

Warnings and caution signs, illustrated below, are posted throughout this manual as well as on the AVN20D. They show safe and correct ways to handle the product to prevent personal injury to you and others and avoid damage to property. Before reading through the manual, take time to read through and learn the important information listed in this section.

## ***Cautions for use***

\* The illustrations of screens shown in this manual may differ from the actual screens of this product.



### **Warning**

This WARNING sign indicates a situation in which incorrect handling through disregard of a sign may result in death or serious personal injury.



### **Caution**

This CAUTION sign indicates a situation in which incorrect handling through disregard of a sign may result in personal injury or may result solely in damage to property.

The symbol shown below indicates that you should know about the information in order to carefully follow it or you should remember the information for its helpfulness.



This ATTENTION sign indicates helpful information to remember and know.

- Please read all materials such as manuals and warranties that have come with the product.
- Eclipse will not be responsible for unsatisfactory product performance due to failure to follow these instructions.
- Changes to product specifications may result in differences between content of the manual and features of the product.



LAMP(S) INSIDE THIS PRODUCT CONTAIN MERCURY AND MUST BE RECYCLED OR DISPOSED OF AS HAZARDOUS WASTE ACCORDING TO LOCAL, STATE, OR FEDERAL LAWS APPLICABLE TO YOU. DO NOT PLACE IN THE TRASH.

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### ***INDEX . . . . . 84***

The Index by Topic simplifies searches for explanations about individual features. When confused by an operation, use the Index by Topic to search for information about the operation.

# How to use this manual

## Section title

A title is assigned for each section.

## Item title

A number and title is assigned for each item.

## Operation title

A title is assigned for each operation.

## Operation screen

A screen showing the operation will appear.

## Detailed operation title

A title is assigned for each detailed operation.

## Operation procedure

Describes the operation. Proceed with the operation as per the numerical order.

Basic operation

## Adjusting sound quality

### Setting DSP (acoustics)

The DSP function reproduces the sensation of various factory set performance environments by adding reverberation to the music being played.

#### DSP mode setting

- 1 Touching the DSP touch switch brings up the acoustics mode screen as shown.
  - After making settings, touch **BACK**. The acoustics mode adjustments will be saved and the system will return to the previous operation screen.



Touch switch	DSP Environment	Touch switch	DSP Environment
<b>CONCERT</b>	Concert hall	<b>CLUB</b>	Disco, Club
<b>LIVE</b>	Live performance arena	<b>THEATER</b>	Movie theater
<b>CATHEDRAL</b>	Church with echo	<b>OFF</b>	DSP OFF

#### Adjusting, saving DSP (acoustics)

The factory set DSP (acoustics) level for each mode can be adjusted to preference and saved.

- 1 Touch **▲** or **▼** at the right of the screen while in the acoustics mode to be adjusted.
  - There are five + and five - adjustment levels available.
- 2 Touch the switch for the acoustics mode that has been adjusted until a beep is heard.





### *Resetting DSP (acoustics) levels*

**1** Touch **OFF** until a beep is heard.

- The acoustic level will be returned to default value (the default value is "0").



When adjusting the level for the currently selected DSP (acoustics) mode, the level will not be saved for other acoustics modes.

Basic  
operation

#### **Section heading**

Only the section heading will appear.

#### **Attention**

Additional points regarding the operations are given here.

# Features

## MP3 player for music discs having 1/10 compression (Page 50)

Plays CD-R (recordable) discs that have been compiled in MP3 format. (MP3 is a format that enables recording of the songs of several albums onto a single CD-R.)



## DSP effects for simulating acoustics of various performance environments (Page 22)

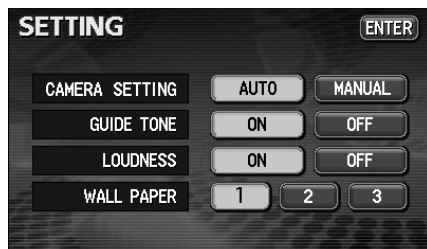
Provides ability to simulate the sensation of various performance environments for matching to the genre and source of a song.



## Selection and display of favorite wallpaper (screen backgrounds) (Page 30)

Wallpaper of your choice can be switched and displayed for use as the background of the information screen and audio playback screens.

The screen from a navigation unit can also be linked and selected.



- Setting wallpaper for the information screen and audio operations screen

## Radio tuner for receiving various broadcasts

- **AM/FM tuner (Page 36)**

Enables reception of analog AM/FM radio broadcasts.



- AM radio operation screen

- **HD RADIO (IBOC) tuner (Page 41)**

Enables reception of HD RADIO (High Definition Radio) broadcasts.



- HD RADIO (IBOC) AM operation screen

# Features

## • SIRIUS tuner (Page 44)

SIRIUS is a satellite broadcasting service offering music, news, sports and other programming with CD-quality sound; This is a paid subscription service.



● SIRIUS operation screen

## System additions

## • CD changer (Page 60)

A CD changer enables non-stop playing of multiple discs, for convenience at times such as taking a long drive.

It is easy to search for and play a song from among the discs on a changer.



## • VTR (Page 64)

Connecting a VTR deck enables watching of video tapes.



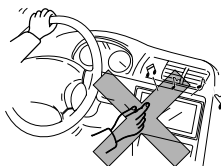
## Easy-access audio controls on the steering wheel (Page 64)

You can select the radio channel and perform CD and MP3 operations using the easy-access switches on the steering wheel. (This function is only available on vehicles fitted with steering wheel switches.)

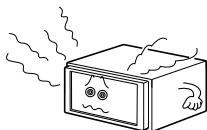
# Before using the main unit



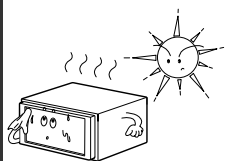
Caution



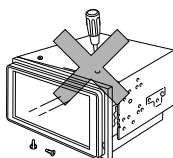
- Be very careful and pay full attention to safety when operating the audio controls while driving, otherwise accidents may occur. Also be sure to set volume so that you can still adequately hear sounds outside the vehicle. Improper use can contribute to a traffic accident.



- Never continue to use the system if it is malfunctioning in any way. If smoke, abnormal noises or abnormal odors are noticed, turn off the power immediately. Immediately turn off audio in such situations.

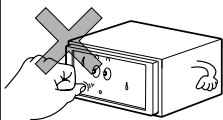


- Exercise caution as to the temperature inside the vehicle. The temperature inside the vehicle can increase during hot weather. Wait for the temperature inside the vehicle to drop before using the unit. Damage could result.

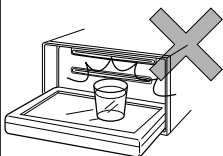


- Do not disassemble or modify the main unit. The main unit has a precisely designed structure, so consult your retailer in the event of any unsatisfactory performance.

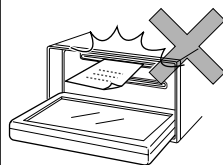
# Before using the main unit



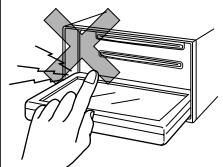
- Do not apply excessive force to the monitor. Damage could result.



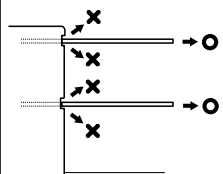
- Do not place items such as cups or cans on top of the monitor, and do not leave the monitor tilted down when not in use. Damage could result.



- Do not insert any objects other than discs into the disc slot. Damage could result.



- Be careful not to get fingers or other objects behind monitor when it is being retracted into place. Interference can cause an injury or damage the main unit.



- When removing a disc from the main unit, remove it in the horizontally level direction. Do not pull them up forcibly or press down on them strongly while removing them. Improper removal can scratch the disc, cause the main unit to make noise or result in other damage.

## About discs



- Water droplets can form on the inside of the main unit during cold or rainy weather in the same way car windows can fog up. (This is condensation.) When this happens, the audio can jump and playback can stop, so ventilate or dehumidify the vehicle for a short time before operating the equipment.
- To safeguard the components of the player, the unit will automatically stop when a malfunction occurs. The player will not operate even when messages displayed on the screen are followed, consult with your equipment retailer because it is possible that the unit has been damaged.
- It is possible that the sound will skip if the vehicle experiences violent motion on rough roads.

### About playable discs

- An audio disc bearing one of the marks below can be played.

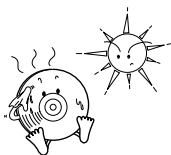


- It is possible that a CD-R (CD-Recordable) or CD-RW (CD-ReWritable) disc will not play on the main unit due to the circumstances of the recording, special disc characteristics, scratches, dirt or deterioration caused by long storage in the vehicle. In addition, a CD-R or CD-RW disc written with CD-R, CD-RW or UDF format that has not been finalized will not play on the main unit.
- The CD-TEXT function can be used only with the CD-TEXT-compatible compact discs available on the market. If it is used with CD-R or CD-RW discs, characters may not be displayed normally.
- Do not use discs with transparent or semi-transparent portions within the recording area, or see through discs, since they may not be accepted and ejected properly and may not play properly.

# Before using the main unit



## About handling discs



- Be sure to store discs in their cases and keep them out of direct sunlight. Discs can warp and become unusable.



- Do not apply paper-based tape to either the recording side or label side of a disc. Damage could result.



- Do not use discs on which there are cracks or large warps. Damage could result.

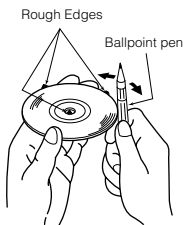


- Do not touch the recorded side of a disc when handling it. (This is the side with the rainbow-colored reflection.) The disc may become dirty and that could cause the sound to skip.



- Using a disc that has become dirty can scratch the disc and cause the sound to skip. Use a commercially available compact disc cleaner to clean a CD, wiping lightly from the center to the edge.

## About new discs

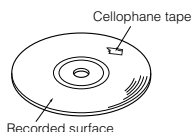


- You may notice that some brand new discs are rough around the center hole or outside edge. Remove the rough edges with the side of a ballpoint pen, etc. Flakes from the rough edges may stick to the recorded surface and interfere with playback.



