and treble settings. (Refer to Compensating for equalizer curves (EQ-EX) on page 70.)

Adjusting bass
You can adjust the cut off frequency and the bass level.
- If SFEQ has been set to FRONT1, bass adjustment affects only the rear output: front output cannot be adjusted. (Refer to Setting the sound focus equalizer (SFEQ) on page 71.)

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

2 Touch ⇐ or ⇒ to select the desired frequency.
Touch ⇐ or ⇒ until the desired frequency appears in the display.
40Hz—63Hz—100Hz—160Hz

3 Touch ⇑ or ⇓ to adjust the bass level. Each time you touch ⇑ or ⇓ increases or decreases the bass level. +6 – –6 is displayed as the level is increased or decreased.

Adjusting treble
You can adjust the cut off frequency and the treble level.
- If SFEQ has been set to FRONT1 or FRONT2, treble adjustment affects only the front output: rear output cannot be adjusted. (Refer to Setting the sound focus equalizer (SFEQ) on page 71.)

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

2 Touch ⇐ or ⇒ to select the desired frequency.
Touch ⇐ or ⇒ until the desired frequency appears in the display.
2.5kHz—4kHz—6.3kHz—10kHz

3 Touch ⇑ or ⇓ to adjust the treble level.
Each time you touch ⇑ or ⇓ increases or decreases the treble level. +6 – –6 is displayed as the level is increased or decreased.

Adjusting loudness
Loudness compensates for deficiencies in the low and high sound ranges at low volume.
Audio Adjustments

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

2 Touch ‹ to turn loudness on.
   • To turn loudness off, touch ›.

3 Touch ‹ or › to select a desired level.
   Each time you touch ‹ or ›, selects level in the following order:
   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 A.MENU and AUDIO and then touch SUB WOOFER.
   • When the subwoofer controller setting is FULL, you cannot select SUB WOOFER.

2 Touch ‹ to turn subwoofer output on.
   • To turn subwoofer output off, touch ›.

3 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 reverse phase and REVERSE appears in the display.

4 Touch ‹ and then touch ‹ or › to adjust the output level of the subwoofer.
   Each time you touch ‹ or ›, increases or decreases the level of the subwoofer. +6 — −6 is displayed as the level is increased or decreased.

5 Touch ‹ and then touch ‹ or › to select cut-off frequency.
   Each time you touch ‹ or ›, selects cut off frequencies in the following order:
   50Hz — 80Hz — 125Hz
   Only frequencies lower than those in the selected range are outputted from the subwoofer.

Using nonfading output

When the nonfading output setting is on, the audio signal does not pass through this unit’s low pass filter (for the subwoofer), but is output through the RCA output.

1 Touch A.MENU and AUDIO and then touch NON FADING.
   • When the subwoofer controller setting is only FULL, you can select NON FADING. (Refer to page 89.)

2 Touch ‹ to turn non fading output on.
   • To turn non fading output off, touch ›.

3 Touch ‹ or › to adjust the output level of the non fading.
   Each time you touch ‹ or ›, increases or decreases the level of the non fading. +6 — −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 outputted from the front or rear speakers.
1 Touch A.MENU and AUDIO and then touch NEXT.

2 Touch HPF.

3 Touch ▲ to turn high pass filter on.
   - To turn high pass filter off, touch ▼.

4 Touch ◀ or ▶ to select cut-off frequency.
   Each time you touch ◀ or ▶ selects cut off frequencies in the following order:
   50Hz—80Hz—125Hz

Note

If you switch the SFEQ setting, the HPF function is automatically turned off. By turning the HPF function on after selecting the SFEQ setting, you can combine HPF function with SFEQ function.

Adjusting source levels

SLA (source level adjustment) lets you adjust the volume level of each source to prevent radical changes in volume when switching between sources.
- Settings are based on the FM tuner volume level, which remains unchanged.

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

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

3 Touch SLA.

4 Touch ▲ or ▼ to adjust the source volume.
   Each time you touch ▲ or ▼ it increases or decreases the source volume.
   +4 — –4 is displayed as the source volume is increased or decreased.

Notes

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

Compensating for equalizer curves (EQ-EX)

The EQ EX function smoothes the effects of each equalizer curve. Furthermore, you can adjust bass and treble for each source when CUSTOM curve is selected.
- You cannot use EQ EX function and SFEQ function simultaneously.

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

2 Touch SFEQ/EQ-EX and then touch EQ-EX.

3 Touch ▲ to turn EQ-EX on.
   - To turn EQ EX off, touch ▼.
Setting the sound focus equalizer (SFEQ)

Clarifying the sound image of vocals and instruments allows the simple staging of a natural, pleasant sound environment. Even greater listening enjoyment will be obtained if seating positions are chosen carefully. **FRONT1** boosts the treble on the front output and the bass on the rear output. **FRONT2** boosts the treble and the bass on the front output and the bass on the rear output. (The bass boost is the same for both front and rear.) For both **FRONT1** and **FRONT2**, **H** setting provides a more pronounced effect than **L** setting.

- You cannot use EQ EX function and SFEQ function simultaneously.

1. Touch **A.MENU** and **AUDIO** and then touch **NEXT**.

2. Touch **SFEQ/EQ-EX** and then touch **SFEQ**.

3. Touch ‹ or › to select the desired SFEQ setting.
   Touch ‹ or › repeatedly to switch between the following settings:
   OFF (off) — **FRONT1-H** (front 1 high) — **FRONT1-L** (front 1 low) — **FRONT2-H** (front 2 high) — **FRONT2-L** (front 2 low) — **CUSTOM** (custom)

4. Touch ‹ or › to select the desired position.
   Touch ‹ or › until the desired position appears in the display.
   **LEFT** (left) — **CENTER** (center) — **RIGHT** (right)

**Notes**

- If you adjust the bass or treble, **CUSTOM** memorizes an SFEQ setting in which the bass and treble are adjusted for personal preference.

- If you switch the SFEQ setting, the HPF function is automatically turned off. By turning the HPF function on after selecting the SFEQ setting, you can combine HPF function with SFEQ function.
Introduction of DSP adjustments

You can use this unit to control multi-channel processor (e.g. DEQ-P8000), which is sold separately.
• Some functions may differ depending on the multi-channel processor connected to this unit.
By carrying out the following settings/adjustments in the order shown, you can create a finely 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 cut-off frequency
7 Adjusting the speaker output levels
8 Adjusting 3-band parametric equalizer

DSP display
Shows the DSP function names.

- Touch A.MENU and then touch DSP to display the DSP function names.
The DSP function names are displayed and operable ones are highlighted.
  - When A.MENU is not displayed, you can display it by touching the screen.
  - You can also display MENU by clicking the joystick.

- To go to the next group of function names, touch NEXT.
- To return to the previous group of function names, touch PREV.
- 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 cancelled.
- When playing discs recorded with more than 96 kHz sampling frequency, audio is outputted from front speaker only.
- When selecting the FM tuner as the source, you cannot switch to SLA.
- When playing other than the DVD disc, you cannot switch to D.R.C.
- When neither FRONT-L nor FRONT-R is selected in POSITION, you cannot switch to TIME ALIGNMENT.
- To return to the previous display, touch BACK.
- To return to the display of each source, touch ESC.

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

Using the sound field control
The SFC function creates the sensation of a live performance.
• The acoustics of different performance environments 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 reverberations. Those factors are programed
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into the SFC circuitry to recreate the acoustics of various performance settings.

1. Press EQ and hold to switch to SFC function.
Press EQ and hold until SFC appears in the display.
- To switch to equalizer function, press EQ and hold again.

2. Press EQ to select the desired SFC mode.
Press EQ repeatedly to switch between the following mode:
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 recommend turning Dolby Pro Logic 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 off.

Using the position selector
One way to assure a more natural sound is to accurately position the stereo image, putting you right in the center of the sound field. The position selector function lets you automatically adjust the speaker output levels and inverts a delay time to match the number and position of occupied seats. When used in conjunction with the SFC, the feature will make the sound image more natural and offer a panoramic sound that envelops you.

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

2. Touch ◄/►/▲/▼ to select a listening position.
Touch one of these, ◄/►/▲/▼, to select a listening position as listed in the table.

<table>
<thead>
<tr>
<th>Key</th>
<th>Display</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>◄</td>
<td>FRONT-L</td>
<td>Front seat left</td>
</tr>
<tr>
<td>►</td>
<td>FRONT-R</td>
<td>Front seat right</td>
</tr>
<tr>
<td>▲</td>
<td>FRONT</td>
<td>Front seats</td>
</tr>
<tr>
<td>▼</td>
<td>ALL</td>
<td>All seats</td>
</tr>
</tbody>
</table>

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

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

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

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

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 – REAR:25 is displayed as the front/rear speaker balance moves from front to rear.
- **FR:00** 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 – RIGHT:25** is displayed as the left/right speaker balance moves from left to right.

### Adjusting source levels

SLA (source level adjustment) lets you adjust the volume level of each source to prevent radical changes in volume when switching between sources.
- Settings are based on the FM tuner volume level, which remains unchanged.

