Multi-CD control High power CD/MP3 player with FM/AM tuner

Syntoniseur FM/AM et lecteur de CD/MP3, "Puisance élevée", avec contrôleur pour lecteur de CD á chargeur



* Entering disc fittee 48 km



Operation Manual

DEH-P740MP

Mode d'emploi

Contents

Thank you for buying this Pioneer product.

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

01 Before You Start

About this unit 6

About this manual 6

After-sales service for Pioneer products 6

Precautions 7

Features 7

- · CD playback 7
- · MP3 file playback 7

Use and care of the remote control 7

- . Installing the battery 7
- Using the remote control 7

About the XM READY mark 8

Protecting your unit from theft 8

- · Removing the front panel 8
- Attaching the front panel 9

About the demo mode 9

- · Reverse mode 9
- · Feature demo 9

What's what 10

- · Head Unit 10
- Remote control 11

2 Power ON/OFF

Turning the unit on 12

Selecting a source 12

Turning the unit off 12

03 Tuner

Listening to the radio 13

Introduction of advanced tuner

operation 14

Storing and recalling broadcast

frequencies 14

Tuning in strong signals 15

Storing the strongest broadcast

frequencies 15

04 Built-in CD Player

Playing a CD 16

Introduction of advanced built-in CD player

operation 17

Repeating play 17

Playing tracks in a random order 17

Scanning tracks of a CD 18

Pausing CD playback 18

Using disc title functions 18

- . Entering disc titles 18
- · Displaying disc titles 19

Using CD TEXT functions 19

- . Displaying titles on CD TEXT discs 19
- . Scrolling titles in the display 19

05 MP3 Player

Playing a MP3 20

Introduction of advanced built-CD player

(MP3) operation 21

Repeating play 21

Playing tracks in a random order 22

Scanning folders and tracks 22

Pausing MP3 playback 23

Displaying titles on MP3 disc 23

Scrolling titles in the display 23

Contents

English

06 Multi-CD Player

Playing a CD 24

50-disc multi-CD player 24

Introduction of advanced multi-CD player operation 25

Repeating play 25

Playing tracks in a random order 26

Scanning CDs and tracks 26

Pausing CD playback 26

Using ITS playlists 27

- Creating a playlist with ITS programming 27
- Playback from your ITS playlist 27
- Erasing a track from your ITS playlist 28
- Erasing a CD from your ITS playlist 28

Using disc title functions 28

- . Entering disc titles 28
- Displaying disc titles 29
- Selecting discs from the disc title list 29

Using CD TEXT functions 30

- Displaying titles on CD TEXT discs 30
- Scrolling titles in the display 30

Using compression and bass emphasis 30

Mudio Adjustments

Introduction of audio adjustments 31
Setting the sound focus equalizer 31
Using balance adjustment 32

Using the equalizer 32

- Recalling equalizer curves 32
- Adjusting equalizer curves 33
- Fine adjusting equalizer curve 33

Adjusting bass 34

Adjusting treble 34

Adjusting loudness 34

Using subwoofer output 34

Adjusting subwoofer settings 35

Using non fading output 35

· Adjusting non fading output level 35

Using the high pass filter 36

Adjusting source levels 36

08 Initial Settings

Adjusting initial settings 37

Setting the time 37

Switching the warning tone 37

Switching the auxiliary setting 38

Switching the dimmer setting 38

Selecting the brightness 38

Setting the rear output and

subwoofer controller 38

Switching the Telephone

Muting/Attenuation 39

Contents

09 Other Functions

Setting the time display on or off **40**Using different entertainment displays **40**Using the AUX source **40**

- . Selecting AUX as the source 40
- Setting the AUX title 40

Using the telephone muting/attenuation function 41

Introduction of XM operation 42

- Operation 42
- . Switching the display 42
- Switching the channel select mode 42
- Display the ID code 43

10 Additional Information

CD player and care 43

CD-R/CD-RW discs 44

Understanding built-in CD player error messages 45

MP3 files 46

About folders and MP3 files 47

Terms 48

Specifications 49





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

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

THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT EXPOSURE

90	Subway, motorcycle, truck traffic, lawn mower
100	Garbage truck, chain saw, pneumatic drill
120	Rock band concert in front of speakers, thunderclap
140	Gunshot blast, jet plane
180	Rocket launching pad

Information courtesy of the Deafness Research Foundation.





Before You Start

About this unit

The tuner frequencies on this unit are allocated for use in North America. Use in other areas may result in improper receiption.



Important

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.

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 product'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 on this page and in other sections.

This manual explains head unit operation. You can perform the same operations with the remote control. •

After-sales service for Pioneer products

Please contact the dealer or distributor from where you purchased this unit for after-sales service (including warranty condtions) 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 1760 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.

English

Before You Start

Precautions

CAUTION: USE OF CONTROL OR

ADJUSTMENT OR PER-FORMANCE OF PROCE-DURES OTHER THAN

THOSE SPECIFIED HEREIN

MAY RESULT IN

HAZARDOUS RADIATION

EXPOSURE.

CAUTION: THE USE OF OPTICAL

INSTRUMENTS WITH THIS PRODUCT WILL INCREASE EYE HAZARD.

- Keep this manual handy as a reference for operating procedures and precautions.
- Always keep the volume low enough so you can hear sounds outside of the car.
- · Protect this product from moisture.
- If the battery is disconnected or discharged, the preset memory will be erased and must be reprogrammed.

Features

CD playback

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

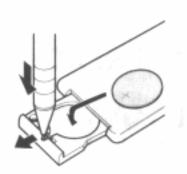
MP3 file playback

It is possible to play back MP3 files recorded on CD-ROM/CD-RW (ISO9660 Level 1/Level 2 standard recordings). (refer to page 20.)

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.



Λ

WARNING

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

Λ

A CAUTION

- Use only one CR2025 (3V) lithium battery.
- Remove the battery if the remote control is not to be used for a month or longer.
- Do not recharge, disassemble, heat or dispose of 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 institution's rules that apply in your country/area.

Using the remote control

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

Before You Start



- Do not store the remote control in high temperatures or direct sunlight.
- The remote control may not function properly in direct sunlight.
- Do not let the remote control fall onto the floor, where it may become jammed under the brake or accelerator pedals.

About the XM READY mark

(((**>**(\(\times\)))

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.





 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.

•

Protecting your unit from theft

The front panel can be detached from the head unit and stored in the protective case provided 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 37.



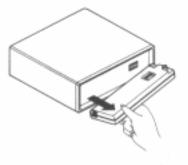
Important

- Never use force or grip the display and the buttons tightly when removing or attaching.
- Avoid subjecting the front panel to excessive shocks.
- Keep the front panel out of direct sunlight and high temperatures.

Removing the front panel

- 1 Press OPEN to open the front panel.
- 2 Grip the left side of the front panel and pull it gently outward.

Take care not to grip it tightly or drop it.



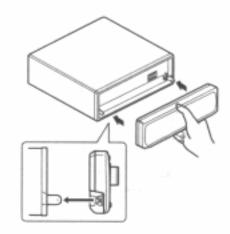
3 Put the front panel into the protective case provided for safe keeping.

English

Before You Start

Attaching the front panel

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



About the demo mode

This product features two demonstration modes, one is the reverse mode, the other is the feature demo mode.

Reverse mode

If you do not perform an operation within about 30 seconds, screen indications start to reverse, and then continue reversing every 10 seconds. Pressing 5 numbered button when power to this product is switched off while the ignition switch is set to ACC or ON cancels the reverse mode. Pressing 5 numbered button again to start the reverse mode.