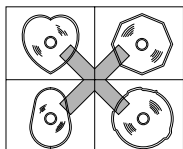


### About rental discs



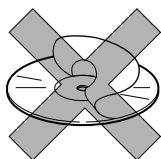
- Do not use CD discs with attached cellophane tape, rental CD discs with glue protruding from labels or discs with the residue of peeled adhesives. Using discs with those conditions can prevent the player from properly opening and closing as well as cause other damage.

### About specially shaped discs

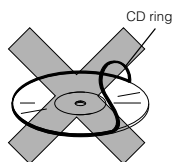


- Specially-shaped or octagonal CDs, like heart-shaped cannot be played. Do not attempt to play them, even with an adapter, since they may damage the player.
- Please do not use a commercially available lens cleaner because it may cause damage to the pickup of the player.

### About disc accessories



- Do not use accessories (stabilizers, protective seals, laser lens cleaners, etc.) sold for "improving sound performance" or "protecting CDs." The changes in CD thickness or outside dimensions made by these accessories may cause problems in the player.



- Please be sure NOT to attach any ring-shape protector (or other accessory) to your discs. Those protectors are commercially available and said to protect discs and to improve sound quality (and antivibration effect), but they can do more harm than good in regular uses. The most common problems are Insert/Eject related problems and "No playback" problems due to the protector ring that may have come off in the disc mechanism.

## About the LCD panel



- The LCD panel can appear to be white or black when seen from certain angles.
- The screen will be difficult to read when external light such as sunlight falls on the display.

# Switching mode

The main unit can be used when the vehicle's ignition switch is on or in the ACC position.

- The main unit supports use of a remote control. The optional remote control is sold separately and can be purchased at your local retailer. Refer to page 70 for instructions on operation of the remote control.

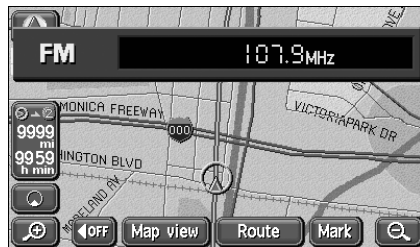
## Switching the mode

### 1 Press **(SOURCE) MENU**.

- The AUDIO MENU screen will be displayed.

### 2 Touch **FM**.

- The various audio modes can be selected by touching the corresponding touch switches.
- When the navigation screen is being displayed before pressing **(SOURCE) MENU**, the selected mode will be displayed on-screen over the background.



On-screen display

## Displaying operation screen

### 1 Press **CONT**.



# Operation screen of each mode

The operation screen for each mode will appear as shown below.

- AM radio operation screen



- FM radio operation screen



- HD RADIO (IBOC) operation screen (optional)



- SIRIUS operation screen (optional)



- CD player operation screen



- MP3 player operation screen



- CD changer operation screen (optional)



- VTR operation screen (optional)



When the operation screen for video (VTR) has not been operated for 6 seconds or more, the operation screen will automatically be canceled.

# Adjusting the volume

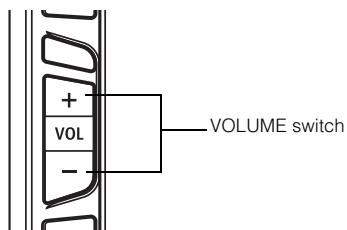
## Adjusting main volume

### 1 Press the VOLUME switch.

Pressing **+** will increase volume.

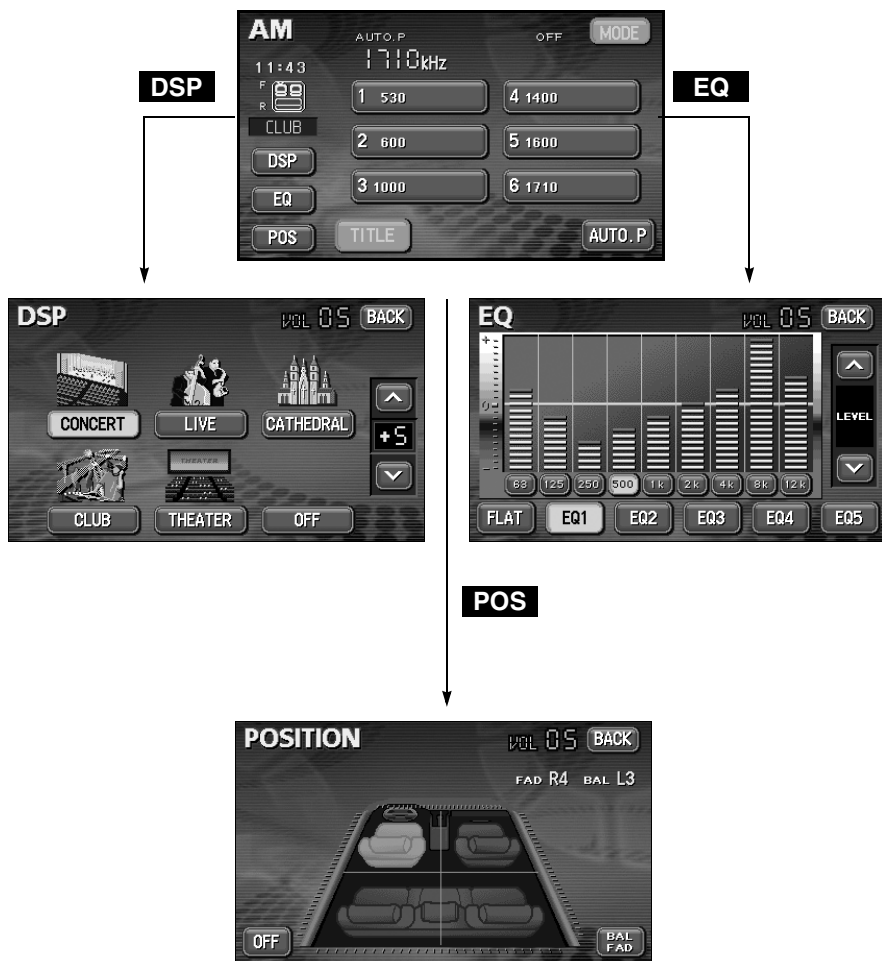
Pressing **-** will decrease volume.

- Each press of the switch will change the volume by two steps. When the volume reaches 50 or higher, the switch will change the volume by one step. Holding the switch will continue to change the volume.



# Adjusting sound quality

To adjust sound quality, touch the DSP, EQ or POS switch while the operation screen for a mode is displayed. Adjustments made in any mode will be saved and applied to all modes.



In the VTR mode display them either by pressing **CONT** or by touching the screen.

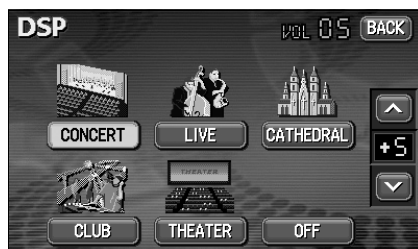
# Adjusting sound quality

## Setting DSP (acoustics)

The DSP function reproduces the sensation of various factory set performance environments by adding reverberation to the music being played.

### DSP mode setting

- 1 Touching the DSP touch switch brings up the acoustics mode screen as shown.
  - After making settings, touch **BACK**. The acoustics mode adjustments will be saved and the system will return to the previous operation screen.

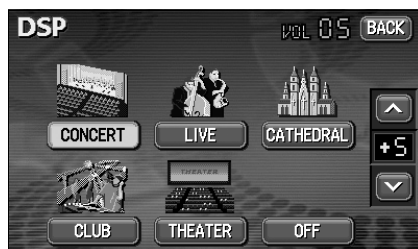


Touch switch	DSP Environment	Touch switch	DSP Environment
<b>CONCERT</b>	Concert hall	<b>CLUB</b>	Disco, Club
<b>LIVE</b>	Live performance arena	<b>THEATER</b>	Movie theater
<b>CATHEDRAL</b>	Church with echo	<b>OFF</b>	DSP OFF

### Adjusting, saving DSP (acoustics)

The factory set DSP (acoustics) level for each mode can be adjusted to preference and saved.

- 1 Touch **▲** or **▼** at the right of the screen while in the acoustics mode to be adjusted.
  - There are five + and five - adjustment levels available.
- 2 Touch the switch for the acoustics mode that has been adjusted until a beep is heard.



## *Resetting DSP (acoustics) levels*

Default settings for the currently adjusted and saved DSP (acoustics) level can be reset.

**1** Touch **OFF** until a beep is heard.

- The accoustic level will be returned to default value (the default value is "0").



When adjusting the level for the currently selected DSP (acoustics) mode, the level will not be saved for other acoustics modes.

# Adjusting sound quality

## Adjusting EQ (equalizer)

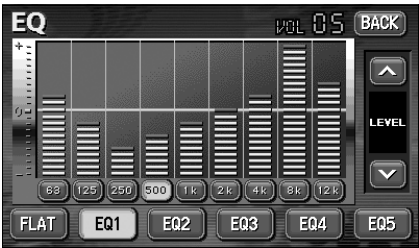
Adjusts sound quality to preferred characteristics according to the music genre and audio source.

### Setting sound quality

Each factory set equalizer pattern can be selected and adjusted to preference.

- 1
- Touching the touch switch brings up the equalizer mode screen as shown in the table.

  - After making settings, touch **BACK**. The equalizer mode adjustments will be saved and the system will return to the previous operation screen.



Touch switch	Equalizer mode types
<b>FLAT</b>	No EQ correction
<b>EQ1</b>	Effective pattern for POPS
<b>EQ2</b>	Effective pattern for ROCK
<b>EQ3</b>	Effective pattern for JAZZ
<b>EQ4</b>	Effective pattern for CLASSIC
<b>EQ5</b>	Effective pattern for VOCAL

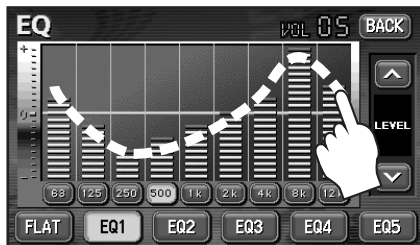
The default setting is **EQ3**.



## Adjusting and saving equalizer (EQ) patterns

Apart from these preset equalizer patterns, you can adjust and record other equalizer patterns to suit your own sound preferences.