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

2 **Touch A.MENU and DSP and then touch SLA.**

3 **Touch ▲ or ▼ to adjust the source volume.**
Each time you touch ▲ or ▼ it increases or decreases the source volume.
**+4 – –4** is displayed as the source volume is increased or decreased.

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

### Using the dynamic range control

The dynamic range refers to the difference between the largest and softest sounds. The dynamic 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.

1 **Touch A.MENU and DSP and then touch D.R.C.**
- When playing other than the DVD disc, you cannot switch this mode.

2 **Touch ▲ to turn the dynamic range control on.**
- To turn dynamic range control off, touch ▼.

### Using the down-mix function

Only when the multi-channel processor (e.g., DEQ-P8000) is connected to this unit, you can operate this function.
The down mix function allows you to play back multi channel audio in 2 channels.

1 **Touch A.MENU and DSP and then touch DOWN MIX.**
2 Touch either of the following touch panel keys to select the desired setting.
   • Lt/Rt – Down mix so that the surround components can be restored (decoded).
   • Lo/Ro – Stereo mix the original audio that do not contain channel modes such as surround components.

Using the direct control
You can override audio settings to check for effectiveness of your audio settings.
   • All audio functions are locked out when the direct control is on except VOLUME.

1 Touch A.MENU and DSP and then touch DIGITAL DIRECT.

2 Touch ▲ to turn the direct control on.
   □ To turn direct control off, touch ▼.

Using the Dolby Pro Logic II
Only when the multi-channel processor (e.g., DEQ-P8000) is connected to this unit, you can operate this function.
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 48kHz sampling rate stereo source and has no effect on other types of source.

1 Touch A.MENU and DSP and then touch NEXT.

2 Touch DOLBY PRO LOGIC II.

3 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 following three controls.
   • Panorama (PANORAMA) extends the front stereo image to include the surround speakers for an exciting “wraparound” effect.
   • Dimension (DIMENSION) allows you to gradually adjust the sound field either towards the front or the rear.
   • Center Width (CENTER WIDTH) allows center channel sounds to be positioned between the center speaker and the left/right speakers. It improves the left center right stage presentation for both the driver and the front passenger.

1 Touch A.MENU and DSP and then touch NEXT.

2 Touch DOLBY PRO LOGIC II.

3 Touch MUSIC and then touch MUSIC ADJUST.
   □ You can operate MUSIC ADJUST only when MUSIC has been selected.
4 Touch \( \star \) or \( \bullet \) to select PANORAMA (panorama).
Each time you touch \( \star \) or \( \bullet \) selects the item in the following order:
PANORAMA (panorama)—DIMENSION (dimension)—CENTER WIDTH (center width)

5 Touch \( \bigtriangledown \) to turn the panorama control on.
- To turn the panorama control off, touch \( \bigtriangledown \).

6 Touch \( \bigtriangledown \) and then touch \( \bigtriangledown \) or \( \bigtriangledown \) to adjust front/surround speaker balance.
Each time you touch \( \bigtriangledown \) or \( \bigtriangledown \) it moves the sound towards the front or the surrounds.
\( +3 \rightarrow -3 \) is displayed as the front/surround speaker balance moves from front to surrounds.

7 Touch \( \bigtriangledown \) and then touch \( \bigtriangledown \) or \( \bigtriangledown \) to adjust the center image.
Each time you touch \( \bigtriangledown \) or \( \bigtriangledown \) it gradually spreads the center channel sound into the front left and right speakers over a range \( 0 \rightarrow 7 \). 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 spea kers. The size needs to be set to LARGE (large) if the speaker is capable of reproducing sounds of about 100 Hz or below. Otherwise select SMALL (small).
- Low frequency range is not output if the subwoofer is set to OFF and the front and rear speakers set to SMALL or OFF.
- It is imperative that non installed speakers be set to OFF.

- Set the front or rear speaker to LARGE if the speaker is capable of reproducing bass content, or if no subwoofer is installed.

1 Touch A.MENU and DSP and then touch NEXT.

2 Touch SPEAKER SETTING.

3 Touch \( \star \) or \( \bullet \) to select the speaker to be adjusted.
Each time you touch \( \star \) or \( \bullet \) selects the speaker in the following order:
FRONT (front speakers)—CENTER (center speaker)—REAR (rear speakers)
—SUB WOOFER (subwoofer)—PHASE (sub woofer setting)
- You can switch to PHASE only when the sub woofer has been set to ON.

4 Touch \( \bigtriangledown \) or \( \bigtriangledown \) to select the correct size for the selected speaker.
Each time you touch \( \bigtriangledown \) or \( \bigtriangledown \) 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 SUB WOOFER (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 A.MENU and DSP and then touch NEXT.

2 Touch SPEAKER SETTING.

3 Touch ‹ or † to select SUB WOOFER (subwoofer).
   Each time you touch ‹ or † selects the speaker in the following order:
   FRONT (front speakers)—CENTER (center speaker)—REAR (rear speakers)
   —SUB WOOFER (subwoofer)—PHASE (subwoofer setting)

4 Touch † to turn subwoofer output on.
   To turn subwoofer output off, touch ‹.

5 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 reverse phase and REVERSE appears in the display.

Note

When playing a 2 channel mono source with Pro Logic turned on, there may be occasions when the following will occur:
- No audio is output if the center speaker setting is SMALL or LARGE and no center speaker is installed.
- Audio is heard only over the center speaker if installed and the center speaker setting is SMALL or LARGE.

Selecting a cut-off frequency

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

1 Touch A.MENU and DSP and then touch NEXT.

2 Touch CROSS OVER.

3 Touch ‹ or † to select the speaker to be adjusted.
   Each time you touch ‹ or † selects the speaker in the following order:
   FRONT (front speakers)—CENTER (center speaker)—REAR (rear speakers)
   —SUB WOOFER (subwoofer)

4 Touch ‹ or † to select cut-off frequency.
   Each time you touch ‹ or † selects cut off frequencies in the following order:
   63—80—100—125—160—200 (Hz)

Note

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

Adjusting the speaker output levels

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

1 Touch A.MENU and DSP and then touch NEXT.

2 Touch SPEAKER LEVEL.
3 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)—SUB WOOFER (subwoofer)
  - You cannot select speakers whose size is set at OFF.

4 Touch ‹ or › to adjust the speaker output level.
Each time you touch ‹ or › increases or decreases the speaker output level. +10 — —10 is displayed 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.

Adjusting the speaker output levels using a test tone
A convenient test tone allows you to easily get the overall balance right among the speakers.

1 Touch A.MENU and DSP and then touch NEXT.

2 Touch TEST TONE.

3 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)—SUB WOOFER (subwoofer)
Check each speaker output level. If no adjustments are needed, perform step 5 to stop the test tone.
  - You can also start the test tone output by moving the joystick up.
  - The settings do not appear for speakers whose size is set OFF.

4 Touch ‹ or › to adjust the speaker output level.
Each time you touch ‹ or › increases or decreases the speaker output level. +10 — —10 is displayed as the level is increased or decreased.
  - The test tone rotates to the next speaker after about two seconds from the last operation.

5 Touch STOP to stop the test tone output.
  - You can also stop the test tone output by moving the joystick down.

Notes
- If needed, select speakers and adjust their ‘absolute’ 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 output levels at SPEAKER LEVEL. Both provide the same results.

Using the time alignment
Only when the multi-channel processor (e.g., DEQ-P8000) is connected to this unit, you can operate this function.
The time alignment lets you adjust the distance between each speaker and the listening position.

1. Touch A.MENU and DSP and then touch NEXT.

2. Touch TIME ALIGNMENT.

3. Touch any of the following touch panel keys to select the time alignment.
   - INITIAL – Initial time alignment (factory setting)
   - AUTO TA – Time alignment created by auto TA and EQ. (Refer to Auto TA and EQ (auto-time alignment and auto-equalizing) on page 81.)
   - CUSTOM – Adjusted time alignment that you can create for yourself
   - OFF – Turn the time alignment off
   - ADJUSTMENT – Adjust the time alignment as desired
     - You cannot select AUTO TA if auto TA and EQ has not been carried out.
     - You cannot select ADJUSTMENT when neither FRONT-L nor FRONT-R is selected in POSITION.

**Using the equalizer**

The equalizer lets you adjust the equalization to match car 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:

<table>
<thead>
<tr>
<th>Display</th>
<th>Equalizer curve</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPER BASS</td>
<td>Super bass</td>
</tr>
<tr>
<td>POWERFUL</td>
<td>Powerful</td>
</tr>
<tr>
<td>NATURAL</td>
<td>Natural</td>
</tr>
<tr>
<td>VOCAL</td>
<td>Vocal</td>
</tr>
<tr>
<td>FLAT</td>
<td>Flat</td>
</tr>
<tr>
<td>CUSTOM1</td>
<td>Custom 1</td>
</tr>
<tr>
<td>CUSTOM2</td>
<td>Custom 2</td>
</tr>
</tbody>
</table>

- CUSTOM1 and CUSTOM2 are adjusted equalizer curves.
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• 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 Press EQ and hold to switch to equalizer function.  
Press EQ and hold until an equalizer curve name appears in the display.  
- To switch to SFC function, press EQ and hold again.