Feature demo

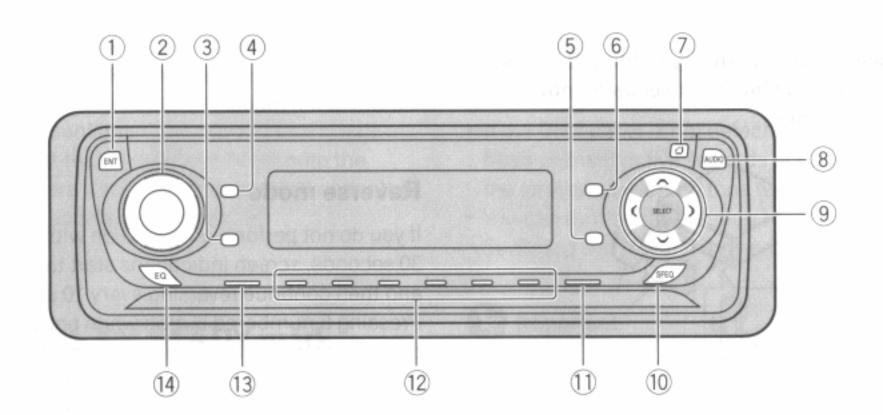
The feature demo automatically starts when power to this product is switched off while the ignition switch is set to ACC or ON. Pressing 6 numbered button during feature demo operation cancels the feature demo mode. Pressing 6 numbered button again to start the feature mode, remember that if the feature demo continues operating when the car engine is switched off, it may drain battery power.

1

Notes

- You cannot cancel a demo mode when the front panel is open.
- The red lead (ACC) of this product should be connected to a terminal coupled with ignition switch on/off operations. If this is not done, the vehicle battery may be drained.

Before You Start



What's what

Head Unit

1 ENTERTAINMENT button

Press to change to the entertainment display.

2 VOLUME

When you press the **VOLUME**, it extends outward so that it becomes easier to turn. To retract the **VOLUME**, press it again. Rotate to increase or decrease the volume.

3 CLOCK button

Press to change to the clock display.

4 DISPLAY button

Press to select different displays.

⑤ PAUSE button

Press to pause play.

6 FUNCTION button

Press to select functions.

7 OPEN button

Press to open the front panel.

8 AUDIO button

Press to select various sound quality controls.

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

10 SFEQ button

Press to select a natural sound with presence.

11 BAND/ESC button

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

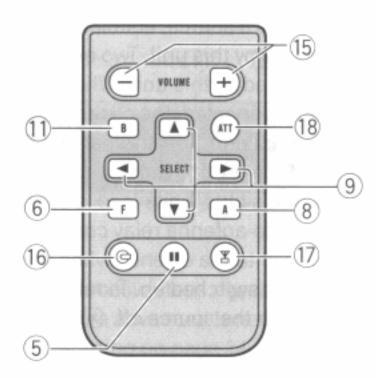
12 1–6 (PRESET TUNING) buttons

Press for preset tuning and disc number search when using a multi-CD player.

13 SOURCE button

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

Before You Start



14 EQ button

Press to select various equalizer curves.

Remote control

The supplied remote control enables convenient remote operation of the head unit. Operation is the same as when using button on the head unit.

15 VOLUME button

Press to increase or decrease the volume.

16 CD button

Press to select the built-in or multi-CD player as source.

17 TUNER button

Press to select the tuner as source.

18 ATT button

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

Power ON/OFF

Turning the unit on

Press SOURCE to turn the unit on.

When you select a source the unit is turned on.

Selecting a source

You can select a source you want to listen to. To switch to the built-in CD player, load a disc in this unit (refer to page 16).

 When using the head unit, press SOURCE to select a source.

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

Built-in CD player—TV—Tuner—XM tuner—
Multi-CD player—External unit 1—External unit 2
—AUX

• When using the remote control, press TUNER, or CD to select a source.

Press each button repeatedly to switch between the following sources:

TUNER: TV—Tuner—XM tuner—Sources off CD: Built-in CD player—Multi-CD player—Sources off

1

Notes

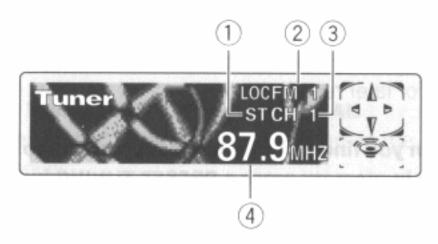
- In the following cases, the sound source will not change:
 - When a product corresponding to each source is not connected to this unit.
 - When no disc is set in this unit.
 - When no magazine is set in the multi-CD player.
 - When the AUX (auxiliary input) is set to off (refer to page 38).

- External unit refers to a Pioneer product (such as one available in the future) that, although incompatible as a source, enables control of basic functions by this unit. Two external units can be controlled by this unit. When two external units are connected, the allocation of them to external unit 1 or external unit 2 is automatically set by this unit.
- When this unit's blue/white lead is connected to the car's auto-antenna relay control terminal, the car's antenna extends when this unit's source is switched on. To retract the antenna, switch the source off.

Turning the unit off

Press SOURCE and hold for at least one second to turn the unit off.

Listening to the radio



These are the basic steps necessary to operate the radio. More advanced tuner operation is explained starting on page 14.

① STEREO (ST) indicator

Shows that the frequency selected is being broadcast in stereo.

② BAND indicator

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

③ PRESET NUMBER indicator

Shows what preset has been selected.

4 FREQUENCY indicator

Shows to which frequency the tuner is tuned.

1 Press SOURCE to select the tuner.

Press **SOURCE** until you see **Tuner** displayed.

2 Use VOLUME to adjust the sound level.

Rotate to increase or decrease the volume.

3 Press BAND/ESC to select a band.

Press BAND/ESC until the desired band is displayed, FM1, FM2, FM3 for FM or AM.

4 To perform manual tuning, press ◀ or ► with quick presses.

The frequencies move up or down step by step.

5 To perform seek tuning, press and hold ◀ 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 pressing either
- ✓ or

 ✓ with a quick press.
- If you press and hold

 or

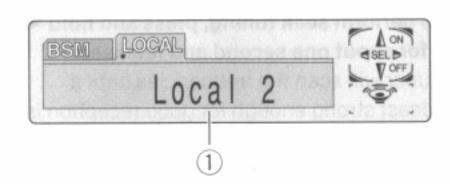
 you can skip
 broadcasting stations. Seek tuning starts as
 soon as you release the buttons.



 When the frequency selected is being broadcast in stereo the STEREO (ST) indicator will light.

Tuner

Introduction of advanced tuner operation



1 FUNCTION display

Shows the function status.

Press FUNCTION to display the function names.

Press **FUNCTION** repeatedly to switch between the following functions:

BSM (best stations memory)—**LOCAL** (local seek tuning)

To return to the frequency display, press
 BAND/ESC.



Note

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

Storing and recalling broadcast frequencies

If you press any of the **PRESET TUNING** buttons you can easily store up to six broadcast frequencies for later recall with the touch of a button.

When you find a frequency that you want to store in memory press a PRESET TUNING button and hold until the preset number stops flashing.

The number you have pressed 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 press the same **PRESET TUN- ING** button the radio station frequency is recalled from memory.



Notes

- Up to 18 FM stations, 6 for each of the three FM bands, and 6 AM stations can be stored in memory.
- You can also use ▲ and ▼ to recall radio station frequencies assigned to PRESET TUNING buttons.

Tuning in strong signals

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

1 Press FUNCTION to select LOCAL.

Press **FUNCTION** until **Local** appears in the display.

2 Press ▲ to turn local seek tuning on.

Local seek sensitivity (e.g., **Local 2**) appears in the display.

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

FM: Local 1—Local 2—Local 3—Local 4

AM: Local 1-Local 2

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

4 When you want to return to normal seek tuning, press ▼ to turn local seek tuning off.

Local :OFF appears in the display.

Storing the strongest broadcast frequencies

BSM (best stations memory) lets you automatically store the six strongest broadcast frequencies under **PRESET TUNING** buttons **1–6** and once stored there you can tune in to those frequencies with the touch of a button.

1 Press FUNCTION to select BSM.

Press **FUNCTION** until **BSM** appears in the display.

2 Press ▲ to turn BSM on.

BSM begins to flash. While **BSM** is flashing the six strongest broadcast frequencies will be stored under **PRESET TUNING** buttons in order of their signal strength. When finished, **BSM** stops flashing.

To cancel the storage process, press ▼.

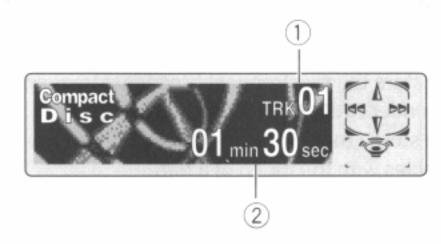


Note

 Storing broadcast frequencies with BSM may replace broadcast frequencies you have saved using PRESET TUNING.