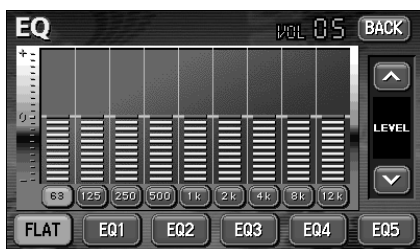
- 1 Touch the screen and slowly draw the image of the preferred equalizer curve with your finger.
- 2 To make fine adjustments, touch the switch for the frequency to be adjusted.
- 3 Touch **▲** or **▼** at the right of the screen to adjust.
- 4 Choose from touch switches **EQ1** to **EQ5** for saving the settings and then touch and hold the switch until a beep is heard.
  - The saved equalizer curve can be used for other settings.
  - After making settings, touch **BACK**. The equalizer mode adjustments will be saved and the system will return to the previous operation screen.



## Resetting EQ patterns

Currently saved equalizer patterns and factory set equalizer patterns can be returned to the default values.

- 1 Touch **FLAT** until a beep is heard.
  - The equalizer pattern will be reset to default values (factory default values).



# Adjusting sound quality

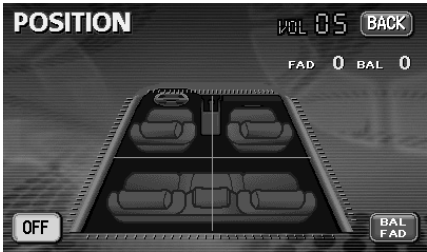
## Setting POS (position selector)

The stereophonic position for obtaining optimum acoustic effects can be adjusted to match the number and position of passengers.

In addition, front-to-back, right-to-left volume balance can be adjusted for the selected position.

**1** Touching the image of a seat shown on the **POS** setting screen will change the position.

- The selected position will change its color to orange. Touching the seat again will cancel the selection. The four positions shown by the table below can be set.
- Touching **OFF** will cancel all settings.
- After making settings, touch **BACK**. The position will be saved and the system will return to the previous operation screen.



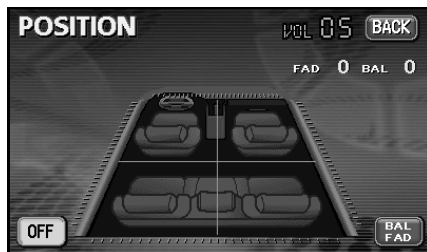
Touch switch	Function	Touch switch	Function
	Acoustics optimized for driver's seat		Acoustics optimized for both front seats
	Acoustics optimized for passenger's seat		Acoustics optimized for rear seats

- This setting cannot be done at the same time as adjustment of the volume balance (see next page).
- The main unit is configured for vehicles with a left-side driver's position.

## Adjusting volume balance

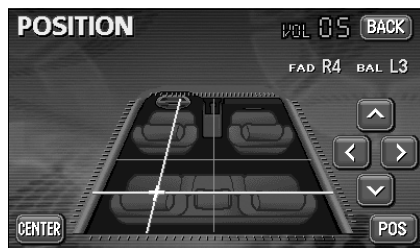
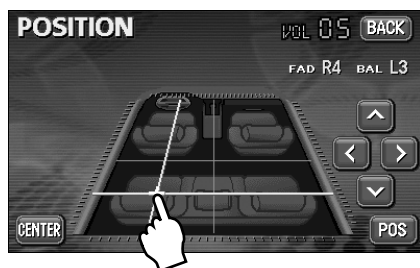
The set position for front-to-back, right-to-left volume balance can be adjusted.

- 1 Touch **BAL • FAD** on the **POSITION** setting screen to display the volume balance adjustment screen.



- 2 Touch the screen at the preferred balance point.

- To make fine adjustments, touch **▲**, **▼**, **<**, **>**.
- Touching **CENTER** will set the volume balance to the center position.
- After making settings, touch **BACK**.
- The set volume balance will be saved and the system will return to the previous operation screen.
- To set the position again, touch **POS** and repeat the steps above.



- This setting cannot be done at the same time as POS (position selector) adjustment, described on the previous page.
- Touching and holding **▲**, **▼**, **<** or **>** while making fine adjustments will adjust values in a continuous action. However, adjustment will lock when it reaches the center value, and **<**, **>**, **▲** or **▼** must be pressed again to continue adjustment.

# Adjusting sound quality

## Setting the BEEP tone

The guide tone that is emitted when touching a panel switch or touch switch can be set to on or off.

**1** Touch **SETTING** on the INFORMATION screen.

**2** Touch **ON** or **OFF** of GUIDE TONE.

- The pressed touch switch will become green.
- Touching **OFF** will cancel (turn off) the guide tone.

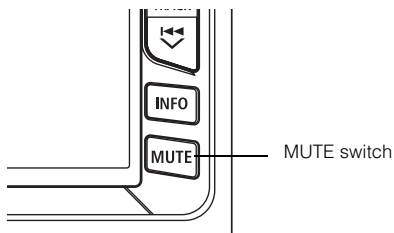
**3** Touch **ENTER**.

## Muting sound

Sound from the audio system can be temporarily muted.

**1** Press **MUTE**.

- Volume will become zero.
- Pressing **MUTE** switch again will return to previous volume.
- The VOLUME display will flash during mute.

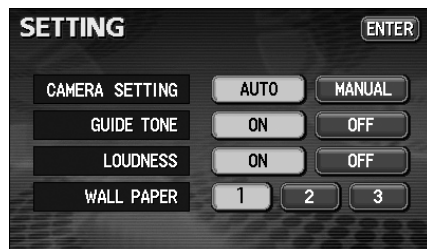


The MUTE function will be canceled on pressing the **+** VOLUME switch (it is unaffected by pressing the **-** switch).

## Setting LOUDNESS

Audio can be modulated to correct for insufficient low and high sounds when listening at low volume.

- 1 Touch **SETTING** on the INFORMATION screen.
- 2 Touch **ON** or **OFF** of LOUDNESS.
  - The pressed touch switch will become green.
- 3 Touch **ENTER**.



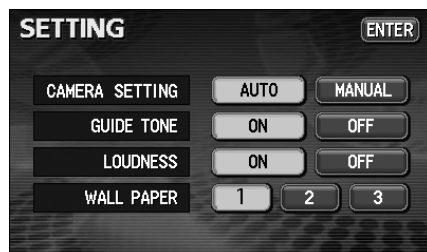
# Setting the background screen

The background for the audio screen, information screen and navigation screen can be changed to a preferred wallpaper.

## Setting the wallpaper

### Changing the wallpaper

- 1 Touch **SETTING** on the INFORMATION screen.
- 2 Touch **1**, **2** or **3** of WALL PAPER.
  - The pressed touch switch will become green and the wallpaper (background) will change.
- 3 Touch **ENTER**.



# Adjusting the background screen

## Setting the opening screen

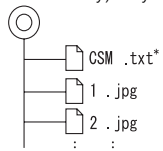
The image displayed on the opening screen (which is displayed when the power is turned on) can be changed to your favorite one stored in a CD-R/RW.

### Changing the image on the opening screen

- 1 Insert a CD-R/RW disc that includes your favorite image.
  - It would take approximately 30 seconds to read the image data. While the image data is being read, do not operate the main unit and the ignition key.
- 2 Touch **Opening Image Change**.
- 3 Touch the image you want to display on the opening screen.
- 4 Touch **OK**.
  - Be sure to eject the CD-R/RW disc that includes the image data.

### About usable image data

The format of disc and image data that can be used on the opening screen are shown in the table below. If your disc and/or data does not meet the conditions below, the file names may not be listed nor displayed correctly.

	CD-R/RW
Disc format	ISO9660 (MODE1)
File size	Smaller than 100 KB
File name	ISO9660 LEVEL 2 (Up to 31 bytes)
File extension	.jpg (Non-JPEG2000-compliant)
Writing method	Single-session only
Image size	416 (W) X 240 (H) dots (Max.)
Displayed file	<p>The files in the root directory (top-most directory) only.</p> 

\*When storing the image data in a CD-R/RW disc, make a text file named "CSM.txt" (any content/text is OK) and store it together with the image data.

- If the image size is larger than the condition above, the image cannot be previewed or imported.
- If the image size is smaller than the condition above, the image will be displayed at the center of screen.
- Only one image data can be imported at a time.

# Adjusting/setting the screen

Quality adjustments can be made for the images such as the audio operation screen, navigation screen and VTR (optional).

## Displaying the image adjustment screen

Contrast, brightness and other picture (only for VTR) settings can be made for viewing video or the audio operation screen.

To make viewing easier, the display switches between day screen/night screen according to whether the vehicle lights (parking lights, taillights, license plate lights) are on/off.

(Default settings)

- When vehicle lights are on: [Night screen is displayed]
- When vehicle lights are off: [Day screen is displayed]

[Audio operation screen]



- Day display [Vehicle lights are off]



- Night display [Vehicle lights are on]

[VTR Screen]



- Day display [Vehicle lights are off]



- Night display [Vehicle lights are on]



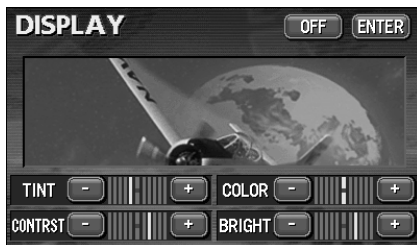
**1** Press **DISP** on the audio mode screen or VTR screen.

**2** Touch **ENTER** after making any adjustments.

- If no adjustments are made after 20 or more seconds, the image quality adjustment screen will be canceled.



● When adjusting audio operation screen



● When adjusting VTR screen

### *How to switch to daytime display when the lights are ON*

**1** The day screen and night screen will be switched each time **DAY** is pressed.



● When adjusting audio operation screen



● When adjusting VTR screen

### *Turning off the screen*

**1** Touch **OFF**.

- Press **CONT** or **NAVI** to return to the original screen.

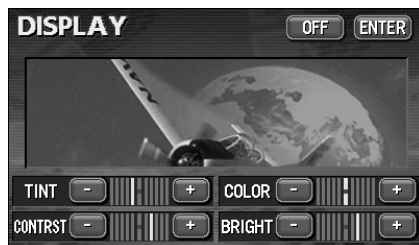
# Adjusting/setting the screen

## Adjusting image quality

The day screen and night screen can be separately adjusted (on the audio operation screen, the navigation screen, and the VTR screen).



- When adjusting audio operation screen or navigation screen



- When adjusting VTR screen

### ■ CONTRAST

- 1 Touch **+** to strengthen contrast, **-** to weaken contrast.