2 Press EQ to select the equalizer.  
Press EQ repeatedly to switch between the following equalizers:  
SUPER BASS—POWERFUL—NATURAL—VOCAL—FLAT—CUSTOM1—CUSTOM2

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 except for the center, and then reproducing a 5.1 ch. audio (Dolby Digital or DTS) and adjusting the center speaker output to the balance you have already got among the other speakers.

1 Touch A.MENU and DSP and then touch NEXT twice.

2 Touch PARAMETRIC EQ.

3 Touch ← or → to select the desired item.  
Each time you touch ← or → selects the item in the following order:  
SP-SEL (speakers)→BAND (bands)→FREQUENCY (center frequency)→LEVEL (equalizer level)→Q. FACTOR (Q factor)

4 Touch ← or → to select the speaker to be adjusted.  
Touch ← or → until the desired speaker appears in the display.  
REAR (rear speakers)→CENTER (center speaker)→FRONT (front speakers)  
- You cannot select speakers whose size is set at OFF.

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 appears 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 → increases or decreases the equalizer level. +06→−06 is displayed 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:
WIDE (wide)—NARROW (narrow)

- 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 octave 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 created 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 A.MENU and DSP and then touch NEXT twice.

2. Touch AUTO EQ.

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

3. Touch ▲ to turn the auto-equalizer on.

- To turn auto equalizer off, touch ▼.

---

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

*Only when the multi-channel processor (e.g., DEQ-P8000) is connected to this unit, you can operate this function.*

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.

**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 following conditions may damage the speakers. Be sure to check the conditions thoroughly before 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 capability.

- If the microphone is placed in an unsuitable position the measurement tone may become loud and measurement may take a long time, resulting in a drain on battery power. Be sure to place the microphone in the specified location.
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 before carrying out auto TA and EQ. Sounds other than the measurement tone (surrounding sounds, engine sound, telephones ringing etc.) may prevent correct measurement of the car interior acoustic characteristics.
- Be sure to carry out auto 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 circumstances, so please continue to use this value.
  - When the reflected sound within a vehicle is strong and delays occur.
  - When delays occur for low sounds due to the influence of the LPF on active subwoofers or external amps.
- Auto TA and EQ changes the audio settings as below:
  - The fader/balance settings return to the center position. (Refer to page 73.)
  - The equalizer curve switches to FLAT. (Refer to page 79.)
  - 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 previous setting of this already exists, the setting 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
Digital Signal Processor

conditioner or heater may prevent correct auto TA and EQ.
- Press SOURCE to turn the source on if this unit is turned off.

4 Select the position for the seat on which the microphone is placed.
Refer to Using the position selector on page 73.
- If no position is selected before you start auto TA and EQ, FRONT-L is selected automatically.

5 Press SOURCE and hold until the unit turns off.

6 Press and hold EQ to enter the auto TA and EQ measurement mode.

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

- 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 part way through, touch BACK or ESC.

10 When auto TA and EQ is completed, Complete is displayed.
When correct measurement of car interior acoustic characteristics is not possible, an error message is displayed. (Refer to Understanding auto TA and EQ error messages on page 100.)

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

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

For details concerning operation, refer to the multi channel processor’s operation manual.

8 Touch START to start the auto TA and EQ.

9 Get out of the car and close the door within 10 seconds when the 10-second count-down starts.
The measurement tone (noise) is outputted from the speakers, and auto TA and EQ begins.
Introduction of DVD setup adjustments

You can use this menu to change audio, subtitle, parental lock and other DVD settings.
- When watching a DVD/Video CD on the rear display independently, you cannot operate this menu.

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

1 Touch SETUP.
SETUP will be displayed instead of MENU.

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

3 Touch any of LANGUAGE, VISUAL or OTHERS to display the DVD setup function names.
The DVD setup function names in selected menu are displayed.
   - To go to the next group of function names, touch NEXT.
   - To return to the previous group of function names, touch PREV.
   - To return to the previous display, touch BACK.
   - To return to the playback display, touch ESC.

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

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

1 Touch SETUP and LANGUAGE and then touch SUB TITLE LANGUAGE.
A subtitle language menu is displayed and the currently set language is highlighted.
   - To switch to the second language select menu, touch NEXT.
   - To return to the first language select menu, touch PREV.

2 Touch the desired language.
A subtitle language is set.
   - If you have selected OTHERS, refer to When you select OTHERS on 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 SUB.T during playback. (Refer to Changing the subtitle language during playback (Multi-subtitle) on page 36.)
- Even if you use SUB.T to switch the subtitle language, this does not affect the settings here.

When you select OTHERS
When you select OTHERS, a language code input display is shown. Refer to Language code
Setting up the DVD player

chart for DVD on page 107 to input the four digit code of the desired language.

1  Touch 0—9 to input the language code.
   ▪ To cancel the inputted numbers, touch C.
   ▪ You can also input the desired number by using the joystick and 0-9.

2  While the inputted number is displayed, touch ENTER. ■

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

1  Touch SETUP and LANGUAGE and then touch MENU LANGUAGE.
   A menu language menu is displayed and the currently set language is highlighted.
   ▪ To switch to the second language select menu, touch NEXT.
   ▪ To return to the first language select menu, touch PREV.

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

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

Setting assist subtitles on or off
Assist subtitles offer explanations for the aurally impaired. However, they are only displayed if they are recorded on the DVD. You can turn assist subtitles on or off as desired.

1  Touch SETUP and LANGUAGE and then touch NEXT.

2  Touch ASSIST SUB TITLE.

3  Touch ▲ to turn assist subtitles on.
   ▪ To turn assist subtitles off, touch ▼. ■

   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 36.)
   • Even if you use AUDIO to switch the audio language, this does not affect the settings here. ■
Setting angle icon display

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

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

Setting the aspect ratio

There are two kinds of display. A wide screen display has a width to height ratio (TV aspect) of 16:9, while a regular display has a TV aspect of 4:3. Be sure to select the correct TV aspect for the display connected to REAR MONITOR OUT.
   • When using a regular display, select either LETTER BOX or PANSCAN. Selecting 16:9 may result in an unnatural picture.
   • If you select the TV aspect, the unit’s display changes to the same setting.

1 Touch SETUP and VISUAL and then touch TV ASPECT.
2 Touch any of the following touch panel keys to select the TV aspect.
   • 16:9 – Wide screen picture (16:9) is displayed 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
   • PANSCAN – The picture is cut short at the right and left of the screen

Notes
   • When playing discs that do not specify PANSCAN, playback is with LETTER BOX even if you select PANSCAN setting. Confirm whether the disc package bears the 16:9 LB mark. (See page 13.)
   • Some discs do not enable changing of the TV aspect. For details, refer to the disc’s instructions.

Setting the parental lock

Some DVD video discs let you use parental lock to restrict the viewing of violent and adult oriented scenes by children. You can set the parental lock level in steps as desired.
   • When you set a parental lock level and then play a disc featuring parental lock, code number input indications may be displayed. In this case, playback will begin when the correct code number is input.

Setting the code number and level

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

1 Touch SETUP and VISUAL and then touch PARENTAL.
2 Touch 0—9 to input a four digit code number.
3 While the inputted number is displayed, touch ENTER.
The code number is set, and you can now set the level.
4 Touch any of 1—8 to select the desired level.
The parental lock level is set.
   • LEVEL 8 – Playback of the entire disc is possible (initial setting)
   • LEVEL 7—LEVEL 2 – Playback of discs for children and non adult oriented discs is possible
Setting up the DVD player

- LEVEL 1 – Playback of discs for children only is possible

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

Changing the level
You can change the set parental lock level.

1 Touch SETUP and VISUAL and then touch PARENTAL.

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

3 Touch ENTER.
This enters the code number, and you can now change the level.
- If you input an incorrect code number, the icon ☒ is displayed. Touch C and input the correct code number.
- If you forget your code number, refer to If you forget your code number on this page.

4 Touch any of 1—8 to select the desired level.
The new parental lock level is set.

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

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

1 Touch SETUP and OTHERS and then touch DVD AUTO PLAY.

2 Touch ▲ to turn automatic playback on.
- To turn automatic playback off, touch ▼.
- When the automatic playback is on, you can not operate repeating play of DVD disc (refer to Repeating play on page 34).

Setting remote control code type
When the remote control operation switch is set to DVD, changing the remote control code type enables you to operate the Pioneer DVD player with the supplied remote control. There are three remote codes, code type A, code type B and code type AVH. When operating a multi DVD player (e.g. XDV P9II), select code A. When operating a DVD navigation unit, select code B. When operating this unit, select code AVH.
1  Set the remote control selection switch on the left side of the remote control to the appropriate position with a pen tip or other pointed instrument.
   - If you select AVH mode, there is no need to take the following procedure.
   - If you select A/B mode, take the following procedure and change the code type to the appropriate type.