Built-in CD Player

Playing a CD



These are the basic steps necessary to play a CD with your built-in CD player. More advanced CD operation is explained starting on page 17.

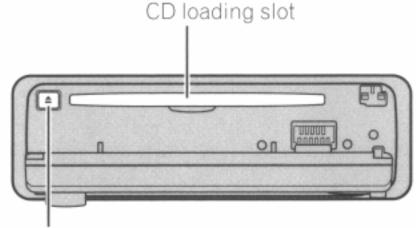
- TRACK NUMBER indicator
 Shows the track currently playing.
- ② PLAY TIME indicator Shows the elapsed playing time of the current track.
- 1 Press OPEN to open the front panel.

CD loading slot appears.

 After inserting a CD, press SOURCE to select the built-in CD player.

2 Insert a CD into the CD loading slot.

Playback will automatically start.



EJECT button

- You can eject a CD by pressing EJECT.
- To avoid a malfunction, make sure that no metal object comes into contact with the front panel is open.
- 3 After a CD has been inserted, close the front panel.

4 Use VOLUME to adjust the sound level.

Rotate to increase or decrease the volume.

- 5 To perform fast forward or reverse, press and hold ◀ or ▶.
- 6 To skip back or forward to another track, press ◀ or ▶.

Pressing ► skips to the start of the next track.

Pressing ◄ once skips to the start of the current track. Pressing again will skip to the previous track.



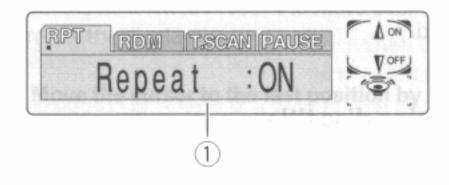
Notes

- The built-in CD player plays one, standard, 12-cm or 8-cm (single) CD at a time. Do not use an adapter when playing 8-cm CDs.
- Do not insert anything other than a CD into the CD loading slot.
- When CD TEXT disc is inserted, 🛸 lights.
- If you cannot insert a disc completely or if after you insert a disc the disc does not play, check that the label side of the disc is up.
 Press EJECT to eject the disc, and check the disc for damage before inserting the disc again.
- ▲ and ▼ are used at the time of MP3 playback.
- If the built-in CD player does not operate properly, an error message such as ERROR-11 may be displayed. Refer to Understanding built-in CD player error messages on page 45.

English

Built-in CD Player

Introduction of advanced built-in **CD** player operation



1 FUNCTION display

Shows the function status.

Press FUNCTION to display the function names.

Press **FUNCTION** repeatedly to switch between the following functions:

RPT (repeat play)—RDM (random play)— T.SCAN (scan play)—PAUSE (pause)

 To return to the playback display, press BAND/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.

Press FUNCTION to select RPT.

Press FUNCTION until Repeat appears in the display.

2 Press ▲ to turn repeat play on.

Repeat :ON appears in the display. The track presently playing will play and then repeat.

3 Press ▼ to turn repeat play off.

Repeat :OFF appears in the display. The track presently playing will continue to play and then play the next track.



Note

 If you perform track search or fast forward/reverse, repeat play is automatically cancelled.

Playing tracks in a random order

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

1 Press FUNCTION to select RDM.

Press FUNCTION until Random appears in the

2 Press ▲ to turn random play on.

Random: ON appears in the display. Tracks will play in a random order.

Press ▼ to turn random play off.

Random: OFF appears in the display. Tracks will continue to play in order.

Built-in CD Player

Scanning tracks of a CD

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

1 Press FUNCTION to select T.SCAN.

Press **FUNCTION** until **Track Scan** appears in the display.

2 Press ▲ to turn scan play on.

Track Scan: ON appears in the display. The first 10 seconds of each track is played.

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

Track Scan: OFF appears in the display. The track will continue to play.

 If the display has automatically returned to the playback display, select T.SCAN again by pressing FUNCTION.



Note

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

Pausing CD playback

Pause lets you temporarily stop playback of the CD.

Press FUNCTION to select PAUSE.

Press **FUNCTION** until **Pause** appears in the display.

2 Press ▲ to turn pause on.

Pause :ON appears in the display. Play of the current track pauses.

3 Press ▼ to turn pause off.

Pause:OFF appears in the display. Play will resume at the same point that you turned pause on.

Using disc title functions

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.

Entering disc titles

Disc title input lets you input CD titles up to 10 letters long and up to 48 disc titles into the built-in CD player.

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

2 Press FUNCTION and hold until TITLE appears in the display.

When playing a CD TEXT disc, you cannot switch to **TITLE**. The disc title will have already been recorded on a CD TEXT disc.

3 Press 1 numbered button to select the desired character type.

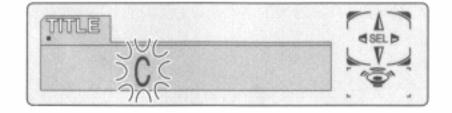
Press 1 numbered button repeatedly to switch between the following character type:

Alphabet (upper case), Numbers and Symbols— Alphabet (lower case)

 You can select to input Numbers and Symbols by pressing 2 numbered button.

4 Press ▲ or ▼ to select a letter of the alphabet.

Each press of ▲ will display a letter of the alphabet in ABC... XYZ, numbers and symbols in 12 3... @ # < order. Each press of ▼ will display a letter in the reverse order, such as ZYX... CBA order.



English

Built-in CD Player

5 Press ► to move the cursor to the next character position.

When the letter you want is displayed, press ► to move the cursor to the next position and then select the next letter. Press ◄ to move backwards in the display.

6 Move the cursor to the last position by pressing ► after entering the title.

When you press ► one more time, the entered title is stored in memory.

7 Press BAND/ESC to return to the playback display.



Notes

- Titles remain in memory, even after the disc has been removed from built-in CD player, 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.
- If you connect a multi-CD player, you can input disc titles for up to 100 discs.
- When a multi-CD player that does not support disc title function is connected, you cannot enter disc titles in this unit.

Displaying disc titles

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

Press DISPLAY.

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

PLAYBACK MODE (play time)—**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

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

Press DISPLAY when playing a CD TEXT disc.

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

PLAYBACK MODE (play time)—Disc Title (disc title)—Disc Artist Name (disc artist name)—
Track Title (track title)—T-Artist Name (track artist name)

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

Scrolling titles in the display

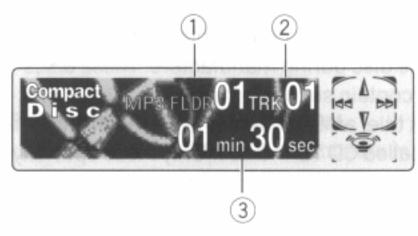
This unit can display the first 16 letters only of **Disc Title**, **Disc Artist Name**, **Track Title** and **T-Artist Name**. When the recorded information is longer than 16 letters, you can scroll the text to the left so that the rest of the title can be seen.

Press DISPLAY and hold until the title begins to scroll to the left.

The rest of the title will appear in the display.

MP3 Player

Playing a MP3



These are the basic steps necessary to play a MP3 with your built-in CD player. More advanced MP3 operation is explained starting on page 21.

- FOLDER NUMBER indicator
 Shows the folder number currently playing.
- ② TRACK NUMBER indicator Shows the track (file) currently playing.
- ③ PLAY TIME indicator Shows the elapsed playing time of the current track (file).

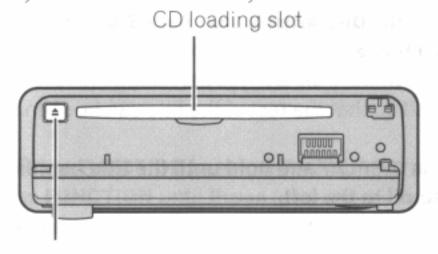
1 Press OPEN to open the front panel.

CD loading slot appears.

 After inserting a CD-ROM, press SOURCE to select the built-in CD player.

2 Insert a CD-ROM into the CD loading slot.

Playback will automatically start.



EJECT button

- You can eject a CD-ROM by pressing EJECT.
- To avoid a mulfunction, make sure that no metal object comes into contact with the terminals when the front panel is open.