### ■ BRIGHT

- 1 Touch **+** to make lighter, **-** to make darker.

### ■ COLOR (for VTR screen only)

- 1 Touch **+** to strengthen green color, **-** to strengthen red color.

### ■ TINT (for VTR screen only)

- 1 Touch **+** to make tint darker, **-** to make tint lighter.

## Switching screen mode

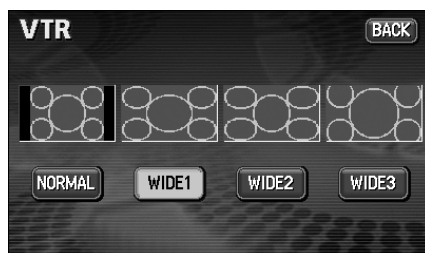
- 1 Touch **WIDE** on VTR operation screen.

- 2 Touch **NORMAL**, **WIDE1**, **WIDE2** or **WIDE3**.

- This selects the wide mode.

- 3 Touch **BACK**.

- Returns to the VTR operation screen.





#### ■ NORMAL mode

The screen is shown with vertical to horizontal ratio of 3 to 4 (normal TV screen size) and side edges are black.



#### ■ WIDE 1 mode

The screen for vertical to horizontal ratio of 3 to 4 (normal TV screen size) is uniformly expanded in the left and right directions.



#### ■ WIDE 2 mode

The screen for vertical to horizontal ratio of 3 to 4 (normal TV screen size) is uniformly expanded in the left and right directions (except for the central section of the screen).



#### ■ WIDE 3 mode

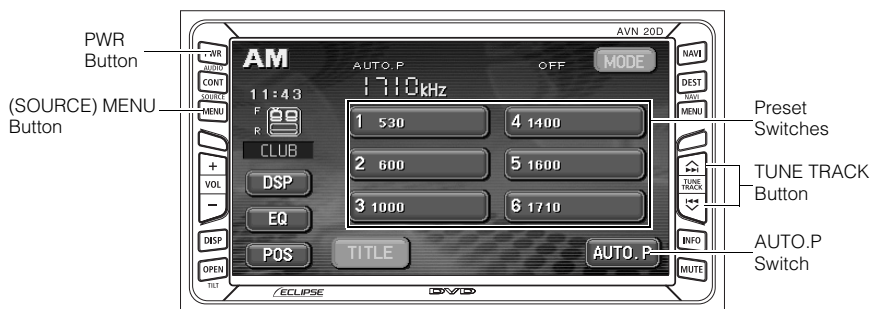
The screen for vertical to horizontal ratio of 3 to 4 (normal TV screen size) is uniformly expanded in the upward, downward, left and right directions.



Caution

Viewing of wide screen modes is permitted when limited to the personal entertainment of the user, but caution is required when using technologies such as image compression and expansion for the purpose of commercial benefit or public presentation may infringe upon the rights of the copyright holder being protected by applicable copyright law.

# How to use the AM / FM radio



## Listening to the AM/FM radio

- 1 Press **(SOURCE) MENU**.
- 2 Touch **AM** to receive AM radio, or **FM** to receive FM radio.



When an HD radio (IBOC) tuner is connected, the standard radio (analog radio) is also controlled through the HD radio tuner. Note that this means the antenna should be connected to the HD radio tuner.

## Selecting radio stations

### Manual selection

**1** Press  or .

- Each pressing of the switch moves the frequency one step up or down. (One step on the AM band is 10kHz. One step on the FM band is 0.2MHz.)



(up switch): Raises frequency



(down switch): Lowers frequency

### Automatic selection

**1** Press and hold the  or  switch until a beep is heard.

- The station that is closest in frequency to the frequency that is currently displayed on the screen will be searched for automatically, and searching will stop when the station is received. To stop the search before a station is found, press the button again.

### Selection using preset switches

**1** Touch the preset switch that already has a station recorded.

- Refer to "Saving radio stations" on page 43 for details on saving stations.



If the reception for a particular station is weak in the area you are in, automatic selection may not work.

# How to use the AM / FM radio

## Saving radio stations

There are two modes for saving radio stations, manual and AUTO.P, and these modes operate independently.

### *Saving manually*

Confirm that "AUTO.P" is not displayed in the upper part of the screen.

- If "AUTO.P" is displayed, touching **AUTO.P** will switch the screen to manual.

**1** Use manual tuning or automatic tuning to select the station to be saved.

**2** Choose a preset switch and touch it until a beep is heard.

- The radio station (frequency) is set. Touching the preset switch will now tune in the selected station.

### *Saving with AUTO.P*

**1** Touch **AUTO.P** until a beep is heard.

- The AUTO.P function will be activated and start automatically selecting stations. A beep will be heard when automatic selection of stations is completed. On touching **AUTO.P** again, the display will switch to the previously recorded station.

### *Changing stations saved by AUTO.P*

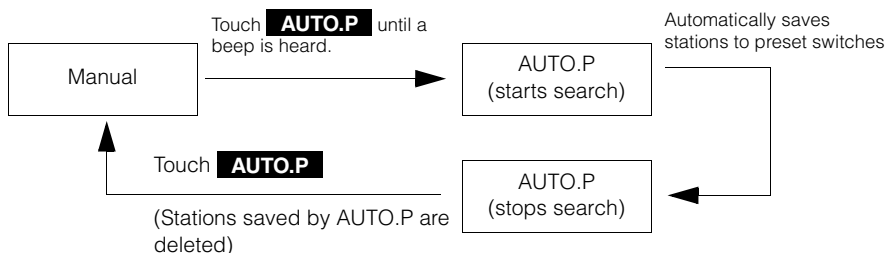
**1** Use manual tuning or automatic tuning to select the station to be saved.

**2** Choose a preset switch and touch it until a beep is heard.

## About AUTO.P

Because AUTO.P temporarily saves stations for the preset switches, stations saved manually will remain in memory even if AUTO.P is used. By manually saving stations that are used regularly, these manually saved stations can be restored even after AUTO.P has been used, such as after traveling.

Touching **AUTO.P** while AUTO.P is being used or after AUTO.P has been used will return the preset memories back to the condition they had before AUTO.P was used. (Doing so will delete the stations saved with AUTO.P.) The flow for switching from AUTO.P to manual is shown below.



- AUTO.P may not automatically receive stations if radio waves in the surrounding area are weak.
- A station saved by the tuning switch may not match a station saved by AUTO.P even though the signal is received from the same station.
- Due to conditions for receiving radio waves, saved stations may differ even when the AUTO.P switch is operated repeatedly in the same location.
- Up to six stations having good reception sensitivity are automatically saved in order starting from the lowest frequency.
- When less than six stations capable of reception are found, nothing is saved for the remaining preset switches.

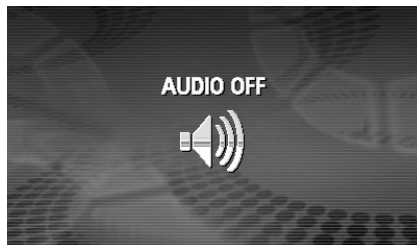
# ***How to use the AM / FM radio***

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## **Turning off the radio**

**1** Press **PWR**.

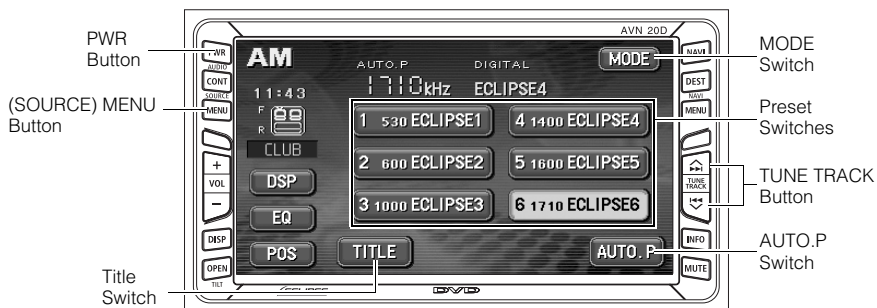
- Pressing **PWR** again will turn on the radio and resume reception of the radio station (frequency) received before power was turned off.





# How to use HD Radio

When an optional HD RADIO (High Definition Radio) tuner is connected, HD RADIO (High Definition Radio) broadcasts can be received.



## Listening to HD RADIO (IBOC)

When receiving HD Radio (High Definition Radio) broadcasts, FM reception has the same quality as a CD, and AM reception has the same quality as conventional FM sound.

Depending on the reception status, HD Radio can also receive analog broadcasts, which means reception is still possible in regions with no digital coverage.

**1** Press **(SOURCE) MENU**.

**2** Touch **AM** to receive AM radio, or **FM** to receive FM radio.

- When an HD RADIO (IBOC) tuner is connected and a digital broadcasting program is received, "DIGITAL" is displayed.
- When an HD RADIO (IBOC) tuner is connected, the **TITLE** touch switch becomes available.



To receive AM/FM analog broadcasting, touch **MODE** and select "OFF."

# How to use HD Radio

## Selecting radio stations

### Manual selection

**1** Press  or .

- Each pressing of the switch moves the frequency one step up or down. (One step on the AM band is 10kHz. One step on the FM band is 0.2MHz.)



(up switch): Raises frequency



(down switch): Lowers frequency

### Automatic selection

**1** Press and hold the  or  switch until a beep is heard.

- The station that is closest in frequency to the frequency that is currently displayed on the screen will be searched for automatically, and searching will stop when the station is received. To stop the search before a station is found, press the button again.

### Selection using preset switches

**1** Touch the preset switch that already has a station recorded.

- Refer to "Saving radio stations" on page 43 for details on saving stations.



If the reception for a particular station is weak in the area you are in, automatic selection may not work.

## Saving radio stations

There are two modes for saving radio stations, manual and AUTO.P, and these modes operate independently.

### *Saving manually*

Refer to "How to use the AM / FM radio" on page 38.

### *Saving with AUTO.P*

Refer to "How to use the AM / FM radio" on page 38.

### *Changing stations saved by AUTO.P*

Refer to "How to use the AM / FM radio" on page 38.

## Displaying information about the current broadcast

When receiving an HD RADIO (IBOC) broadcast, information about the current broadcast, such as the name of the radio station, the album, the title of the track, the artist, and the musical genre, can be displayed.