2  Press 7 and 0 on the remote control simultaneously to change the code type.
Initially, the code type is set to A. Each time you press 7 and 0 simultaneously on the remote control the code type switches between A and B.
Initial Settings

Adjusting initial settings

Initial settings lets you perform initial setup of different settings for this unit.

1  Function display
   Shows the function names.

2  Touch A.MENU and then touch INITIAL to display the function names.
   The function names are displayed and operable ones are highlighted.
   - When A.MENU is not displayed, you can display it by touching the screen.
   - You can also display MENU by clicking the joystick.
   - To go to the next group of function names, touch NEXT.
   - To return to the previous group of function names, touch PREV.
   - When the multi channel processor (e.g., DEQ P8000) is connected to this unit, you can operate DIGITAL ATT instead of REAR SPEAKER.
   - To return to the previous display, touch BACK.
   - To return to the display of each source, touch ESC.

Switching the warning tone

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

1  Touch A.MENU and INITIAL and then touch DETACH WARNING.

2  Touch ▲ to turn warning tone on.
   - To turn warning tone off, touch ▼.

Switching the auxiliary setting

It is possible to use auxiliary equipment with this unit. Activate the auxiliary setting when using auxiliary equipment connected to this unit.

1  Touch A.MENU and INITIAL and then touch AUX.

2  Touch ▲ to turn auxiliary setting on.
   - To turn auxiliary setting off, touch ▼.

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 (SUB. W) connection. If you switch the rear output setting to the SUB. W, you can connect a rear speaker lead directly to a subwoofer without using an auxiliary amp.
Initially, the unit is set for rear full range speaker connection (FULL). When rear output is connected to full range speakers (when FULL is selected), you can connect the RCA subwoofer output to a subwoofer. In this case, you can select whether to use the subwoofer controller’s (low pass filter, phase) built in **SUB.W** or the auxiliary FULL.

- When the multi channel processor (e.g., DEQ P8000) is connected to this unit, you cannot operate this function.

1 Touch A.MENU and INITIAL and then touch REAR SPEAKER.

2 Touch ➔ or ➕ to switch the rear output setting.
   Touch ➔ to select full range speaker and FULL appears in the display. Touch ➕ to select subwoofer and SUB. W appears in the display.
   ▪ When no subwoofer is connected to the rear output, select FULL.
   ▪ When a subwoofer is connected to the rear output, set for subwoofer SUB. W.
   ▪ When the rear output setting is SUB. W, you cannot change the subwoofer controller.

3 Touch ➔ or ➕ to switch the subwoofer output or non fading output.
   Touch ➔ to select subwoofer output and SUB.W appears in the display. Touch ➕ to select non fading output and FULL appears in the display.

![Notes](https://example.com/notes.png)

- Even if you change this setting, there is no output unless you turn the nonfading output (refer to Using nonfading output on page 69) or subwoofer output (refer to Using subwoofer output on page 69) in the audio menu on.
- If you change the subwoofer controller, subwoofer output and nonfading output in the audio menu return to the factory settings.

- Both rear speaker leads output and RCA rear output are switched simultaneously in this setting.

**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 (e.g., DEQ P8000) is connected to this unit, you can operate this function.

1 Touch A.MENU and INITIAL and then touch DIGITAL ATT.

2 Touch ➔ or ➕ to switch the digital attenuator setting.
   Touch ➔ to select low setting and LOW appears in the display. Touch ➕ to select high setting and HIGH appears in the display.

**Switching the sound muting/attenuation**

Sound from this system is muted, attenuated or mixed automatically in the following cases:

- When a call is made or received using a cellular telephone connected to this unit.
- When the voice guidance is output from a Pioneer navigation unit connected to this unit.

1 Touch A.MENU and INITIAL and then touch TEL/GUIDE.
Initial Settings

2 Touch « or » to select any of the muting, attenuation or mixing.
Touch « or » 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

Notes
- The sound is turned off, MUTE or ATT is displayed and no audio adjustment is possible.
- Operation returns to normal when the phone connection or the voice guidance is ended.

Switching the automatic disc playback
You can turn automatic disc playback on or off when you insert a disc into the disc loading slot. When this function is on, the disc will be automatically played after it is inserted into the disc loading slot.
Initially, this function is set to on.

1 Touch A.MENU and INITIAL and then touch DVD DISC AUTO.

2 Touch ▲ to turn automatic disc playback on.
   - To turn automatic disc playback off, touch ▼.

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

1 Touch A.MENU and INITIAL and then touch NEXT.

2 Touch SUB DISPLAY DIMMER.

3 Touch ▲ to turn dimmer on.
   - To turn dimmer off, touch ▼.

Mixing navigation voice/beep and audio sound
When there is a navigation guidance, you can mix the guidance voice/beep sound from a Pioneer navigation unit with the audio sound from this system. You can select either mixing both the guidance voice and the beep sound or the guidance voice only.
- You can operate this function only when a Pioneer navigation unit is connected to this unit.
- When the multi channel processor (e.g., DEQ P8000) is connected to this unit, you cannot use this function.
- We recommend that you select GUIDE to ensure quality sound.

1 Touch A.MENU and INITIAL and then touch NEXT.

2 Touch NAVI MIXING.

3 Touch ▲ or ▼ to switch the mixing of navigation voice/beep.
   Touch ▲ to select ALL (mixing both guidance voice and beep). Touch ▼ to select GUIDE (mixing guidance voice only).

Resetting the audio functions
You can reset all audio functions except volume.
Initial Settings

- Only when the multi channel processor (e.g., DEQ P8000) is connected to this unit, you can operate this function.

1 Touch A.MENU and INITIAL and then touch NEXT.

2 Touch AUDIO RESET.

3 Touch RESET.

4 Touch RESET again to reset audio functions.
   - To cancel resetting the audio functions, touch CANCEL.
Introduction of setup adjustments

1  Setup menu display
   Shows the setup function names.

<table>
<thead>
<tr>
<th>Touch A.MENU and then touch SETUP to display the setup function names.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The setup function names are displayed and operable ones are highlighted.</td>
</tr>
<tr>
<td>▪ When A.MENU is not displayed, you can display it by touching the screen.</td>
</tr>
<tr>
<td>▪ You can also display MENU by clicking the joystick.</td>
</tr>
<tr>
<td>▪ To return to the previous display, touch BACK.</td>
</tr>
<tr>
<td>▪ To return to the display of each source, touch ESC.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>If you do not operate the setup function within about 30 seconds, the display is automatically returned to the source display.</td>
</tr>
</tbody>
</table>

Setting the video input

You can switch the setting according to the connected component.

• Select VIDEO to watch video of a connected component as AV source.
• Select M-DVD to watch video of a connected DVD player as S-DVD source.

1  Touch A.MENU and SETUP and then touch AV INPUT.

2  Touch « or » to select the video input setting.
   Touch « or » until the desired setting appears in the display.
   • OFF – No video component is connected
   • VIDEO – External video component
   • M-DVD – DVD player connected with RCA cable
   ▪ When a DVD player is connected with an AV BUS cable, do not select M-DVD otherwise no picture will be displayed even if you select S-DVD.

Setting for rear view 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 (BACK UP CAMERA 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.)

• Confirm the setting immediately whether the display changes to a rear view camera video when the gear shift is moved to REVERSE (R) from another position.
• When the display changes to a rear view camera video during normal drivings, switch to another setting.
• To return to the source display, press V.ADJ.

1  Touch A.MENU and SETUP and then touch BACK UP CAMERA.
2 Touch ‡ to turn rear view camera setting on.
   - To turn rear view camera setting off, touch ‡.

3 Touch ¶ or ‡ to select an appropriate setting for polarity.
Each time you touch ¶ or ‡ it switches between the following polarity:
   - BATTERY – When the polarity of the connected lead is positive while the gear shift is in REVERSE (R) position
   - GND – When the polarity of the connected lead is negative while the gear shift is in REVERSE (R) position

Selecting the video of rear display
When the navigation image is displayed on front display, you can select either showing the navigation image on rear display or a video of a selected source.
   - Only when a Pioneer navigation unit is connected to this unit, you can switch the video of rear display.
   - When selecting SOURCE in REAR DISPLAY, when the selected source is an audio source, nothing is displayed on rear display.

1 Touch A.MENU and SETUP and then touch REAR DISPLAY.

2 Touch ¶ or ‡ to select the video on rear display.
   Touch ¶ or ‡ until the desired video setting appears in the display.
   - SOURCE – Display the video of the selected source on rear display
   - NAVI – Display the navigation image on rear display

Setting the automatic open function
To prevent the display from hitting the shift lever of an automatic vehicle when it is in P (park) position, or when you do not wish the display to open/close automatically, you can set the automatic open function in the manual mode. Furthermore, to adjust the LCD panel slide position, you can turn the set back on or off.