3 After a CD-ROM has been inserted, close the front panel.

4 Use VOLUME to adjust the sound level.

Rotate to increase or decrease the volume.

5 Press ▲ or ▼ to select a folder.

- You can not select a folder that does not have an MP3 file recorded in it.
- Press ▼ for 2 seconds or longer to return to folder 01 (ROOT).

6 To perform fast forward or reverse, press and hold ◀ or ▶.

 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.

7 To skip back or forward to another track, press ✓ or ►.

Pressing ► skips to the start of the next track.

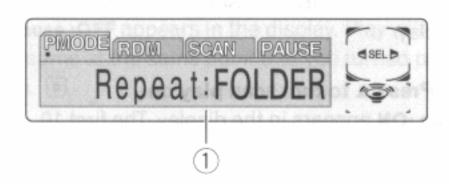
Pressing ◄ once skips to the start of the current track. Pressing again will skip to the previous track.

Notes

- The built-in CD player can play back an MP3 file recorded on CD-ROM (Please refer to page 46 for files that can be played back.)
- Do not insert anything other than a CD into the CD loading slot.
- When a CD-ROM containing ID3 is inserted,
 lights.
- There is sometimes a delay between starting up playback and the sound being issued. This is particularly the case when playing back multi-session and many folders. When being read in, Format Read is displayed.
- If you cannot insert a disc completely or if after you insert a disc the disc does not play, check that the label side of the disc is up.
 Press EJECT to eject the disc, and check the disc for damage before inserting the disc again.
- Playback is carried out in order of file number.
 Folders are skipped if they contain no files. (If folder 01 (ROOT) contains no files, playback commences with folder 02.)
- When playing back files recorded as VBR (Variable Bit Rate) files, the play time will not be correctly displayed if fast-forward or reverse operations are used.

- If selected disc contains no files that can be played back, No Audio is displayed.
- There is no sound on fast-forward or reverse.
- If the built-in CD player does not operate properly, an error message such as ERROR-11 may be displayed. Refer to Understanding built-in CD player error messages on page 45.

Introduction of advanced built-in CD player (MP3) operation



1) FUNCTION display

Shows the function status.

Press FUNCTION to display the function names.

Press **FUNCTION** repeatedly to switch between the following functions:

PMODE (repeat play)—RDM (random play)—
SCAN (scan play)—PAUSE (pause)

To return to the playback display, press
 BAND/ESC.



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

Repeating play

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

1 Press FUNCTION to select PMODE.

Press **FUNCTION** until **Repeat** appears in the display.

Press **◄ or ►** until the desired repeat range appears in the display.

- FOLDER the folder being played back is repeated.
- TRK the track being played back is repeated.
- DISC the entire folder is repeated.



- If you select other folder during repeat play, the repeat play range changes to **DISC** (disc repeat).
- If you perform track search or fast forward/reverse during TRK (one-track repeat), the repeat play range changes to FOLDER (folder repeat).
- When FOLDER is selected, it is not possible to play back a sub-folder of that folder.

MP3 Player

Playing tracks in a random order

Random play lets you play back tracks in a random order within the repeat range, **F.RANDOM** (folder repeat) and **RANDOM** (disc repeat).

1 Select the repeat range.

Refer to Repeating play on page 21.

2 Press FUNCTION to select RDM.

Press **FUNCTION** until **Random** appears in the display.

3 Press ▲ to turn random play on.

Random: ON appears in the display. Tracks will play in a random order within the previously selected F.RANDOM (folder repeat) or RANDOM (disc repeat) ranges.

4 Press ▼ to turn random play off.

Random: OFF appears in the display. Tracks will continue to play in order.

Notes

- During random playback, only tracks (MP3 files) in the folder being played back will be played back. Tracks in the subfolder will not be played back.
- When the playback range is set to disc repeat, tracks of all folders will be played back in a random order.

Scanning folders and tracks

While you are using **T.SCAN** (folder repeat), the beginning of each track in the selected folder plays for about 10 seconds. When you are using **F.SCAN** (disc repeat), 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 page 21.

2 Press FUNCTION to select SCAN.

Press **FUNCTION** until **Scan** appears in the display.

3 Press ▲ to turn scan play on.

Scan: ON appears in the display. The first 10 seconds of each track of the present folder (or the first track of each folder) is played.

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

Scan :OFF appears in the display. The track (or folder) will continue to play.

 If the display has automatically returned to the playback display, select SCAN again by pressing FUNCTION.

1

Notes

- Scan playback is cancelled if it returns to the track (or folder) where it started.
- During track repeat, if scan repeat is set to on, the playback range changes to folder repeat, and track scan is repeated.

Pausing MP3 playback

Pause lets you temporarily stop playback of the MP3.

1 Press FUNCTION to select PAUSE.

Press **FUNCTION** until **Pause** appears in the display.

2 Press ▲ to turn pause on.

Pause: ON appears in the display. Play of the current track pauses.

3 Press ▼ to turn pause off.

Pause:OFF appears in the display. Play will resume at the same point that you turned pause on.

Displaying titles on MP3 disc

Press DISPLAY when playing a MP3 disc.

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

PLAYBACK MODE (play time)—Folder Name (folder name)—File Name (file name)—Track
Title (track title)—Artist Name (artist name)—
Album Title (album title)—BIT RATE (bit rate)

- When playing back files recorded as VBR (Variable Bit Rate) files, the BIT RATE value is not displayed even after switching to BIT RATE.
- If specific information has not been recorded on a MP3 disc, no xxxx will be displayed (e.g., no artist).

Scrolling titles in the display

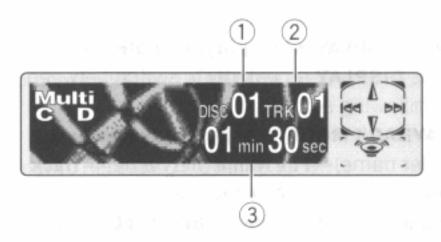
This unit can display the first 16 letters only of Folder Name, File Name, Track Title, Artist Name and Album Title. When the recorded information is longer than 16 letters, you can scroll the text to the left so that the rest of the title can be seen.

Press DISPLAY and hold until the title begins to scroll to the left.

The rest of the title will appear in the display.

Multi-CD Player

Playing 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 page 25.

- DISC NUMBER indicator
 Shows the disc currently playing.
- ② TRACK NUMBER indicator Shows the track currently playing.
- 3 PLAY TIME indicator Shows the elapsed playing time of the current track.
- 1 Press SOURCE to select the multi-CD player.

Press SOURCE until you see Multi-CD displayed.

2 Use VOLUME to adjust the sound level.

Rotate to increase or decrease the volume.

3 Select a disc you want to listen to with the 1 to 6 buttons.

For discs located at 1 to 6, press the corresponding number button.

If you want to select a disc located at 7 to 12, press and hold the corresponding numbers such as 1 for disc 7, until the disc number appears in the display.

 You can also sequentially select a disc by pressing ▲/▼.

4 To perform fast forward or reverse, press and hold ◀ or ▶.

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

Pressing ► skips to the start of the next track.

Pressing ◀ once skips to the start of the current track. Pressing again will skip to the previous track.

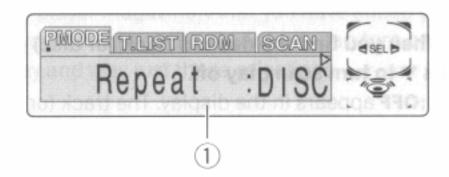
Notes

- 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-11 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.

50-disc multi-CD player

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

Introduction of advanced multi-CD player operation



1) FUNCTION display

Shows the function status.

Press FUNCTION to display the function names.

Press **FUNCTION** repeatedly to switch between the following functions:

PMODE (repeat play)—T.LIST (disc title list)—
RDM (random play)—SCAN (scan play)—ITS-P
(ITS play)—PAUSE (pause)—COMP (compression and DBE)

To return to the playback display, press
 BAND/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: **MCD** (multi-CD player repeat), **TRK** (one-track repeat), and **DISC** (disc repeat).

1 Press FUNCTION to select PMODE.

Press **FUNCTION** until **Repeat** appears in the display.

