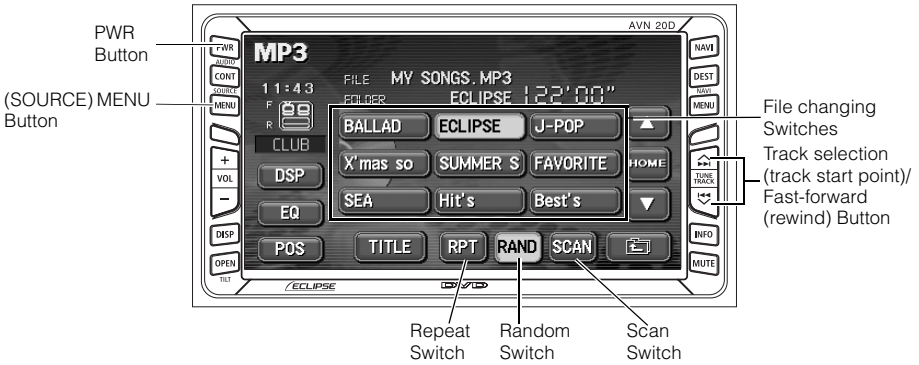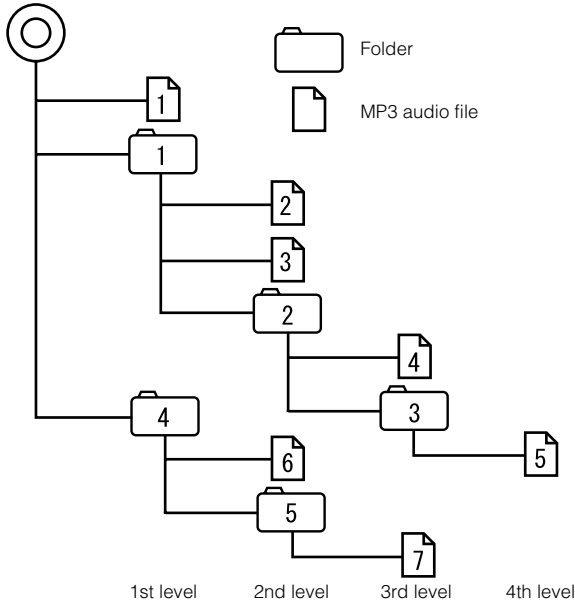# *How to use the MP3 player*

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

PWR Button

(SOURCE) MENU Button

File changing Switches

Track selection (track start point)/ Fast-forward (rewind) Button

Repeat Switch   Random Switch   Scan Switch

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

Example of MP3 file structure

Folder

MP3 audio file

1st level   2nd level   3rd level   4th level

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 $\boxed{1} \rightarrow \boxed{2} \rightarrow \boxed{3} \rightarrow \boxed{4} \rightarrow \boxed{5} \rightarrow \boxed{6} \rightarrow \boxed{7}$.
- 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.

MP3

How to use the MP3 player

ATTENTION	• 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.

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.

MP3

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.

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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

Caution	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.

MP3

How to use the MP3 player

Format of discs

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

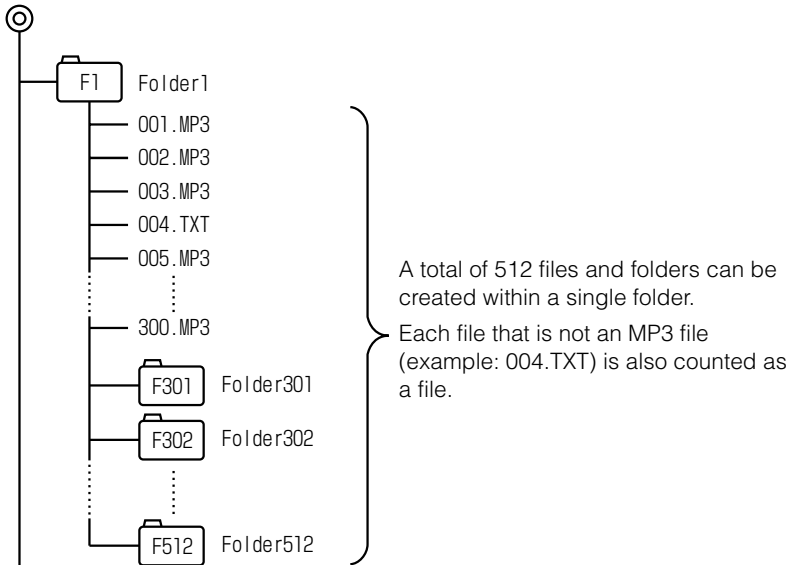- Disc format   : CD-ROM (MODE 1)
- File format   : ISO9660 Level 1 or Level 2
                                                    ROMEO system, JOLIET system

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 512 files and folders can be created within a single folder.

Each file that is not an MP3 file (example: 004.TXT) is also counted as a file.

- 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.

MP3

⚠ **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.

ATTENTION	• 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.

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