1 Touch A.MENU and SETUP and then touch FLAP SETTING.

2 Touch ‡ and the LCD panel slides to the back.
   - Touch ‡ and the LCD panel slides to the front.

3 Touch ¶ or ‡ to select the display to open/close automatically or manually.
   Touch ¶ to select MANUAL, and you have to press OPEN/CLOSE to open/close the display. Touch ‡ to select AUTO, and the display automatically opens/closes when power to this unit is turned on.

Setting the clock
Use these instructions to set the clock.

1 Touch A.MENU and SETUP and then touch CLOCK ADJUST.

2 Touch OFF to turn the clock display on. ON will appear in the display instead of OFF. Clock display is now on.
   - You can also turn the clock display on or off by pressing FLIP DOWN/CLOCK when the LCD panel is closed.
   - To turn the clock display off, touch ON.
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 set the clock.
Each time you touch < it increases the selected hour or minute. Each time you touch > it decreases the selected hour or minute.

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

Setting the display appearance
Touch panel key color, background picture and motion text can be changed.

1 Touch A.MENU and SETUP and then touch APPEARANCE.

2 Touch < or > to select the desired item.
Each time you touch < or > selects the item in the following order:
TOUCH KEY COLOR (touch panel key color) — BACKGROUND PICTURE (background picture) — MOTION TEXT (motion text setting)

3 Touch < or > to select the touch panel key color.
Touch < to select the touch panel key color blue and BLUE appears in the display. Touch > to select the touch panel key color silver and SILVER appears in the display.
- Changing the touch panel key color switches the skin of the SPEANA1 (spectrum analyzer 1) and LEVEL METER2 (level meter 2). (Refer to Switching the background display on the next page.)

4 Touch < and then touch < or > to select the background picture.
Touch < to select background picture 1 and BGP1 appears in the display. Touch > to select background picture 2 and BGP2 appears in the display.

5 Touch < and then touch < or > to select the motion text setting.
Touch < to select motion text off and OFF appears in the display. Touch > to select motion text on and ON appears in the display.
- When the vehicle’s parking brake is not detected, motion text is not activated.

Using the AUX source
An IP BUS RCA Interconnector such as the CD RB20/CD RB10 (sold separately) lets you connect this unit to auxiliary equipment featuring RCA output. For more details, refer to the IP BUS RCA Interconnector owner’s manual.
Selecting AUX as the source

- Touch the source icon and then touch AUX to select AUX as the source.
  - When the source icon is not displayed, you can display it by touching the screen.
  - If the auxiliary setting is not turned on, AUX cannot be selected. For more details, see Switching the auxiliary setting on page 89.

Setting the AUX title

The title displayed for the AUX source can be changed.

1. After you have selected AUX as the source, touch A.MENU and FUNCTION and then touch NAME EDIT.

2. Touch ABC to select the desired character type.
   Touch ABC repeatedly to switch between the following character types:
   Alphabet (uppercase), numbers and symbols — Alphabet (lowercase) — European letters, such as those with accents (e.g., á, à, ā, ç)
   - You can select to input numbers and symbols by touching 123.

3. Touch ø or î to select a letter of the alphabet.
   Each time you touch ø, it will display a letter of the alphabet in A B C ... X Y Z, numbers and symbols in 1 2 3 ... } order. Each time you touch î, it will display a letter in the reverse order, such as Z Y X ... C B A.

4. Touch » to move the cursor to the next character position.
   When the desired letter is displayed, touch » to move the cursor to the next next position and then select the next letter. Touch « to move backwards in the display.

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

6. Touch ESC to return to the playback display.

Switching the background display

You can switch background displays while listening to each source.

- Press ENTERTAINMENT.
  Each time you press ENTERTAINMENT the display changes in the following order:
  Audio source
  Background still picture — SPEANA1 (spectrum analyzer 1) — SPEANA2 (spectrum analyzer 2) — LEVEL METER1 (level meter 1) — LEVEL METER2 (level meter 2) — VISUAL1 (background visual 1) — VISUAL2 (background visual 2) — VISUAL3 (background visual 3) — CLOCK (entertainment clock) — NAVI (navigation unit wall paper)
  Video source
  Video of currently selected source — Background still picture — SPEANA1 (spectrum analyzer 1) — SPEANA2 (spectrum analyzer 2) — LEVEL METER1 (level meter 1) — LEVEL METER2 (level meter 2) — VISUAL1 (background visual 1) — VISUAL2 (background visual 2) — VISUAL3 (background visual 3) — CLOCK (entertainment clock) — NAVI (navigation unit wall paper)
Other Functions

Note
In the following cases, the background display will not change:

- When the AV (video input) is not set to VIDEO (refer to page 93).
- When the DVD/Video CD playback is not turned on for rear display (refer to page 22).
- When a Pioneer navigation unit is not connected to this unit.

Using the PGM button

You can operate the preprogrammed functions for each source by using PGM.

- Press PGM to turn pause on when selecting the following sources:
  - DVD – Built in DVD player
  - S-DVD – DVD player/multi DVD player
  - M-CD – Multi CD player
  - To turn pause off, press PGM again.

- Press PGM and hold to turn BSM on when selecting TUNER as the source.
  Press PGM and hold until the BSM turns on.
  - To cancel the storage process, press PGM again.

- Press PGM and hold to turn BSSM on when selecting TV as the source.
  Press PGM and hold until the BSSM turns on.
  - To cancel the storage process, press PGM again.

- Press PGM to select the desired channel select setting when selecting XM as the source.
  Press PGM repeatedly to switch between the following channel select settings:
  - CHNUMBER (channel number select setting)
  - CATEGORY (channel category select setting)
## Troubleshooting

### Common

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action (See)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power doesn’t turn on.</td>
<td>Leads and connectors are incorrectly</td>
<td>Confirm once more that all connections are correct.</td>
</tr>
<tr>
<td>The unit doesn’t operate.</td>
<td>connected.</td>
<td></td>
</tr>
<tr>
<td>The fuse is blown.</td>
<td></td>
<td>Rectify the reason for the fuse blowing, then replace the fuse. Be very sure to install the correct fuse with the same rating.</td>
</tr>
<tr>
<td>Noise and other factors are causing the built in microprocessor to operate incorrectly.</td>
<td></td>
<td>Press RESET. (Page 14)</td>
</tr>
<tr>
<td>Operation with the remote control isn’t possible.</td>
<td>The remote control operation mode is</td>
<td>Switch to the correct remote control mode. (Page 19)</td>
</tr>
<tr>
<td>The unit does not operate correctly even when the appropriate</td>
<td>incorrect.</td>
<td></td>
</tr>
<tr>
<td>remote control buttons are pressed.</td>
<td>The remote control code is incorrect.</td>
<td>Make sure the remote control selection switch setting and code type setting are the same. (Page 87)</td>
</tr>
<tr>
<td>Battery power is low.</td>
<td></td>
<td>Load new battery. (Page 14)</td>
</tr>
<tr>
<td>Some operations are prohibited with certain discs.</td>
<td></td>
<td>Check by using another disc.</td>
</tr>
<tr>
<td>Playback is not possible.</td>
<td>The disc is dirty.</td>
<td>Clean disc. (Page 102)</td>
</tr>
<tr>
<td></td>
<td>The loaded disc is a type this unit cannot play.</td>
<td>Check what type the disc is.</td>
</tr>
<tr>
<td></td>
<td>Non compatible video system disc is loaded.</td>
<td>Change to a disc compatible to your video system.</td>
</tr>
<tr>
<td>No sounds are heard.</td>
<td>Cables are not connected correctly.</td>
<td>Connect the cables correctly.</td>
</tr>
<tr>
<td>The volume level will not rise.</td>
<td>The unit is performing still, slow motion or frame by frame playback.</td>
<td>There is no sound during still, slow motion or frame by frame playback.</td>
</tr>
<tr>
<td>There is no picture.</td>
<td>The parking brake cord is not connected.</td>
<td>Connect a parking brake cord, and apply the parking brake.</td>
</tr>
<tr>
<td></td>
<td>The parking brake is not applied.</td>
<td>Connect a parking brake cord, and apply the parking brake.</td>
</tr>
<tr>
<td>The icon ❌ is displayed, and operation is not possible.</td>
<td>The operation is prohibited for the disc.</td>
<td>This operation is not possible.</td>
</tr>
<tr>
<td></td>
<td>The operation is not compatible with the disc’s organization.</td>
<td>This operation is not possible.</td>
</tr>
<tr>
<td>The picture stops (pauses) and the unit cannot be operated.</td>
<td>Reading of data has become impossible during playback.</td>
<td>After pressing ■ once, start playback once more.</td>
</tr>
<tr>
<td>There is no sound.</td>
<td>The volume level is low.</td>
<td>Adjust the volume level.</td>
</tr>
<tr>
<td>Volume level is low.</td>
<td>The attenuator is on.</td>
<td>Turn the attenuator off.</td>
</tr>
<tr>
<td>There is audio and video skipping.</td>
<td>The unit is not firmly secured.</td>
<td>Secure the unit firmly.</td>
</tr>
<tr>
<td>The picture is stretched, the aspect is incorrect.</td>
<td>The aspect setting is incorrect for the display.</td>
<td>Select the appropriate setting for your display. (Page 86)</td>
</tr>
</tbody>
</table>
### Additional Information