- MCD Repeat all discs in the multi-CD player
- TRK Repeat just the current track
- DISC Repeat the current disc



- If you select other discs during repeat play, the repeat play range changes to MCD (multi-CD player repeat).
- If you perform track search or fast forward/reverse during TRK (one-track repeat), the repeat play range changes to DISC (disc repeat).

Multi-CD Player

Playing tracks in a random order

Random play lets you play back tracks in a random order within the repeat range, **RANDOM** (multi-CD player repeat) and **D.RANDOM** (discrepeat).

Select the repeat range.

Refer to Repeating play on page 25.

2 Press FUNCTION to select RDM.

Press FUNCTION until Random appears in the display.

3 Press ▲ to turn random play on.

Random:ON appears in the display. Tracks will play in a random order within the previously selected RANDOM (multi-CD player repeat) or D.RANDOM (disc repeat) ranges.

4 Press ▼ to turn random play off.

Random: OFF appears in the display. Tracks will continue to play in order.

Scanning CDs and tracks

While you are using **T.SCAN** (disc repeat), the beginning of each track on the selected disc plays for about 10 seconds. When you are using **D.SCAN** (multi-CD player repeat), 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 page 25.

2 Press FUNCTION to select SCAN.

Press **FUNCTION** until **Scan** appears in the display.

3 Press ▲ to turn scan play on.

Scan :ON appears in the display. The first 10 seconds of each track of the present disc (or the first track of each disc) is played.

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

Scan: OFF appears in the display. The track (or disc) will continue to play.

 If the display has automatically returned to the playback display, select SCAN again by pressing FUNCTION.

4

Note

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

Pausing CD playback

Pause lets you temporarily stop playback of the CD.

Press FUNCTION to select PAUSE.

Press **FUNCTION** until **Pause** appears in the display.

2 Press ▲ to turn pause on.

Pause: ON appears in the display. Play of the current track pauses.

3 Press ▼ to turn pause off.

Pause: OFF appears in the display. Play will resume at the same point that you turned pause on.

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

1 Play a CD that you want to program.

Press ▲ or ▼ to select a CD.

2 Press FUNCTION and hold until TITLE appears in the display, then press FUNCTION to select ITS.

After **TITLE** is displayed, press **FUNCTION** repeatedly, the following functions appear in the display:

TITLE (disc title input)—ITS (ITS programming)

- 3 Select a desired track by pressing ◀ or ►.
- 4 Press ▲ to store the currently playing track in the playlist.

ITS Input is displayed briefly and the currently playing selection is added to your playlist. The display then shows **ITS** again.

5 Press BAND/ESC to return to the playback display.



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 25.

2 Press FUNCTION to select ITS-P.

Press **FUNCTION** until **ITS Play** appears in the display.

3 Press ▲ to turn ITS play on.

begins of those tracks from your playlist within the previously selected MCD (multi-CD player repeat) or DISC (disc repeat) ranges.

 If no tracks in the current range are programmed for ITS play then ITS Empty is displayed.

4 Press ▼ to turn ITS play off.

will continue in normal order from the currently playing track and CD.

Multi-CD Player

Erasing a track from your ITS playlist

When you want to delete a track from your ITS playlist, you can if ITS play is on.

If ITS play is already on, skip to step 2. If ITS play is not already on, press **FUNCTION**.

1 Play a CD you want to delete a track from your ITS playlist, and turn ITS play on.

Refer to Playback from your ITS playlist on page 27.

2 Press FUNCTION and hold until TITLE appears in the display, then press FUNCTION to select ITS.

After **TITLE** is displayed, press **FUNCTION** until **ITS** appears in the display.

- 3 Select a desired track by pressing ◀ or ▶.
- 4 Press ▼ to erase a track from your ITS playlist.

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

- If there are no tracks from your playlist in the current range, ITS Empty is displayed and normal play resumes.
- 5 Press BAND/ESC to return to the playback display.

Erasing a CD from your ITS playlist

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

1 Play a CD that you want to delete.

Press ▲ or ▼ to select a CD.

2 Press FUNCTION and hold until TITLE appears in the display, then press FUNCTION to select ITS.

After **TITLE** is displayed, press **FUNCTION** until **ITS** appears in the display.

3 Press ▼ to erase all tracks on the currently playing CD from your ITS playlist.

All tracks on the currently playing CD are erased from your playlist and ITS Clear is displayed.

4 Press BAND/ESC to return to the playback display.

Using disc title functions

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

Entering disc titles

Disc title input lets you input CD titles up to 10 letters long and up to 100 disc titles (with ITS playlist) into the multi-CD player.

1 Play a CD that you want to enter the title.
Press ▲ or ▼ to select a CD.

2 Press FUNCTION and hold until TITLE appears in the display.

After **TITLE** is displayed, press **FUNCTION** repeatedly, the following functions appear in the display:

TITLE (disc title input)—ITS (ITS programming)

When playing a CD TEXT disc on a CD TEXT
 compatible multi-CD player, you cannot switch
 to TITLE. The disc title will have already been
 recorded on a CD TEXT disc.

3 Press 1 numbered button to select the desired character type.

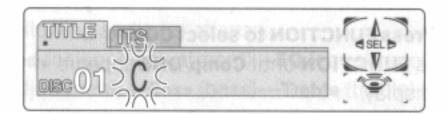
Press 1 numbered button repeatedly to switch between the following character type:

Alphabet (Upper case), Numbers and Symbols—Alphabet (Lower case)

 You can select to input Numbers and Symbols by pressing 2 numbered button.

4 Press ▲ or ▼ to select a letter of the alphabet.

Each press of ▲ will display a letter of the alphabet in ABC... XYZ, numbers and symbols in 12 3... @ # < order. Each press of ▼ will display a letter in the reverse order, such as ZYX... CBA order.



5 Press ► to move the cursor to the next character position.

When the letter you want is displayed, press ► to move the cursor to the next position and then select the next letter. Press ◄ to move backwards in the display.

6 Move the cursor to the last position by pressing ► after entering the title.

When you press ► one more time, the entered title is stored in memory.

7 Press BAND/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.

Press DISPLAY.

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

PLAYBACK MODE (play time)—**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.

Selecting discs from the disc title list

Disc title list lets you see the list of disc titles that have been entered into the multi-CD player and select one of them to playback.

1 Press FUNCTION to select T.LIST.

Press **FUNCTION** until disc title appears in the display.

- 2 Press ✓ or ► to scroll through the list of titles that have been entered.
- If no title has been entered for a disc, NO
 D-TITLE will be displayed.
- 3 Press ▲ to play your favorite CD title.

That selection will begin to play.

Multi-CD Player

Using CD TEXT functions

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

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

Displaying titles on CD TEXT discs

Press DISPLAY when playing a CD TEXT disc from the multi-CD player.

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

PLAYBACK MODE (play time)—Disc Title (disc title)—Disc Artist Name (disc artist name)—
Track Title (track title)—T-Artist Name (track artist name)

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

Scrolling titles in the display

This unit can display the first 16 letters only of **Disc Title**, **Disc Artist Name**, **Track Title** and **T-Artist Name**. When the recorded information is longer than 16 letters, you can scroll the text to the left so that the rest of the title can be seen.

Press DISPLAY and hold until the title begins to scroll to the left.

The rest of the title will appear in the display.

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

1 Press FUNCTION to select COMP.

Press **FUNCTION** until **Comp/DBE** appears in the display.

- If the multi-CD player does not support COMP/DBE, No Comp is displayed when you attempt to select it.
- 2 Press ▲ or ▼ to select your favorite setting.

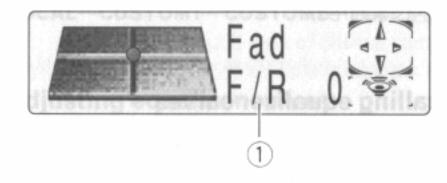
Press ▲ or ▼ repeatedly to switch between the following settings:

Comp OFF—Comp 1—Comp 2—Comp OFF—DBE 1—DBE 2

English

Audio Adjustments

Introduction of audio adjustments



① AUDIO display

Shows the audio adjustments status.

Press AUDIO to display the audio function names.