**1** Touch **TITLE**.

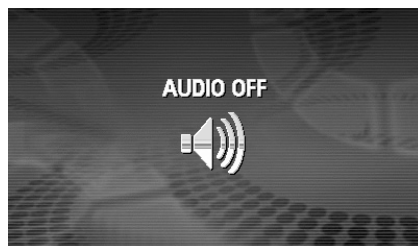
- Touch **TITLE OFF** to return to the operation screen.



## Turning off the radio

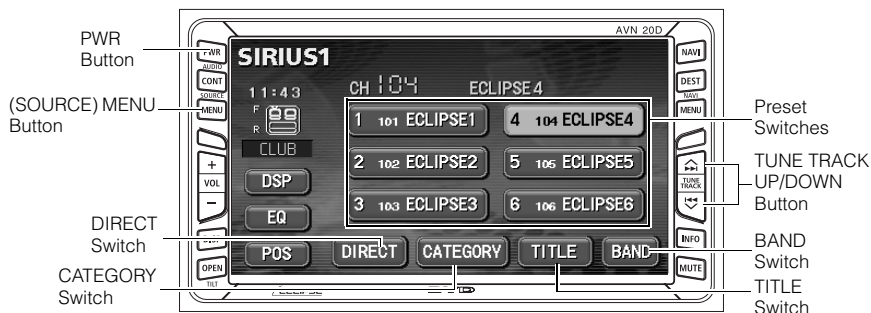
**1** Press **PWR**.

- Pressing PWR again will turn on the radio and resume reception of the radio station (frequency) received before power was turned off.



# How to use the SIRIUS satellite radio

When an optional SIRIUS satellite radio tuner is connected, SIRIUS satellite radio broadcasts can be received.



## Listening to SIRIUS satellite radio

With SIRIUS satellite radio, over 100 channels are available including music, news, and entertainment programs.

You can select the channel you want from 14 categories such as POP and ROCK, or you can select a channel by direct input.

Reception of SIRIUS satellite radio is a paid subscription.

**1** Press **(SOURCE) MENU**.

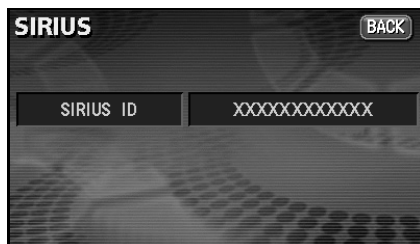
**2** Touch **SIRIUS**.

## Check the SIRIUS ID

The SIRIUS ID number is a 12-digit numerical code that is assigned each time the SIRIUS satellite radio tuner is connected.

**1** Touch **SIRIUS ID** on the INFORMATION screen.

- A 12-digit numerical code is displayed.



## Changing the SIRIUS band

- 1 Touch **BAND** on the SIRIUS operation screen.
  - The BAND changes.  
[SIRIUS 1] → [SIRIUS 2] → [SIRIUS 3] ... → return to [SIRIUS 1]

## Selecting the channel you want to listen to

### Selecting from the available categories

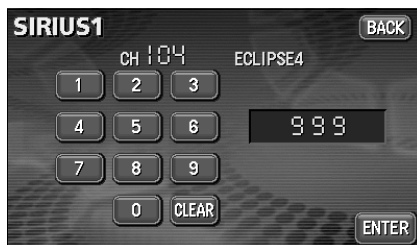
- 1 Touch **CATEGORY**.
- 2 Select the category that you want.
  - Touch **▲** or **▼** to switch categories.



If the selected category is unobtainable, the blank category button appears.

### Selecting a channel by direct input

- 1 Touch **DIRECT**.
- 2 Input a channel.
- 3 Touch **ENTER**.



# How to use the SIRIUS satellite radio

## Displaying information about the current broadcast

During SIRIUS broadcasts, information including the channel name, the album name, the title, and the artist can be displayed for the current track.

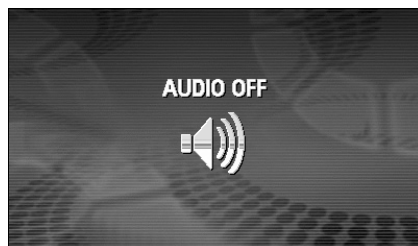
**1** Touch **TITLE**.

- Touch **TITLE OFF** to return to the operation screen.



## Turning off the SIRIUS

**1** Press **PWR**.



# MEMO







**1** Press **(SOURCE) MENU** while a CD is inserted.

**2** Touch **CD**.

- ## Selecting a song

**1** Press  or .

-  (up): Selects next song
-  (down): Selects previous song







**ATTENTION**

- 48



## Fast-forwarding/rewinding

It is possible to fast-forward/rewind the song played currently.

- 1 Press  or  until a beep is heard, or touch and hold  or .



(up): Fast-forwards



(down): Rewinds

The main unit switches to the fast-forward (rewind) mode when the beep is heard and will continue fast-forwarding (rewinding) until your finger is removed from the switch.

## Searching for a song

- 1 Touch **SCAN**.

- The main unit will play the first 10 seconds of each song. Touching **SCAN** again will continue playing the current song.

## Repeating a song

- 1 Touch **RPT**.

- Touching **RPT** once will cause repeating of the song until the function is canceled. Touching **RPT** again will cancel repeating of the song.

## Playing songs in random order

- 1 Touch **RAND**.

- Touching **RAND** will play songs in random order until the function is canceled. Touching **RAND** again will cancel random playing of songs.
- The song to be played next is randomly selected at the end of current song, so it is possible that a single song could end up being played twice in a row.

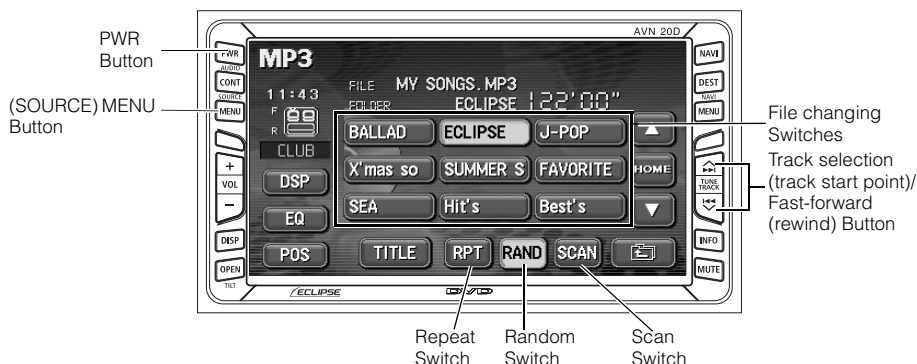
## Turning off the CD player

- 1 Press **PWR**.

- Pressing **PWR** again will start resume playback.

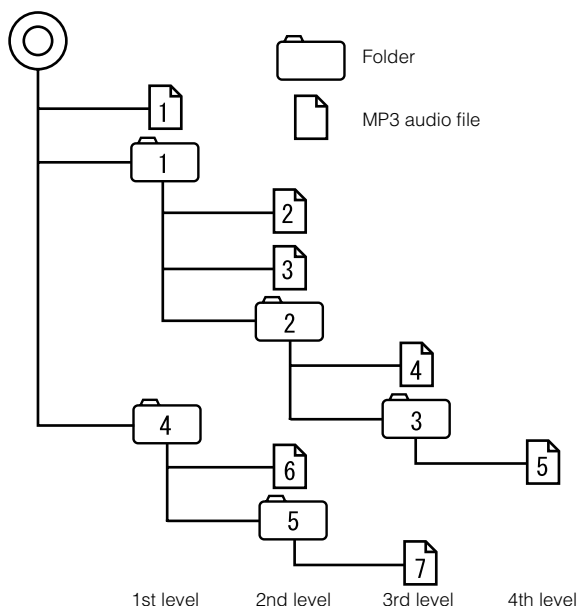
# How to use the MP3 player

For safety considerations, some functions are disabled while the vehicle is in motion.



The following operating procedures are based on this example of MP3 file structure below.

## Example of MP3 file structure










## Playing MP3

When a CD is inserted into the disc slot, it automatically starts playing.

**1** Press **(SOURCE) MENU** while a disc is inserted.

**2** Touch **MP3**.



- Playback will begin.
- The CD player screen will be shown for about 2 seconds as the system checks whether the inserted CD is a music CD or an MP3 disc.
- Normally, tracks are played back in the order  →  →  →  →  →  → .
- When multiple MP3 files and folders are on the same level, they are played in ascending order by folder and file names.

## Selecting a music file

A music file located within a folder can be selected.

### Selecting with file change switch



**1** Touch the music file.

- The currently selected file name and folder name will be shown in the display.
- When more than 10 music files are located in the same folder, touching  or  can switch between the data. (This function is not available when the vehicle is in motion.)

### Selecting with TUNE/TRACK button

When several music files are located in the same folder, the next music file or previous music file can be selected with the track selection (track start point).

**1** Press  or .

-  (up): Selects next music file
-  (down): Selects previous music file  
Restarts current track. Pressing the down button once more continuously plays previous tracks.

# How to use the MP3 player





- If sound data and MP3 data are mixed on the same disc, only the data recorded in the first session can be played.
- When MP3 is being played, navigation operation will become slower. This is not a malfunction of the system.

## Fast-forwarding/rewinding

It is possible to fast-forward/rewind in the song being played.

**1** Press and hold the  or  switch until a beep is heard.


-  (up): Fast-forwards
-  (down): Rewinds

The main unit switches to the fast-forward (rewind) mode when the beep is heard and will continue fast-forwarding (rewinding) until your finger is removed from the switch.

## Changing display of the current level

The folder level can be switched and displayed.

**1** Touch  or **HOME**.

-  : Displays the next higher folder level.
- **HOME** : Displays the level of the file currently being played.

## Displaying the current level

Displays the file currently being played.

**1** Touch **HOME**.

## Searching for a music file

**1** Touch **SCAN**.

- The system will play the first 10 seconds of each song located within the same layer of the folder currently being played. Touching **SCAN** again will continue playing the current song.



Refer to page 50 for an example of MP3 file structure.

When the display shows the folder and files of the second level ( [2], [3] and [2] ) as [4] of the third level is being played, touching **HOME** will show the folder and files of the third level ( [4] and [3] ).