#### Symptom | Cause | Action (See)
--- | --- | ---
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.

#### Problems during DVD playback

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action (See)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Playback is not possible.</td>
<td>The loaded disc has a different region number from this unit.</td>
<td>Replace the disc with one featuring the same region number as this unit. (Page 9, Page 109)</td>
</tr>
<tr>
<td>A parental lock message is displayed and playback is not possible.</td>
<td>Parental lock is on.</td>
<td>Turn parental lock off or change the level. (Page 86)</td>
</tr>
<tr>
<td>Parental lock cannot be canceled.</td>
<td>The code number is incorrect.</td>
<td>Input the correct code number. (Page 86)</td>
</tr>
<tr>
<td></td>
<td>You have forgotten your code number.</td>
<td>Press CLEAR 10 times to cancel the code number. (Page 87)</td>
</tr>
<tr>
<td>Dialog language (and subtitle language) cannot be switched.</td>
<td>The DVD playing does not feature multiple language recordings.</td>
<td>You cannot switch among multiple languages if they are not recorded on the disc.</td>
</tr>
<tr>
<td></td>
<td>You can only switch between items indicated in the disc menu.</td>
<td>Switch using the disc menu.</td>
</tr>
<tr>
<td>No subtitles are displayed.</td>
<td>The DVD playing does not feature subtitles.</td>
<td>Subtitles are not displayed if they are not recorded on the disc.</td>
</tr>
<tr>
<td></td>
<td>You can only switch between items indicated in the disc menu.</td>
<td>Switch using the disc menu.</td>
</tr>
<tr>
<td>Playback is not with the audio language and subtitle language settings selected in DVD SETUP</td>
<td>The DVD playing does not feature dialog or subtitles in the language selected in DVD SETUP</td>
<td>Switching to a selected language is not possible if the language selected in DVD SETUP is not recorded on the disc.</td>
</tr>
<tr>
<td>Switching the viewing angle is not possible.</td>
<td>The DVD playing does not feature scenes shot from multiple angles.</td>
<td>You cannot switch between multiple angles if the DVD does not feature scenes recorded from multiple angles.</td>
</tr>
<tr>
<td></td>
<td>You are trying to switch to multiple angle viewing of a scene that is not recorded from multiple angles.</td>
<td>Switch between multiple angles when watching scenes recorded from multiple angles.</td>
</tr>
</tbody>
</table>
| The picture is extremely unclear/distorted and dark during playback. | 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 playing a disc that has a signal prohibiting copying, 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

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action (See)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The PBC (playback control) menu display cannot be called up.</td>
<td>The Video CD playing does not feature PBC.</td>
<td>This operation is not possible with Video CDs not featuring PBC.</td>
</tr>
<tr>
<td>Repeat play and track/time search are not possible.</td>
<td>The Video CD playing features PBC.</td>
<td>This operation is not possible with Video CDs featuring PBC.</td>
</tr>
</tbody>
</table>

Error messages

When problems occur with disc playback, an error message appears on the display. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists, contact your dealer or your nearest PIONEER Service Center.

<table>
<thead>
<tr>
<th>Message</th>
<th>Cause</th>
<th>Action (See)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERROR-02</td>
<td>Dirty disc</td>
<td>Clean disc.</td>
</tr>
<tr>
<td></td>
<td>Scratched disc</td>
<td>Replace disc.</td>
</tr>
<tr>
<td>ERROR-05</td>
<td>Electrical or mechanical</td>
<td>Press RESET.</td>
</tr>
<tr>
<td>DIFFERENT REGION DISC (REGION ERR)</td>
<td>The disc does not have the same region number as this unit</td>
<td>Replace the DVD video with one bearing the correct region number.</td>
</tr>
<tr>
<td>NON PLAYABLE DISC (NON-PLAY)</td>
<td>This type of disc cannot be played by this unit</td>
<td>Replace the disc with one this unit can play.</td>
</tr>
<tr>
<td></td>
<td>The disc is loaded upside down</td>
<td>Check that the disc is loaded correctly.</td>
</tr>
<tr>
<td>THERMAL PROTECTION IN MOTION (TEMP)</td>
<td>The temperature of this unit is outside the normal operating range</td>
<td>Wait until the unit's temperature returns to within normal operating limits.</td>
</tr>
<tr>
<td>PROTECT</td>
<td>All the files on the inserted disc are secured by digital rights management (DRM)</td>
<td>Replace disc.</td>
</tr>
<tr>
<td>TRK SKIPPED</td>
<td>The inserted disc contains WMA files that are protected by digital rights management (DRM)</td>
<td>Replace disc.</td>
</tr>
</tbody>
</table>

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.
<table>
<thead>
<tr>
<th>Message</th>
<th>Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error check MIC</td>
<td>Microphone is not connected.</td>
<td>Plug the supplied microphone securely into</td>
</tr>
<tr>
<td>Error check front SP Error check FL SP</td>
<td>The microphone cannot pick up the</td>
<td>• Confirm that the speakers are connected</td>
</tr>
<tr>
<td>Error check center SP Error check RL SP</td>
<td>measuring tone of a speaker.</td>
<td>correctly.</td>
</tr>
<tr>
<td>Error check subwoofer</td>
<td></td>
<td>• Correct the input level setting of the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>power amp connected to the speakers.</td>
</tr>
<tr>
<td>Error check noise</td>
<td>The surrounding noise level is too</td>
<td>• Stop your car in a place that is as quiet</td>
</tr>
<tr>
<td></td>
<td>high.</td>
<td>as possible, and switch off the engine, air</td>
</tr>
<tr>
<td></td>
<td></td>
<td>conditioner or heater.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Set the microphone correctly.</td>
</tr>
</tbody>
</table>
**DVD player and care**

- Use only normal, round discs. If you insert irregular, non-round, shaped discs they may jam in the DVD player or not play properly.

- 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 chemicals 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, condensation may form on components inside the DVD player. Condensation may cause the DVD player not to 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.

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

- When DVD R/DVD RW discs are used, playback is possible only for discs which have been recorded with the Video format (video mode). It is not possible to play back DVD RW discs which have been recorded with the Video Recording format (VR mode).

- It may not be possible to play back DVD R/DVD RW discs which have been recorded with the Video format (video mode), be cause of disc characteristics, scratches or dirt on the disc, or dirt, condensation, etc., on the lens of this unit.

- It is not possible to play back DVD ROM/DVD RAM discs.

- Playback of discs recorded on a personal computer may not be possible, depending on the application settings and the environment. Please record with the correct for mat. (For details, contact the manufacturer of the application.)

**CD-R/CD-RW discs**

- When CD R/CD RW discs are used, playback 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 recorder 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 environment. Please record with the correct format. (For details, contact the manufacturer of the application.)
- Playback of CD R/CD RW discs may become impossible in case of direct exposure to sunlight, high temperatures, or the storage conditions in the vehicle.
- Titles and other text information recorded on a CD R/CD RW disc may not be displayed by this unit (in the case of audio data (CD DA)).
- This unit conforms to the track skip function of the CD R/CD RW disc. The tracks containing the track skip information are skipped automatically (in case of audio data (CD DA)).
- If you insert a CD RW disc into this unit, time to playback will be longer than when you insert a conventional CD or CD R disc.
- Read the precautions with CD R/CD RW discs before using them.

### MP3 and WMA files
- MP3 is short for MPEG Audio Layer 3 and refers to an audio compression technology standard.
- WMA is short for Windows Media™ Audio and refers to an audio compression technology that is developed by Microsoft Corporation. WMA data can be encoded by using Windows Media Player version 7 or later.
- With some applications used to encode WMA files, this unit may not operate correctly.
- With some applications used to encode WMA files, album names and other text information may not be correctly displayed.
- This unit allows playback of MP3/WMA files on CD ROM, CD R and CD RW discs. Disc recordings compatible with level 1 and level 2 of ISO9660 and with the Romeo and Joliet file system can be played back.
- It is possible to play back multi session compatible recorded discs.
- MP3/WMA files are not compatible with packet write data transfer.
- The maximum number of characters which can be displayed for a file name, including the extension (.mp3 or .wma), is 64, from the first character.
- The maximum number of characters which can be displayed for a folder name is 64.
- In case of files recorded according to the Romeo file system, only the first 64 characters can be displayed.
- When playing discs with MP3/WMA files and audio data (CD DA) such as CD EXTRA and MIXED MODE CDs, both types can be played only by switching mode between MP3/WMA and CD DA.
- The folder selection sequence for playback and other operations becomes the writing sequence used by the writing software. For this reason, the expected sequence at the time of playback may not coincide with the actual playback sequence. However, there also is some writing software which permits setting of the playback order.
- Some audio CDs contain tracks that merge into one another without a pause. When these discs are converted to MP3/WMA files and burned to a CD R/CD RW/CD ROM, the files will be played back on this player with a short pause between each one, regardless of the length of the pause between tracks on the original audio CD.