Press **AUDIO** repeatedly to switch between the following audio functions:

Fad (balance adjustment)—EQ (equalizer curve adjustment)—Bass (bass)—Treble (treble)— Loud (loudness)—Sub-W1 (subwoofer1)/Non Fad (non fading output on/off)—Sub-W2 (subwoofer2)/Non Fad (non fading output setting)—HPF (high pass filter)—SLA (source level adjustment)

- · When the subwoofer controller setting is only S.W Control: EXT, you cannot switch the Sub-W1. (Refer to page 38.)
- You can select the Sub-W2 only when Subwoofer output is switched on in the Sub-W1.
- When the subwoofer controller setting is only S.W Control: EXT, you can switch the non fading output on/off mode. (Refer to page 38.)
- You can select the non fading output setting mode only when non fading output is switched on in the non fading output on/off mode.
- When selecting the FM tuner as the source, you cannot switch to SLA.
- To return to the playback display, press BAND/ESC.



Note

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

Setting the sound focus equalizer

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.

. FRT1 boosts the treble on the front output and the bass on the rear output.

FRT2 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 FRT1 and FRT2 the H setting provides a more pronounced effect than the L setting.

Press SFEQ to select the desired SFEQ mode.

FRT1-H (front1-high) —FRT1-L (front1-low) — FRT2-H (front2-high) —FRT2-L (front2-low) — CUSTOM (custom) —SFEQ OFF (off)

2 Press ✓ or ➤ to select the desired position.

Press

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 mode in which the bass and treble are adjusted for personal preference.

Audio Adjustments

If you switch the SFEQ mode, the H.P.F. function is automatically switched off. By switching the H.P.F. function on after selecting the SFEQ mode, you can combine H.P.F. function with SFEQ function.

Using balance adjustment

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

1 Press AUDIO to select Fad.

Press AUDIO until Fad appears in the display.

 If the balance setting has been previously adjusted, Bal will be displayed.

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

Each press of ▲ or ▼ moves the front/rear speaker balance towards the front or the rear.

- Fad F15 Fad R15 is displayed as the front/rear speaker balance moves from front to rear.
- Fad 0 is the proper setting when only two speakers are used.
- When the rear output setting is Rear SP:S.W, you cannot adjust front/rear speaker balance.
 Refer to Setting the rear output and subwoofer controller on page 38.

3 Press ✓ or ➤ to adjust left/right speaker balance.

When you press or ►, Bal 0 is displayed. Each press of or ► moves the left/right speaker balance towards the left or the right.

 Bal L9 – Bal R9 is displayed as the left/right speaker balance moves from left to right.

Using the equalizer

The graphic 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:

Display	Equalizer curve
SUPER BASS	Super bass
POWERFUL	Powerful
NATURAL	Natural
VOCAL	Vocal
CUSTOM1,2	Custom1,2
FLAT	Flat

- CUSTOM1 and CUSTOM2 are adjusted equalizer curve.
- A separate CUSTOM1 curve can be created for each source. (The Built-in CD player and Multi-CD player are set to the same Equalizer Curve Adjustment setting automatically.)
- If you make adjustments when a curve other than CUSTOM2 is selected, the equalizer curve settings are memorized in CUSTOM1.
- A CUSTOM2 curve can be created common to all sources.
- If you make adjustments when the CUSTOM2 curve is selected, the CUSTOM2 curve is updated.
- 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.

English

Audio Adjustments

1 Press EQ to select the equalizer.

Press **EQ** repeatedly to swith between the following equalizer.

SUPER BASS—POWERFUL—NATURAL—VOCAL—CUSTOM1—CUSTOM2—FLAT

Adjusting equalizer curves

You can adjust the currently selected equalizer curve setting as desired. Adjusted equalizer curve settings are memorized in **CUSTOM1** or **CUSTOM2**.

- 1 Press AUDIO to select the equalizer mode.
 Press AUDIO until EQ Low/EQ Mid/EQ High appears in the display.
- 2 Select the equalizer band you want to adjust with **◄/►**.

EQ Low (low)—EQ Mid (mid)—EQ High (high)

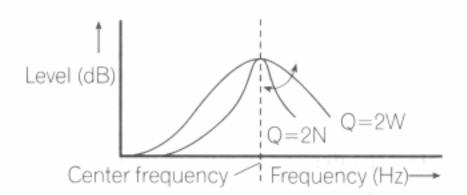
- 3 Press ▲ or ▼ to adjust the equalizer curve.
 Each press of ▲ or ▼ increases or decreases
 the equalizer curve respectively.
- +6 --6 is displayed as the equalizer curve is increased or decreased.



 If you make adjustments when a curve other than CUSTOM2 is selected, CUSTOM1 curve is updated.

Fine adjusting equalizer curve

You can adjust the center frequency and the Q factor (curve characteristics) of each currently selected curve band (EQ Low/EQ Mid/EQ High).



- 1 Press AUDIO and hold unitil frequency and the Q factor (e.g., F 80 Q 1W) appears in the display.
- 2 Press AUDIO to select the desired band for adjustment.

LOW (low)—MID (mid)—HIGH (high)

3 Select the desired frequency with **◄/►**.

LOW: 40—80—100—160 (Hz) MID: 200—500—1 k—2 k (Hz)

HIGH: 3.15 k—8 k—10 k—12.5 k (Hz)

4 Press ▲/▼ to select the desired Q factor.

Press ▲ or ▼ until the desired Q factor appears in the display.

2 N—1 N—1 W—2 W



 If you make adjustments when a curve other than CUSTOM2 is selected, CUSTOM1 curve is updated.

Audio Adjustments

Adjusting bass

You can adjust the cut-off frequency and the bass level.

- In FRT1 mode, bass adjustment affects only the rear output: front output cannot be adjusted.
- 1 Press AUDIO to select Bass.

Press AUDIO until Bass appears in the display.

2 Select the desired frequency with **◄/►**.

Press or ► until the desired frequency appears in the display.

40—63—100—160 (Hz)

3 Press ▲ or ▼ to adjust the bass level.

Each press of ▲ 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.

- In FRT1 and FRT2 modes, treble adjustment affects only the front output: rear output cannot be adjusted.
- 1 Press AUDIO to select Treble.

Press AUDIO until Treble appears in the display.

2 Select the desired frequency with **◄/►**.

2.5k—4k—6.3k—10k (Hz)

3 Press ▲ or ▼ to adjust the treble level.

Each press of ▲ 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.

1 Press AUDIO to select Loud.

Press AUDIO until Loud appears in the display.

2 Press ▲ to turn loudness on.

Loudness level (e.g., **Loud Mid**) appears in the display.

Low (low)—Mid (mid)—High (high)

4 Press ▼ to turn loudness off.

Loud OFF appears in the display.

Using subwoofer output

This unit is equipped with a subwoofer output which can be switched on or off.

1 Press AUDIO to select Sub-W1.

When the subwoofer controller setting is **S.W Control:EXT**, you cannot select **Sub-W1**. Press **AUDIO** until **Sub-W1** appears in the display.

2 Press ▲ to turn subwoofer output on.

Sub-W1 Normal appears in the display. Subwoofer output is now on.

You can turn off subwoofer output by pressing

₹

3 Press ◀ or ► to select the phase of subwoofer output.

07

English

Audio Adjustments

Adjusting subwoofer settings

When the subwoofer output is on, you can adjust the cut-off frequency and the output level of the subwoofer.

1 Press AUDIO to select the Sub-W2.

When the subwoofer output is on, you can select the **Sub-W2**. Press **AUDIO** until **Sub-W2 80** (Hz) appears in the display.

- If the subwoofer setting has been previously adjusted, the frequency of that previously selected will be displayed, such as 50 (Hz) or 125 (Hz).
- 2 Press or to select cut-off frequency.
 Press and 50 (Hz) is displayed. Press and
 125 (Hz) is displayed. Only frequencies lower
 than those in the selected range are output
 from the subwoofer.

3 Press ▲ or ▼ to adjust the output level of the subwoofer.

Each press of ▲ or ▼ increases or decreases the level of the subwoofer (e.g., +6 to -6).

Press ▲ or ▼ until you see the desired value displayed. ■

Using non fading output

When the non fading 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 Press AUDIO to select non fading output on/off mode.