## Repeating the same music file

### 1 Touch **RPT**.

- The file currently being played will be repeated.
- Setting RPT will cause repeating of the song until the function is canceled. Touching **RPT** again will cancel repeating of the song.

## Playing songs in random order

### 1 Touch **RAND**.

- Files will be randomly selected from among all files at the same level as the folder currently being played.
- **RAND** will play songs in random order until the function is canceled. Pressing **RAND** again will cancel random playing of songs.
- Touching **RPT** while the random function is operating will repeat the currently playing song. Touching **RPT** again will return to random playing of songs.
- The song to be played next is randomly selected at the end of current song, so it is possible that a single song could end up being played twice in a row.

# How to use the MP3 player

## About display of file information

Folder names and file information (album name and song titles) recorded on the disc can be displayed. The number of characters that can be displayed is as shown below.

Screen Display	
Folder/file names	Music file information
8 characters max.	30 characters max.

### Displaying folder/file names

- 1 Press **CONT** to display the operation screen.



### Displaying file information

- 1 Touch **TITLE**.
  - The **TITLE** switch will change to **TITLE OFF** while file information is being displayed. Touching **TITLE OFF** will change the display to a folder/file switch.



## Turning off the MP3 player

- 1 Press **PWR**.
  - Pressing **PWR** again will resume playback.

## About MP3

MP3 (MPEG-1 Audio Layer III) is a standard format for audio compression technology. By using MP3, a file can be compressed to one-tenth the size of the original.

This unit has limitations on MP3 file standards and recorded media and formats that can be used. Be aware of the following points when recording MP3 files.

### *Playable MP3 file standards*

- Supported standards : MPEG-1 Audio Layer III
- Supported sampling frequencies : 32, 44.1, 48 (kHz)
- Supported bit rate : 32 to 128 (kbps)
  - \* Supports VBR.
  - \* Does not support free format.
  - \* Bit rates vary for MPEG-1 and MPEG-2.
- Supported channel modes : stereo, monaural, dual channel, joint stereo



Use 128kbps or lower for the MP3 bit rate. If the bit rate exceeds 128kbps, there may be sound cutting in and out during MP3 playback.

### *ID3 tags*

MP3 files have an "ID3 Tag" that allows input of information so that data such as song title and artist can be saved.

This unit supports ID3v.1.0 and ID3v.1.1 tags. Use only ASCII code to record tags, since only ASCII code is supported by this equipment. Recording of characters not included in ASCII code will result in display of garbled characters.

### *Media*

Media capable of playing MP3 includes CD-ROM, CD-R and CD-RW discs.

Compared to CD-ROM media commonly used for music discs, CD-R and CD-RW discs are fragile in high temperature/high humidity environments and one section of the CD-R/CD-RW may become incapable of playback. Fingerprints or scratches on the disc may prevent playback or cause skipping during playback.

Sections of CD-R/CD-RW may deteriorate if left inside a vehicle for long periods of time.

It is also recommended that CD-R/CD-RW discs be kept in a light-blocking case because the discs are vulnerable to ultra-violet light.

# How to use the MP3 player

## Format of discs

The format of discs to be used must be as following:

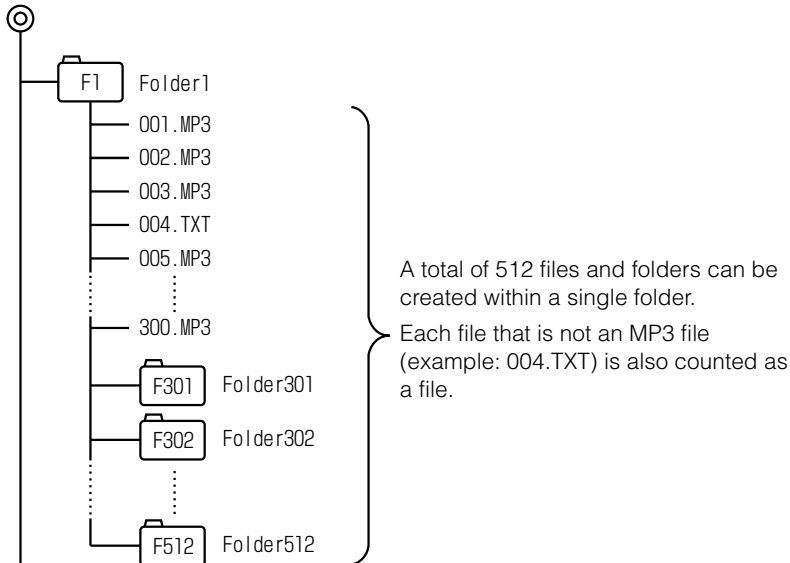
- Disc format : CD-ROM (MODE 1)
- File format : ISO9660 Level 1 or Level 2  
ROMEO system, JOLIET system

MP3 files recorded in a format other than the one explained above may result in files that cannot be played normally and in file names and folder names that do not display properly. Limitations in addition to standards are as follows.

- Maximum directory layers : 8 layers
- Maximum characters for folder names/file names : 30 (including "." and 3 letter file extension)
- Allowable characters for folder names/file names : A to Z, 0 to 9, \_ (underscore)
- Number of files/folders possible on a single disc : 512

Each file that is not an MP3 file (files with extensions other than "MP3") is also counted as a file.

### Configuration example for CD supporting MP3



- A total of 1023 files and folders can be recorded on a single disc.



## ***File names***

Only files with the MP3 file extension ".mp3" can be recognized as MP3 and played. Be sure to save MP3 files with the ".mp3" file extension.

Use half-width English capital letters to write "MP" of the extension.

## ***Multi-sessions***

Multisessions are supported and CD-R/RW with recorded MP3 files can be played. When written with "Track at once", however, finalize the disc with session close or write protect.

## ***Playing MP3***

When a disc having MP3 files recorded on it is inserted into the main unit, the system first checks all the files on the disc. If the number of files and folders is large, the check will take some time.

While the system is checking the disc, the music that had been playing continues to play.

In order to speed up completion of the file check, it is recommended that you avoid recording files that are not MP3 files and avoid establishing unnecessary folders.

In addition, it is recommended that you record all data in a single session because a multisession disc takes time for CD control information acquisition.

When MP3 is being played, navigation operation will become slower. This is not a malfunction of the system.

## ***MP3 playing time display***

It is possible that playing time will not be correct, depending on the writing condition of the MP3 file.

\* It is possible that playing time will not be correct when VBR Fast Up/Down is operated.

## ***Display order of MP3 file/folder names***

Names of MP3 folders and files within the same level are displayed in the following order.

1. MP3 files displayed first, by ascending order of numbers, letters.
2. Folders displayed next, by ascending order of numbers, letters.



Caution

If the ".mp3" file extension is attached to a file other than an MP3 file, that file will be mistakenly recognized by the main unit as an MP3 file and played, resulting in loud noise output that can damage the speakers. Be sure to avoid attaching the ".mp3" file extension to files that are not MP3 files.

# How to use the MP3 player

## Making and playing MP3 files

MP3 files created by recording broadcasts, records, audio recordings, video recordings or live performances cannot be used for purposes other than personal entertainment without permission of the copyright holder as set forth in copyright law.

### Downloading from Internet MP3 music sites

There are many kinds of sites that distribute MP3 files on the Internet, such as "pay per download" online shopping sites, "try before you buy" listening sites and free download sites. Follow the rules for each site (such as paying fees) and download according to site instructions.

### Converting CD music to MP3 files

Prepare a computer with commercially available MP3 encoding software (conversion software). (Some encoding programs available on the Internet do not require payment.) Music data files in MP3 format can be made by inserting the music CD into the CD-ROM drive of the computer and following the procedures of the MP3 encoding software to compress the songs of the music CD. A 12cm music CD (having a maximum of 74 minutes of recording/650MB of data) can be compressed to 65MB (about 1/10 of the original size).

### Writing to CD-R/CD-RW

MP3 files can be recorded on CD-R/RW by using a CD-R/RW drive connected to a computer. Record by setting the recording format of the recording software to ISO9660 level 1 or level 2 (not including extension format).

Select CD-ROM (mode 1) for the disc format. Discs recorded with CD-ROM xA (mode 2) cannot be played on the main unit.

### When playing back CD-R/RW

Insert a CD-R/RW disc having recorded MP3 files. The system will automatically determine whether the disc is a music CD or a CD-R/RW with MP3 files and begin playing the disc. A music CD recorded onto a CD-R/RW can also be played. However, depending on the type of disc being used, a disc may not play.



- A fixed bit rate of 128kbps and sampling frequency of 44.1kHz is recommended for obtaining stable audio quality at playback.
- Depending on the characteristics of a disc, CD-R and CD-RW may not be able to read the disc.
- Because there are many types of MP3 encoding software available, including commercial and freeware programs, audio quality may deteriorate, noise may be generated when playing starts and some recordings may not play, depending on the condition of the encoder and the file format.
- When files other than MP3 files are recorded on a disc, the system may take some time to recognize the disc and it may not play the disc.

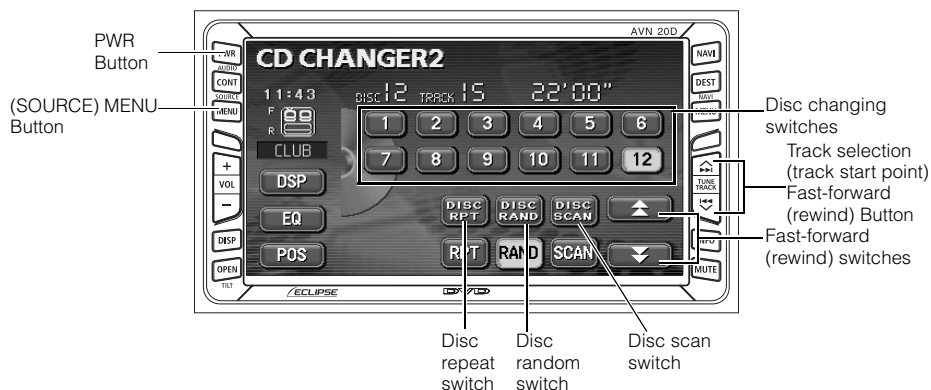
# MEMO

MP3



# How to use the CD changer

An optional CD changer can be connected and used.