⚠️ **Important**
- When naming an MP3 or a WMA file, add the corresponding filename extension (.mp3 or .wma).
• This unit plays back files with the filename extension (.mp3 or .wma) as an MP3 or a WMA file. To prevent noise and malfunctions, do not use these extensions for files other than MP3 or WMA files.

**MP3 additional information**
• Files are compatible with the ID3 Tag Ver. 1.0, 1.1, 2.2, 2.3 and 2.4 formats for display of album (disc title), track (track title), artist (track artist) and comments. Ver. 2.x of ID3 Tag is given priority when both Ver. 1.x and Ver. 2.x exist.
• The emphasis function is valid only when MP3 files of 32, 44.1 and 48 kHz frequencies are played back. (16, 22.05, 24, 32, 44.1, 48 kHz sampling frequencies can be played back.)
• There is no m3u playlist compatibility.
• There is no compatibility with the MP3i (MP3 interactive) or mp3 PRO formats.
• The sound quality of MP3 files generally becomes better with an increased bit rate. This unit can play recordings with bit rates from 8 kbps to 320 kbps, but in order to be able to enjoy sound of a certain quality, we recommend using only discs recorded with a bit rate of at least 128 kbps.

**WMA additional information**
• This unit plays back WMA files encoded by Windows Media Player version 7 and 8.
• You can only play back WMA files in the frequencies 32, 44.1 and 48 kHz.
• The sound quality of WMA files generally becomes better with an increased bit rate. This unit can play recordings with bit rates from 48 kbps to 192 kbps, but in order to be able to enjoy sound of a certain quality, we recommend using discs recorded with a higher bit rate.

• This unit does not play back WMA files recorded as VBR (variable bit rate).
• This unit doesn’t support the following formats.
  — Windows Media Audio 9 Professional (5.1ch)
  — Windows Media Audio 9 Lossless
  — Windows Media Audio 9 Voice

**About folders and MP3/WMA files**
• An outline of a CD ROM with MP3/WMA files on it is shown below. Subfolders are shown as folders in the folder currently selected.
### Second level

### Third level

#### Notes
- This unit assigns folder numbers. The user can not assign folder numbers.
- It is not possible to check folders that do not include MP3/WMA files. (These folders will be skipped without displaying the folder number.)
- MP3/WMA files in up to 8 tiers of folders can be played back. However, there is a delay in the start of playback on discs with numerous tiers. For this reason we recommend creating discs with no more than 2 tiers.
- It is possible to play back up to 253 items from folders on one disc.

#### 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 a fire, electric shock, or other failure.
- If you notice smoke, a strange noise or smell, or any other abnormal signs from the display, turn off the power immediately and consult your dealer or the nearest authorized PIONEER Service Station. Using this unit in this condition may result in permanent damage to the system.
- Do not disassemble or modify this unit, as there are high voltage components inside which may cause an electric shock. Be sure to consult your dealer or the nearest authorized PIONEER Service Station for internal inspection, adjustments or repairs.

#### Handling the display
- When the display is subjected to direct sunlight for a long period of time, it will become very hot resulting in possible damage to the LCD screen. When not using this unit, close the display and avoid exposing it to direct sunlight.
- The display should be used within the temperature ranges shown below.
  - Operating temperature range: +14 to +122 °F
  - Storage temperature range: 4 to +176 °F
  - At temperatures higher or lower than the operating temperature range the display may not operate normally.
- The LCD screen of this unit is exposed in order to increase its visibility within the vehicle. Please do not press strongly on it as this may damage it.
- Do not place anything on the display when it is opened. Also, do not attempt to carry out angle adjustment, or open/close the display by hand. Applying strong force to the display may damage it.
- Do not push the LCD screen with much force as this may scratch it.
- Be careful not to place anything between the display and the main body when the display is opening or closing. If an object gets between the display and main body, the display may stop working.
- Be careful of fingers, long hair, and loose articles of clothing which could possibly get caught between the display and the main body and cause serious injury.
**Liquid crystal display (LCD) screen**
- If the display is near the vent of an air conditioner when it is opened, make sure that air from the air conditioner is not blowing on it. 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 in side the display may be shortened.
- Small black dots or white dots (bright dots) may appear on the LCD screen. These are due to the characteristics of the LCD screen and do not indicate a problem with the display.
- At low temperatures, the LCD screen may be dark for a while after the power is turned on.
- The LCD screen will be difficult to see if it is exposed to direct sunlight.
- When using a portable phone, keep the antenna of the portable phone away from the display to prevent disruption of the video by the appearance of spots, colored stripes, etc.

**Keeping the display in good condition**
- When removing dust from the screen or cleaning the display, first turn the system power off, then wipe with the supplied cloth.
- When wiping the screen, take care not to scratch the surface. Do not use harsh or abrasive chemical cleaners.

**Small fluorescent tube**
- A small fluorescent tube is used inside the display to illuminate the LCD screen.

— The fluorescent tube should last for approximately 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

<table>
<thead>
<tr>
<th>Language (code), input code</th>
<th>Language (code), input code</th>
<th>Language (code), input code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japanese (ja), 1001</td>
<td>Guarani (gn), 0714</td>
<td>Pashto, Pushto (ps), 1619</td>
</tr>
<tr>
<td>English (en), 0514</td>
<td>Gujarati (gu), 0721</td>
<td>Quechua (qu), 1721</td>
</tr>
<tr>
<td>French (fr), 0618</td>
<td>Hausa (ha), 0801</td>
<td>Rhaeto Romance (rm), 1813</td>
</tr>
<tr>
<td>Spanish (es), 0519</td>
<td>Hindi (hi), 0809</td>
<td>Kirundi (rn), 1814</td>
</tr>
<tr>
<td>German (de), 0405</td>
<td>Croatian (hr), 0818</td>
<td>Romanian (ro), 1815</td>
</tr>
<tr>
<td>Italian (it), 0920</td>
<td>Hungarian (hu), 0821</td>
<td>Kinyarwanda (rw), 1823</td>
</tr>
<tr>
<td>Chinese (zh), 2608</td>
<td>Armenian (hy), 0825</td>
<td>Sanskrit (sa), 1901</td>
</tr>
<tr>
<td>Dutch (nl), 1412</td>
<td>Interlingua (ia), 0901</td>
<td>Sindhi (sd), 1904</td>
</tr>
<tr>
<td>Portuguese (pt), 1620</td>
<td>Interlingue (ie), 0905</td>
<td>Sangho (sg), 1907</td>
</tr>
<tr>
<td>Swedish (sv), 1922</td>
<td>Inupiak (ik), 0911</td>
<td>Serbo Croatian (sh), 1908</td>
</tr>
<tr>
<td>Russian (ru), 1821</td>
<td>Indonesian (in), 0914</td>
<td>Sinhalese (si), 1909</td>
</tr>
<tr>
<td>Korean (ko), 1115</td>
<td>Icelandic (is), 0919</td>
<td>Slovak (sk), 1911</td>
</tr>
<tr>
<td>Greek (el), 0512</td>
<td>Hebrew (iw), 0923</td>
<td>Slovenian (sl), 1912</td>
</tr>
<tr>
<td>Afar (aa), 0101</td>
<td>Yiddish (ji), 1009</td>
<td>Samoan (sm), 1913</td>
</tr>
<tr>
<td>Abkhazian (ab), 0102</td>
<td>Javanese (jw), 1023</td>
<td>Shona (sn), 1914</td>
</tr>
<tr>
<td>Afrikaans (af), 0106</td>
<td>Georgian (ka), 1101</td>
<td>Somali (so), 1915</td>
</tr>
<tr>
<td>Amharic (am), 0113</td>
<td>Kazakh (kk), 1111</td>
<td>Albanian (sq), 1917</td>
</tr>
<tr>
<td>Arabic (ar), 0118</td>
<td>Greenlandic (kl), 1112</td>
<td>Serbian (sr), 1918</td>
</tr>
<tr>
<td>Assamese (as), 0119</td>
<td>Cambodian (km), 1113</td>
<td>Siswati (ss), 1919</td>
</tr>
<tr>
<td>Aymara (ay), 0125</td>
<td>Kannada (kn), 1114</td>
<td>Sesotho (st), 1920</td>
</tr>
<tr>
<td>Azerbaijani (az), 0126</td>
<td>Kashmiri (ks), 1119</td>
<td>Sundanese (su), 1921</td>
</tr>
<tr>
<td>Bashkir (ba), 0201</td>
<td>Kurdish (ku), 1121</td>
<td>Swahili (sw), 1923</td>
</tr>
<tr>
<td>Byelorussian (be), 0205</td>
<td>Kirghiz (ky), 1125</td>
<td>Tamil (ta), 2001</td>
</tr>
<tr>
<td>Bulgarian (bg), 0207</td>
<td>Latin (la), 1201</td>
<td>Telugu (te), 2005</td>
</tr>
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**Terms**

**Aspect ratio**
This is the width to height ratio of a TV screen. A regular display has an aspect ratio of 4:3. Wide screen displays have an aspect ratio of 16:9, providing a bigger picture for exceptional presence and atmosphere.