When the subwoofer controller setting is **S.W Control:EXT**, you can select non fading output on/off mode. Press **AUDIO** until **NonFad ON** appears in the display.

- 2 Press ▲ to turn non fading output on.
 NonFad ON appears in the display, non fading output is now on.
- You can turn off non fading output by pressing
 ▼.

Adjusting non fading output level

When the non fading output is on, you can adjust the level of non fading output.

1 Press AUDIO to select non fading output setting mode.

Press AUDIO until NonFad 0 appears in the display.

2 Press ▲ or ▼ to adjust the output level of the non fading.

Each press of ▲ or ▼ increases or decreases the level of the non fading (e.g., +6 to -6).

Press ▲ or ▼ until you see the desired value displayed. ■

Audio Adjustments

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, switch the HPF (high pass filter) on. Only frequencies higher than those in the selected range are output from the front and rear speakers.

1 Press AUDIO to select HPF.

Press **AUDIO** until **HPF** appears in the display.

2 Press ▲ to turn high pass filter on.

HPF 80 Hz appears in the display. High pass filter is now on.

To turn high pass filter off, press ▼.

3 Press ✓ or ► to select a high pass filter range.

Press ◀ and HPF 50 Hz is displayed. Press ► and 125 Hz is displayed. Only frequencies higher than those in the selected range are output from the front or rear speakers.



If you switch the SFEQ mode, the H.P.F. function is automatically switched off. By switching the H.P.F. function on after selecting the SFEQ mode, you can combine H.P.F. 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 volume level of the FM tuner, which remains unchanged.
- 1 Compare the FM tuner volume level with the level of the source you wish to adjust (e.g., built-in CD player).
- 2 Press AUDIO to select SLA.

Press AUDIO until SLA appears in the display.

3 Press ▲ or ▼ to adjust the source volume.

Each press of ▲ or ▼ increases or decreases the source volume.

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



- Since the FM tuner volume is the control, it is not possible to apply source level adjustments to the FM tuner.
- The AM tuner volume level can also be adjusted with source level adjustments.
- The built-in CD and the multi-CD players are both set to the same source level adjustment volume automatically.
- External unit 1 and External unit 2 are set to the same volume adjustment setting automatically.

English

Initial Settings

Adjusting initial settings



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

1 FUNCTION display

Shows the function status.

- 1 Press SOURCE and hold until the unit turns off.
- 2 Press FUNCTION and hold until time appears in the display.
- 3 Press FUNCTION to select one of the initial settings.

Press FUNCTION repeatedly to switch between the following settings:

CLOCK—WARN—AUX—DIM—BRIGHT—SW— TEL

Use the following instructions to operate each particular setting.

- To cancel initial settings, press BAND/ESC.
- You can also cancel initial settings by holding down **FUNCTION** until the unit turns off. •

Setting the time

This is used to set the time on the unit's clock display.

1 Press FUNCTION to select the CLOCK.

Press **FUNCTION** until the time appears in the display.

2 Select the portion of the time display you wish to set with **◄/►**.

Pressing **◄/►** will select a portion of the clock display:

HOUR-MINUTE

As you select portions of the clock display the portion selected will blink.



3 Select the correct time with ▲/▼.

Pressing

will increase the selected hour or minute. Pressing ▼ will decrease the selected hour or minute.

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 this warning tone.

Press FUNCTION to select WARN.

Press FUNCTION repeatedly until Warning appears in the display.

2 Select WARN on or off with ▲/▼.

Pressing ▲/▼ will switch Warning between on and off and that status will be displayed (e.g.,

Warning:ON).

Initial Settings

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 Press FUNCTION to select AUX.

Press **FUNCTION** repeatedly until **AUX** appears in the display.

2 Select AUX on or off with ▲/▼.

Pressing ▲/▼ will switch **AUX** between on and off and that status will be displayed (e.g., **AUX:ON**). ■

Switching the dimmer setting

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

1 Press FUNCTION to select DIM.

Press **FUNCTION** repeatedly until **Dimmer** appears in the display.

2 Select DIM on or off with ▲/▼.

Pressing ▲/▼ will switch **Dimmer** between on and off and that status will be displayed (e.g., **Dimmer :ON**). ■

Selecting the brightness

You can select the display brightness. Initially this mode is set to 12.

1 Press FUNCTION to select BRIGHT.

Press **FUNCTION** repeatedly until **Brightness** appears in the display.

2 Select the desired brightness with ◄/►.

• The display shows 0 − 15. ■

Setting the rear output and subwoofer controller

This product's rear output (rear speaker leads output and RCA rear output) can be used for full-range speaker (Rear SP:FULL) or subwoofer (Rear SP:S.W) connection. If you switch rear output setting to the Rear SP:S.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 (Rear SP:FULL).

When rear output are connected to full range speakers (when **Rear SP: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 **S.W Control:INT** or the auxiliary **S.W Control:EXT**.

Initial Settings



- Even if you change this setting, there is no output unless you switch the non fading output (refer to page 35) or subwoofer output (refer to page 34) in the audio menu on.
- If you change the subwoofer controller, subwoofer output and non fading 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 mode.

1 Press FUNCTION to select SW.

Press **FUNCTION** repeatedly until **Rear SP** appears in the display.

2 Change the rear output setting with ▲/▼. Pressing ▲/▼ will switch between Rear SP :FULL (full-range speaker) and Rear SP :S.W (subwoofer) and that status will be displayed.

Notes

- When no subwoofer is connected to the rear output, select Rear SP:FULL.
- When a subwoofer is connected to the rear output, set for subwoofer Rear SP:S.W.
- When the rear output setting is Rear SP:S.W, you cannot change the subwoofer controller.

3 Change the subwoofer controller with **◄/►**.

Pressing ✓/ will switch between S.W Control:
:INT and S.W Control: EXT and that status will be displayed.

Switching the Telephone Muting/Attenuation

Sound from this system is muted or attenuated automatically when a call is made or received using a cellular telephone connected to this product.

Press FUNCTION to select TEL.
 Press FUNCTION repeatedly until Telephone appears in the display.

2 Switch the telephone muting/attenuation with **◄/►**.

Pressing
✓/ will switch between Telephone :ATT (attenuation) and Telephone :MUTE (muting) and that status will be displayed. •

Other Functions

Setting the time display on or off

You can display the clock on each sound source display.

Press CLOCK to select the time display.

Each press of **CLOCK** turns time display on or off.

 The time display disappears temporarily when you perform other operations, but the time indication is displayed again after 6 seconds.



 Even when the sources and the feature demo are off, the time appears on the display.
 Pressing CLOCK switches the time display on/off.

Using different entertainment displays

You can enjoy entertainment displays while listening to each sound source.

Press ENTERTAINMENT.

Each time you press **ENTERTAINMENT** the display changes in the following order:

SOURCE ICON DISPLAY—BGV 1—BGV 2—BGV 3—BGV 4—LEVEL INDICATOR 1—LEVEL INDI-CATOR 2—MOVIE SCREEN 1—MOVIE SCREEN 2—ENTERTAINMENT CLOCK

BGV stands for Back Ground Visual.

Using the AUX source

An IP-BUS-RCA Interconnector such as the CD-RB20 or 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

Press SOURCE to select AUX as the source.

Press SOURCE until AUX appears in the display.

 If the auxiliary setting is not switched on, AUX cannot be selected. For more details, see Switching the auxiliary setting on page 38.

Setting the AUX title

The title displayed for the **AUX** source can be changed.

- 1 After you have selected AUX as the source, press FUNCTION and hold until TITLE appears in the display.
- 2 Press 1 numbered button to select the desired character type.

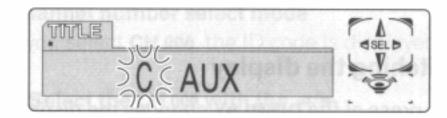
Press 1 numbered button repeatedly to switch between the following character type:

Alphabet (Upper case), Numbers and Symbols—Alphabet (Lower case)

 You can select to input Numbers and Symbols by pressing 2 numbered button.

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

Each press of ▲ will display a letter of the alphabet in ABC... XYZ, numbers and symbols in 12 3... @ # < order. Each press of ▼ will display a letter in the reverse order, such as ZYX... CBA order.