## Listening to a CD

- 1 Press **(SOURCE) MENU**.
- 2 When only one CD changer is connected, touch **CD<sub>CH1</sub>**. When two CD changers are connected, touch **CD<sub>CH1</sub>** or **CD<sub>CH2</sub>**.

## Selecting a song

Refer to "How to use the CD player" (Page 48).

## Fast-forwarding/rewinding

Refer to "How to use the CD player" (Page 49).

## Selecting a CD

A CD can be selected from among all the discs on a changer.

### 1 Touch one of the disc changing switches.

- The number for the selected CD will change color.

## Searching for a song or CD from all CDs in changer

### *Searching for a song*

Refer to "How to use the CD player" (Page 49).

### *Searching for a CD*

### 1 Touch **DISC SCAN**.

- The system will play the first 10 seconds of the first song on each CD in the changer.  
Touching **DISC SCAN** again will continue playing the current song.



- The system will display the amount of disc changing switches that matches the number of CDs that can be inserted into the CD changer, and it will only allow selection of disc numbers that have discs currently loaded.
- No operation is possible when there are no discs loaded into the CD changer.
- If two CD changers are connected, switch between the optional CD changers and the CD changer with **CDCH1** / **CDCH2**.

## Repeating a song or CD

### *Repeating the current song*

Refer to "How to use the CD player" (Page 49).

### *Repeating the current CD*

### 1 Touch **DISC RPT**.

- Touching DISC RPT once will cause repeating of the CD until the function is canceled  
Touching **DISC RPT** again will cancel repeating of the CD.

# ***How to use the CD changer***

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## **Playing songs in random order**

### ***Playing songs on current CD in random order***

Refer to "How to use the CD player" (Page 49).

### ***Playing songs on all CDs in random order***

#### **1** Touch **DISC RAND**.

- Touching **DISC RAND** will play songs in random order until the function is canceled. Touching **DISC RAND** again will cancel random playing of songs.
- The song to be played next is randomly selected at the end of current song, so it is possible that a single song could end up being played twice in a row.

## **Turning off the CD player**

#### **1** Press **PWR**.

- Pressing PWR again will start resume playback.

# MEMO



# How to use the VTR

Connecting a VTR deck enables watching of video tapes. Videos can be played only if the vehicle is completely stopped in a safe location with the parking brake set and the ignition switch turned to ON or ACC. (Only sound can be heard if a VTR is played while the car is in motion.)

To connect a VTR deck to this equipment, an optional connection cable is required.



## Viewing the VTR

**1** Press **(SOURCE) MENU**.

**2** Touch **VTR**.

- The VTR screen will be displayed.
- Press **CONT** or touch the screen to display the VTR operation screen.

## Turning off the VTR mode

**1** Press **PWR**.

- Pressing PWR again will resume playback.
- Video can also be played by pressing **(SOURCE) MENU** and touching **VTR**.



- After switching to the VTR operation screen, touch switches will be displayed for about 6 seconds. Pressing **CONT** will display them again.
- The VTR operation screen will be displayed by touching the screen, even when the VTR is playing.
- Depending on the kind of devices connected, the video image may not be displayed correctly.



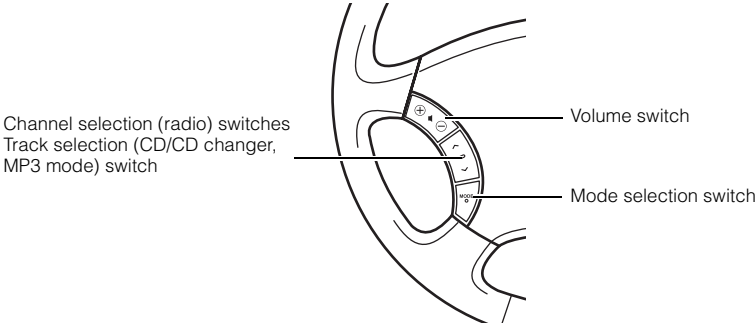
# MEMO



# About the steering wheel switches

On vehicles equipped with steering wheel switches, these easy-access switches can be used to perform the main audio and other operations.

## Function names and summaries



## Common operations

Switch	Name	Function	Explanation of operation
(+) (-)	Volume switch	Each momentary actuation of these switches changes the volume one step. Hold a switch down for a continuous volume change.	(+): Volume UP (-): Volume DOWN
(MODE)	Mode selection switch	<ul style="list-style-type: none"><li>When the power is OFF, pressing this switch turns it ON.</li><li>The mode changes. AM → FM → CD → MP3 → (CD changer) → (VTR) → (SIRIUS) → return to AM</li><li>Press the switch until it beeps to turn the power OFF.</li></ul>	Each time <b>(MODE)</b> is pressed while the power is ON, the mode changes.

( ) : Optional

## Radio operations

Switch	Name	Function	Explanation of operation
(^) (v)	Channel selection switch	<ul style="list-style-type: none"> <li>• Calls up the preset broadcast channels in order.</li> <li>• Pressing the switch until it beeps starts automatic channel selection.</li> </ul>	Pressing (^)/(v) briefly: Used to select the next (previous) preset channel Pressing (^)/(v) for longer: Starts automatic channel selection.

## CD player operations

Switch	Name	Function	Explanation of operation
(^) (v)	Track selection switches	Selects the next track or previous track or beginning of the current track.	(^): Used to select the next track. (v): Used to select the previous track.

## SIRIUS satellite radio tuner operations

Switch	Name	Function	Explanation of operation
(^) (v)	Channel selection switches	<ul style="list-style-type: none"> <li>• Selects the next channel or previous channel.</li> <li>• Pressing the switch until it beeps to start searching channels within the selected category.</li> </ul>	Pressing (^)/(v) briefly: Used to select the next (previous) channel Pressing (^)/(v) for longer: Starts searching channels within the selected category.

## MP3 Player operations

Switch	Name	Function	Explanation of operation
(^) (v)	Track selection switches	<ul style="list-style-type: none"> <li>• Selects the next file or previous file.</li> <li>• Pressing the switch until it beeps to go to the next folder or previous folder.</li> </ul>	Pressing (^)/(v) briefly: Used to select the next (previous) file Pressing (^)/(v) for longer: Used to select the next (previous) folder

# About the steering wheel switches

## CD changer operations

Switch	Name	Function	Explanation of operation
(^) (v)	Track selection switches	<ul style="list-style-type: none"><li>• Selects the next track or previous track or beginning of the current track.</li><li>• Press the switch until it beeps to go to the next disc or previous disc.</li></ul>	<p>Pressing (^)/(v) briefly: Used to select the next track or previous track.</p> <p>Pressing (^)/(v) for longer: Used to select the next disc or previous disc.</p>

# MEMO



# ***How to use an optional remote control (RMC105)***



## **Precautions in use of the remote control**

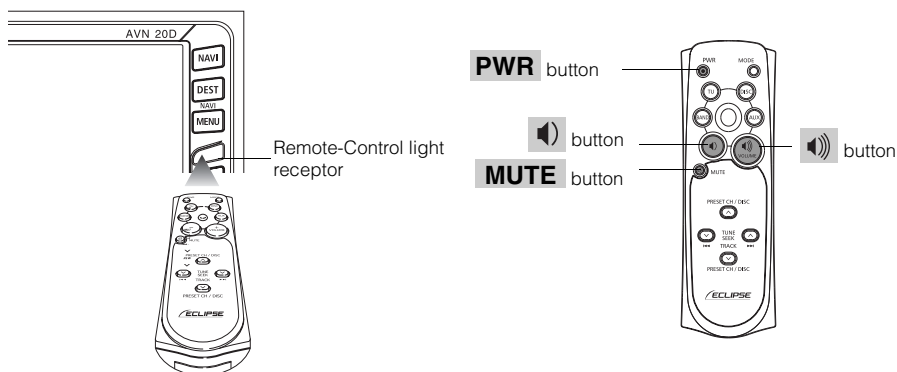
- Be careful when handling the remote control, especially because it is small and light. Dropping or striking it hard may damage it, wear out the battery or cause a malfunction.
- Keep the remote control free of moisture, dust and water. Do not subject it to shock.
- Do not place the remote control unit where it will get hot, such as on the dashboard or near a heater vent. Allowing the remote control unit to overheat may warp its case or cause other problems.
- Do not operate the remote control unit while driving because doing so could cause an accident.
- When using the remote control, point it directly at the remote control light receptor.
- The light receptor may not operate correctly if it is exposed to bright light such as direct sunlight.
- Remove the batteries from the remote control unit whenever it is not to be used for a long time.

## **Cleaning the remote control**

- Use a dry cloth to keep the unit clean. If the remote control unit gets extremely dirty, clean it with a cloth moistened in diluted liquid detergent. Do not use alcohol or thinner; these compounds may damage the finish.
- In no event should benzine or thinner be used. These substances will damage the case or finish.



TU, DISC and AUX buttons do not work.



## Turning the power on/off

When the power is turned on, the state used when the power was turned off such as CD and tuner will be restored.

### 1 Press **PWR**.

- The power turns on or off each time the button is pressed.



When the main unit is shut down, the remote control will not work.

## Adjusting the audio volume

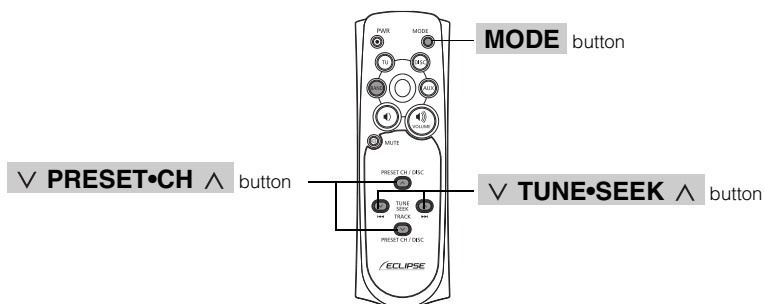
### 1 Press or .

- button: Increases the volume.
- button: Decreases the volume.

### Muting the Volume

Press **MUTE** to cut the volume or restore it instantly.

# How to use an optional remote control (RMC105)



## Switching playback modes

**1** Press **MODE**.

- Press the button to switch modes in the following sequence:

AM → FM → CD(MP3) → CD Changer1 → CD Changer2 → VTR → SIRIUS

## How to play the tuner

Select the tuner mode first.