**Bit rate**
This expresses data volume per second, or bps units (bits per second). The higher the rate, the more information is available to reproduce the sound. Using the same encoding method (such as MP3), the higher the rate, the better the sound.

**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 featuring chapters, you can quickly find a desired scene with chapter search.

**Dolby Digital**
Dolby Digital provides multi channel audio from up to 5.1 independent channels. This is the same as the Dolby Digital surround sound system used in theaters.

**DTS**
This stands for Digital Theater Systems. DTS is a surround system delivering multi channel audio from up to 6 independent channels.

**ID3 tag**
This is a method of embedding track related information in an MP3 file. This embedded information can include the track title, the artist’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 number of characters, the information can be viewed when the track is played back.

**ISO9660 format**
This is the international standard for the format 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 consists of up to 8 characters, half byte English capital letters and half byte numerals and the “.” sign, with a file extension of three characters.)

**Level 2:**
The file name can have up to 31 characters (including the separation mark “.” and a file extension). Each folder contains less than 8 hierarchies.

**Extended formats**
Joliet:
File names can have up to 64 characters.
Romeo:
File names can have up to 128 characters.

**Linear PCM (LPCM)/Pulse code modulation**
This stands for linear pulse code modulation, which is the signal recording system used for music CDs and DVDs. Generally, DVDs are recorded with higher sampling frequency and bit rate than CDs. Therefore, DVDs can provide higher sound quality.

**m3u**
Playlists created using the “WINAMP” software have a playlist file extension (.m3u).

**MP3**
MP3 is short for MPEG Audio Layer 3. It is an audio compression standard set by a working
group (MPEG) of the ISO (International Standards Organization). MP3 is able to compress audio data to about 1/10th the level of a conventional disc.

**MPEG**
This stands for Moving Pictures Experts Group, and is an international video image compression standard. Some DVDs feature digital audio compressed and recorded using this system.

**Multi-angle**
With regular TV programs, although multiple cameras are used to simultaneously shoot scenes, only images from one camera at a time are transmitted to your TV. Some DVDs feature scenes shot from multiple angles, letting you choose your viewing angle as desired.

**Multi-audio (Multilingual dialog)**
Some DVDs feature dialog recorded in multiple languages. Dialog in up to 8 languages can be recorded on a single disc, letting you choose as desired.

**Multi-session**
Multi-session is a recording method that allows 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 session is a method of recording more than 2 sessions on one disc.

**Multi-subtitle**
Subtitles in up to 32 languages can be recorded on a single DVD, letting you choose as desired.

**Optical digital output/input**
By transmitting and receiving audio signals in a digital signal format, the chance of sonic quality deteriorating in the course of transmission is minimized. An optical digital output/input is designed to transmit and receive digital signals optically.

**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 oriented scenes feature parental lock which prevents 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 possible unless it features the same region number as the DVD player. This unit’s region number is displayed on the bottom of the unit.

**Title**
DVD video discs have high data capacity, enabling recording of multiple movies on a single disc. If, for example, one disc contains three separate movies, they are divided into title 1, title 2 and title 3. This lets you enjoy the convenience of title search and other functions.
**VBR**
VBR is short for variable bit rate. Generally speaking CBR (constant bit rate) is more widely used. But by flexibly adjusting the bit rate according to the needs of audio compression, it is possible to achieve compression priority sound quality.

**WMA**
WMA is short for Windows Media™ Audio and refers to an audio compression technology that is developed by Microsoft Corporation. WMA data can be encoded by using Windows Media Player version 7 or later. Microsoft, Windows Media, and the Windows logo are trademarks, or registered trademarks of Microsoft Corporation in the United States and/or other countries.
Specifications

General
Power source .................. 14.4 V DC (10.8 – 15.1 V allowable)
Grounding system .......... Negative type
Head unit:
  Max. current consumption ............................................ 10.0 A
  Dimensions (W × H × D):
    DIN
      Chassis ................. 178 × 50 × 160 mm
      (7 × 2 × 6 1/4 in.)
      Nose ..................... 188 × 58 × 36 mm
      (7 3/8 × 2 1/4 × 1 3/8 in.)
    D
      Chassis ................. 178 × 50 × 165 mm
      (7 × 2 × 6 1/2 in.)
      Nose ..................... 170 × 46 × 31 mm
      (6 3/4 × 1 3/4 × 1 1/4 in.)
  Weight ...................... 2.3 kg (4.8 lbs)
Hideaway unit:
  Max. current consumption ............................................ 1.0 A
  Dimensions (W × H × D) ........................................... 150 × 28 × 100 mm
  (5 7/8 × 1 1/8 × 3 7/8 in.)
  Weight ...................... 0.4 kg (0.7 lbs)

Display
Screen size/aspect ratio .......... 6.5 inch wide/16:9
  (effective display area: 144 × 77 mm)
Pixels .......................... 336,960 (1,440 × 234)
Type .......................... TFT active matrix, transmissive type
Color system ........................ NTSC compatible
Operating temperature range ........................................... +14 – +122 °F
Storage temperature range ........................................... 4 – +176 °F
Angle adjustment .......... 50 – 110°
  (initial settings: 110°)

Audio
Continuous power output is 22 W per channel minimum into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5% THD.
Maximum power output ...... 50 W × 4
  50 W × 2/4 Ω + 70 W × 1/2 Ω (for subwoofer)
Load impedance .................. 4 Ω (4 – 8 Ω [2 Ω for 1 ch] allowable)
Preout max output level/output impedance ........................................... 4.0 V/100 Ω
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 ..................... ±12dB
  Mid
    Frequency ................. 200/500/1k/2k Hz
    Q Factor .................. 0.35/0.59/0.95/1.15 (+6 dB when boosted)
    Gain ..................... ±12dB
  High
    Frequency ................. 3.15k/8k/10k/12.5k Hz
    Q Factor .................. 0.35/0.59/0.95/1.15 (+6 dB when boosted)
    Gain ..................... ±12dB
Loudness contour
  Low ........................ +3.5 dB (100 Hz), +3 dB (10 kHz)
  Mid ........................ +10 dB (100 Hz), +6.5 dB (10 kHz)
  High ........................ +11 dB (100 Hz), +11 dB (10 kHz)
  (volume: −30 dB)
Tone controls:
  Bass
    Frequency ................. 40/63/100/160 Hz
    Gain ..................... ±12dB
  Treble
    Frequency ................. 2.5k/4k/6.3k/10k Hz
    Gain ..................... ±12dB
HPF:
  Frequency ................. 50/80/125 Hz
  Slope ...................... −12 dB/oct
Subwoofer:
  Frequency ................. 50/80/125 Hz
  Slope ...................... −18 dB/oct
  Gain ..................... ±12dB
  Phase ..................... Normal/Reverse

DVD Player
System ........................ DVD video, Video CD, Compact disc audio system
Usable discs ........................ DVD video, Video CD, Compact disc
Region number ................. 1
Signal format:
  Sampling frequency ........ 44.1/48/96 kHz
**Additional Information**

Number of quantization bits
.................................................. 16/20/24; linear

Frequency response ................. 5 – 44,000 Hz (with DVD, at
sampling frequency 96 kHz)

Signal to noise ratio .......... 97 dB (1 kHz) (IHFA network)
.................................................. (CD: 96 dB (1 kHz) (IHFA network))

Dynamic range .................... 95 dB (1 kHz)
.................................................. (CD: 94 dB (1 kHz))

Distortion ............................. 0.008 % (1 kHz)

Output level:

  Video ........................................... 1.0 Vp/75 Ω (±0.2 V)
  Audio ........................................... 1.0 V (1 kHz, 0 dB)

Number of channels ............. 2 (stereo)

MP3 decoding format .......... MPEG 1 & 2 Audio Layer 3

WMA decoding format .......... Ver. 7 & 8

**FM tuner**

Frequency range ................. 87.9 – 107.9 MHz

Usable sensitivity .................. 8 dBf (0.7 μV/75 Ω, mono,
S/N: 30 dB)

50 dB quieting sensitivity .... 10 dBf (0.9 μV/75 Ω, mono)

Signal to noise ratio ........... 75 dB (IHFA network)

Distortion ......................... 0.3 % (at 65 dBf, 1 kHz,
.................................................. stereo)
.................................................. 0.1 % (at 65 dBf, 1 kHz,
.................................................. mono)

Frequency response ............ 30 – 15,000 Hz (±3 dB)

Stereo separation ............... 45 dB (at 65 dBf, 1 kHz)

Selectivity ......................... 80 dB (±200 kHz)

Three signal intermodulation (desired signal level)
.................................................. 30 dBf (two undesired sig
nal level: 100 dBf)

**AM tuner**

Frequency range ................. 530 – 1,710 kHz (10 kHz)

Usable sensitivity ................ 18 μV (S/N: 20 dB)

Signal to noise ratio ........... 65 dB (IHFA network)

**Note**

Specifications and the design are subject to possible modifications without notice due to improvements.
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