### Selecting a station (manually or automatically)

A short press of the button will allow manual station tuning. Pressing for more than one second will start automatic tuning.

**1** Press **∇ TUNE•SEEK ∧**.

- ∧ button:** Tunes to higher frequency stations.
- ∇ button:** Tunes to lower frequency stations.

### Selecting preset stations

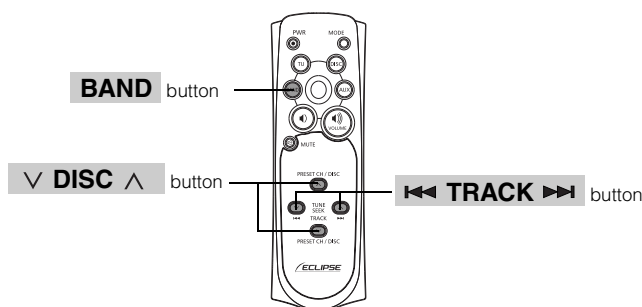
A total of six stations may be selected (preset tuning) out of those already set in memory through the main unit. (Refer to the Section "Saving radio stations" on page 38)

**1** Press **∇ PRESET•CH ∧**.

- ∧ button:** Select the next higher number preset button.

**∇ button:** Select the next lower number preset button.





## How to play CDs

### Switching CD Changer modes

Select the CD Changer mode first.

**1** Press **BAND**.

When two CD changers are connected, press **BAND** to change modes from CD changer 1 → CD changer 2.

### Advancing to the next track or returning to the beginning of the track being played

Select the CD or CD Changer mode first.

**1** Press **<< TRACK >>**.

- **>>>** button: Skips to the next track.
- **<<<** button: Returns to the beginning of the track being played. (Press repeatedly to move to previous tracks.)



Hold **>>>** down to fast forward, or **<<<** to rewind through the track being played.

### Skipping to the next or previous disc

Select the CD or CD Changer mode first.

**1** Press **V DISC ^**.

- **^** button: Selects the next higher number disc.
- **V** button: Selects the next lower number disc.

# ***How to use an optional remote control (RMC105)***

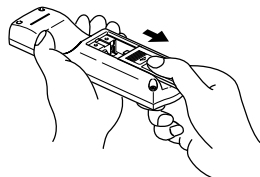
## **Replacing the battery**



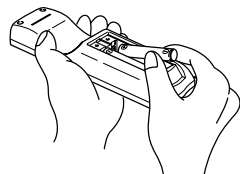
To prevent accidents, store batteries out of the reach of children. If a child has swallowed one, consult a doctor immediately.

Use two AAA-size batteries.

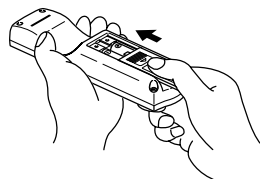
- 1** Remove the back cover of the remote control unit by gently pressing and sliding it in the direction indicated by the arrow.



- 2** Install the two batteries provided into the compartment as illustrated.



- 3** Return the back cover into place by sliding it in the direction indicated by the arrow.



- The battery life is approximately one year. If the remote control unit does not operate correctly or if the button lamp gets dim, replace the batteries.
- Be sure to orient the batteries correctly so that the positive and negative poles match the diagram.
- Do not use one new battery and one old one; use two new batteries.
- Use only two of the same kind of battery.
- If any liquid is seen leaking from the batteries, remove both batteries and dispose of them properly. Thoroughly clean the battery compartment with a dry cloth. Then install new batteries.

# MEMO



# Information you should know

## If one of these messages appears

If any of the following messages are displayed, check the equipment while referring to the Cause and Corrective action columns.

Messages	Cause	Corrective action
CD SEEK	The CD changer is searching for discs when a magazine has been set in the CD changer.	Wait until the unit has finished identifying the type of disc.
CD DOOR OPEN	The door of the CD changer is open.	Close the door of the CD changer.
CHECK DISC	The CD/MP3 is dirty or is upside down.	Clean the disc if it is dirty. Insert the disc correctly if it is upside-down.
NO DISC NO CD	There is no disc in the CD/MP3 or CD changer.	Load a music disc (1).
CD ERROR DISC ERROR	The CD/MP3 or CD changer is not operating for some reason.	Eject the disc.
CD ERROR DISC ERROR	The temperature of the CD/MP3 or CD changer has become unusually high.	Without performing any other operations, wait until the temperature comes down (2).
NO CD MAGAZINE	There is no magazine in the CD changer.	Load a magazine.
CD ○○ CHECK	The ○○th CD in the CD changer cannot be read.	Check for a properly loaded music CD.
CURRENTLY THIS FUNCTION IS DISABLED	A function that cannot be used while the vehicle is in motion was selected.	Stop the vehicle.

Messages	Cause	Corrective action
ANTENNA	The SIRIUS antenna is disconnected.	Check the connection of the SIRIUS antenna.
ACQUIRING	Displayed when the signal is lost (during access).	Try receiving the signal again in the place where there are no obstacles.
CALL888-539-SIRIUS	You are tuned to a valid channel but you are not subscribed to that channel.	Subscribe to SIRIUS. Or, check/change your subscription plan.
SUB UPDATED	Displayed when your channel subscription has been accepted and your status is being updated to allow you to receive the channels.	After this message is displayed, the channels for which you do have a subscription can be received.
INVALID	Displayed when you are tuned to a channel that you cannot receive.	Tune to channels that you can receive.
UPDATING	Displayed while the channel map is being updated.	After this message is displayed, subscribe to SIRIUS. The channels for which you do have a subscription can be received.

- 1: If the DVD player still will not work after the disc is ejected, contact the place of purchase.
- 2: If this happens, wait for a while. When the temperature inside the equipment returns to normal, the message will disappear and playback will start. If the message does not disappear after a long period of waiting, contact the place of purchase.

# Information you should know

## Before asking for repairs

Slight differences in operation can sometimes be mistaken for malfunctions, so check the following table before asking for any repairs.

If the following fail to solve the problem, contact the place of purchase.

Problem	Possible reason	Corrective action
The screen is dark for a brief period when the power is turned on at low temperatures.	This is a characteristic of LCDs.	This is not a malfunction. Wait for a brief period.
The display is distorted for a brief period after the power is turned on.	This is a characteristic of LCD backlighting.	This is not a malfunction. The display will stabilize after a brief period.
No sound comes out.	Volume is poorly adjusted or MUTE is functioning.	Press the volume switch and check volume. Or cancel MUTE.
Sound comes out of only one side (left or right, front or back).	A speaker wire is disconnected.	Check the connections of the speaker wires.
	Volume is poorly adjusted.	Check the balance and fader adjustments.
Sound quality does not change even after making adjustments.	The adjusted audio quality is not included in the radio broadcast or disc.	Check by changing the radio station or disc.
A CD will not go into the deck.	Power is not turned on.	Turn the vehicle ignition switch to [ACC] or [ON].
	A disc is already inserted and you are trying to insert a second disc.	Eject the previously inserted CD and insert the preferred CD.
A CD cannot be played.	There is water condensation in the equipment.	Do not use the equipment for a while and then try using it again. (Refer to pages 15.)
	There is a large scratch or warp in the CD.	Insert a different CD.
	The CD is very dirty.	Clean the CD. (Refer to page 16.)
	The CD is upside down.	Insert the CD with the proper orientation.
	A non-supported type of CD has been inserted.	Insert a CD that is supported by the deck. (Refer to pages 15.)
A <b>CD<sub>CH1</sub></b> / <b>CD<sub>CH2</sub></b> is not displayed on the screen.	The CD changer is not completely connected.	Check the connections to the CD changer.
Audio is output, but not video.	The screen has been turned off with the screen OFF button.	Press <b>CONT</b> or <b>NAVI</b> . (Refer to page 33.)
Neither video nor audio is output.	The vehicle ignition switch has not been turned on.	Turn the vehicle ignition switch to [ACC] or [ON].
	The connection wires and cables are not completely connected.	Check the connections to each connection wire and cable.
There is a point of light on the display.	At least 99.99% of the pixels on the LCD panel are effective, but it is possible that 0.01% of the pixels may not light or may stay lighted.	This is not a defect, so please use the equipment in this condition.

# Glossary

<b>CD-R</b> <b>(Compact Disc Recordable)</b>	This is a disc that can only be recorded once. Recorded data cannot be deleted. There are two types of CD-R, one having capacity of 650MB (74 minutes of music), the same as a regular CD, and the other having capacity of 700MB (80 minutes of music).
<b>CD-DA</b> <b>(Compact Disc Digital Audio)</b>	This disc is the standard for recording and playing of music data. One track is recorded with one song, and a maximum of 74 minutes can be used with the CD.
<b>CD-RW</b> <b>(Compact Disc ReWritable)</b>	This disc uses a phase transformation method that enables recording and deleting of data as many times needed. Capacity is 700MB (80 minutes of music).
<b>EQ (Equalizer)</b>	This enables setting of stronger or softer playing of sounds throughout the high to low range of the sound. Levels can be adjusted to personal preference, enhancing enjoyment of the music.
<b>MP3</b> <b>(MPEG-1 Audio Layer-3)</b>	"MP3" is the abbreviation for "MPEG Audio Layer 3," which is the standard format for compression of audio data. MP3 technology compresses sound in the range inaudible to the human ear, producing a file one tenth the size of the original.
<b>LPCM</b> <b>(Linear PCM)</b>	This is an abbreviation for Linear Pulse Code Modulation, a signal recording method used with music CDs.
<b>Copy Control CD</b>	This is a CD that has controls for preventing computers from copying and ripping (taking audio information recorded on a compact disc and using it as data to create a file).
<b>UDF</b> <b>(Universal Disc Format)</b>	This is one format for use with optical discs not reliant on the OS. It is used with media such as DVD and CD-RW.
<b>Track</b>	The single division for a song on a music CD is called a track.

# Index by topic

## About screen and sound adjustment

### [Regarding screen adjustment]

To make the audio operation screen or VTR screen easier to see

**"Adjusting/setting the screen"** ..... P32

To turn off the screen

**"Turning off the screen"** ..... P33

To change the wallpaper

**"Changing the wallpaper"** ..... P30

To set the screen to wide mode

**"Switching screen mode"** ..... P34

### [Regarding audio adjustment]

To change the volume

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*MEMO*