4 Press ► to move the cursor to the next character position.

When the letter you want is displayed, press ► to move the cursor to the next position and then select the next letter. Press ◄ to move backwards in the display.

5 Move the cursor to the last position by pressing ► after entering the title.

When you press ➤ one more time, the entered title is stored in memory.

6 Press BAND/ESC to return to the playback display.

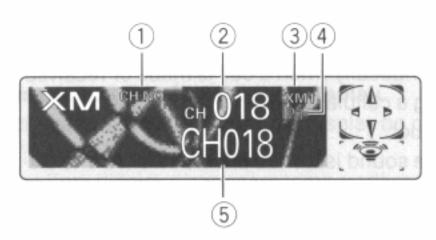
Using the telephone muting/attenuation function

Sound from this system is muted or attenuated automatically when a call is made or received using a cellular telephone connected to this product.

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

Other Functions

Introduction of XM operation



You can use this product with a separately sold Universal XM satellite digital tuner system (GEX-FM903XM) or XM satellite digital tuner (GEX-P900XM). For details concerning operation, refer to the XM tuner's operation manuals. This section provides information on XM operations with this product which differs from that described in the XM tuner's operation manual.

CHANNEL SELECT MODE indicator
 Shows what channel select mode has been

selected. **CH.NO** is displayed when **CH NUM-BER** is selected, and **CAT** is displayed when **CATEGORY** is selected.

2 CHANNEL NUMBER indicator

Shows to which channel number the tuner is tuned.

3 BAND indicator

Shows the band which has been selected.

4 PRESET NUMBER indicator

Shows what preset has been selected.

5 XM Tuner information

The display is switched each time **DISPLAY** is pressed.

Operation

Operation of the following functions with this product differs.

- Switching the display (Refer to page 42.)
- Switching the channel select mode (Refer to page 42.)
- Display the ID code (Refer to page 43.)

Switching the display

Each press of the **DISPLAY** changes the display in the following order:

CHANNEL NUMBER—CANNEL NAME—ARTIST NAME/FEATURE—SONG/PROGRAM TITLE—ADDITIONAL INFORMATION

Swiching the channel select mode

You can switch if you select a Channel with a Channel Number or from a Channel Category when you select a channel.

- 1 Press FUNCTION to select MODE.
- 2 Press ✓ or ► to select the desired channel select mode.

CH NUMBER (Channel number select mode) — CATEGORY (Channel category select mode)

Other Functions

Additional Information

Display the ID Code

Each XM tuner is identified with a unique radio ID. You will need the radio ID when activating XM service or when reporting a problem. How to display the ID code depends on the channel select mode.

Channel number select mode

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

Select the CH 000 with the ◄/►

Channel category select mode

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

- Select the Channel Category RADIO ID with the ▲/▼ buttons.
- 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..



CD player and care

 Use only CDs that have either of the two Compact Disc Digital Audio marks as show below.





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





- Check all CDs for cracks, scratches or warped discs before playing. CDs that have cracks, scratches or are warped may not play properly. Do not use such discs.
- Avoid touching the recorded (non-printed side) surface when handling the disc.
- Store discs in their cases when not in use.
- Keep discs out of direct sunlight and do not expose the discs to high temperatures.

Additional Information

- Do not attach labels, write on or apply chemicals to the surface of the discs.
- To clean dirt from a CD, wipe the disc with a soft cloth outward from the center of the disc.



- If the heater is used in cold weather, moisture may form on components inside the CD player. Condensation may cause the CD player to not operate properly. If you think that condensation is a problem turn off the CD player for an hour or so to allow the CD player to dry out and wipe any damp discs with a soft cloth to remove the moisture.
- Road shocks may interrupt CD playback.

CD-R/CD-RW discs

- 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 car.
- Titles and other text information recorded on a CD-R/CD-RW disc may not be displayed by this product (in the case of audio data (CD-DA)).
- This product conforms to the track skip function of the CD-R/CD-RW disc. The tracks containing the track skip information are skipped over automatically (in the case of audio data (CD-DA)).
- If you insert a CD-RW disc into this product, time to playback will be longer than when you insert a conventional CD or CD-R disc.
- Read the precautions with the CD-R/CD-RW discs before using.

Understanding built-in CD player error messages

When problems occur during CD play an error message may appear on the display. If an error message appears on the display refer to the table below to see what the problem is and the suggested method of correcting the problem. If the error cannot be corrected, contact your dealer or your nearest Pioneer Service Center.

Message	Cause	Action
ERROR-11, 12, 17, 30	Dirty disc	Clean disc.
ERROR-11, 12, 17, 30	Scratched disc	Replace disc.
ERROR-22, 23	The CD format cannot be played back.	Replace disc.
ERROR-10, 11, 12, 17, 30, A0	Electrical or mechanical	Turn the ignition ON and OFF, or switch to a different source, then back to the CD player.
ERROR-44	All tracks are skip tracks	Replace disc.

10

Additional Information

MP3 files

- MP3 is short for MPEG Audio Layer 3 and refers to an audio compression technology standard.
- This product allows playback of MP3 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.
- Files are compatible with the ID3 Tag Ver. 1.0 and Ver. 1.1 formats for display of album (disc title), track (track title) and artist (track artist).
- Only when MP3 files of 32, 44.1 and 48 kHz frequencies are played back, the emphasis function is valid. (16, 22.05, 24, 32, 44.1, 48 kHz sampling frequencies can be played back.)
- MP3 files are not compatible with packet write data transfer.
- There is no m3u playlist compatibility.
- There is no compatibility with the MP3i (MP3 interactive) or mp3 PRO format.
- The max. number of characters which can be displayed for a file name, including the extension (.mp3), is 32 characters from the first character.
- The max. number of characters which can be displayed for a folder name is 32 characters.
- In case of files recorded according to the Romeo or the Joliet file system, only the first 32 characters can be displayed.
- In case of discs with MP3 files mixed with CD-EXTRA, MIXED-MODE CD, and other audio data (CD DA), only the CD DA part can be played.
- When CD-R/CD-RW discs are used, playback is possible only for discs which have been finalized.

- 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.
- The sound quality of MP3 files generally becomes better with increasing bit rate. This unit can play recordings with bit rates from 16 kbps to 320 kbps, but in order to be able to enjoy a certain sound quality, it is recommended to use only discs recorded with a bit rate of at least 128 kbps.

Precaution:

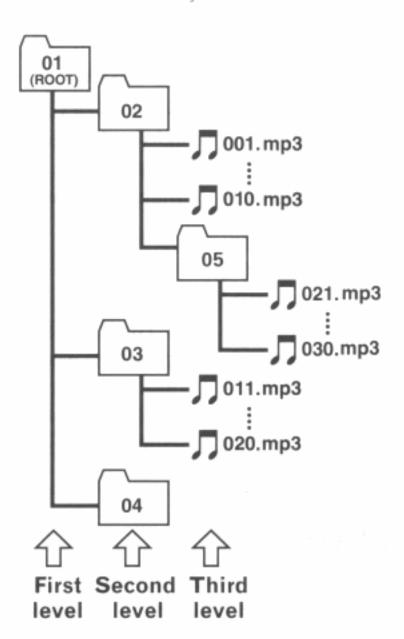
- When naming an MP3 file, add the corresponding filename extension (.mp3).
- This product plays back files with the filename extension (.mp3) as an MP3 file. To prevent noise and malfunctions, do not use this extension for files other than MP3 files.

English

Additional Information

About folders and MP3 files

 An outline of a CD-ROM with MP3 files on it is shown below. Subfolders are shown as folders in the folder currently selected.





Notes

- The equipment assigns folder numbers. The user can not assign folder numbers.
- If a disc contains both MP3 files and music data, only the music data will be played back. (The elapsed playback time for MP3 files is displayed, but there is no music output.)
- It is not possible to check folders that do not include MP3 files. (These folders will be skipped without displaying the folder number.)
- MP3 files in up to 8 tiers of folders can be played back. However, there is a delay in the start of playback on discs with numerous tiers. For this reason we recommend creating discs with no more than 2 tiers.
- It is possible to play back up to 253 items from folder on one disc.

Additional Information

Terms

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.

ID3 Tag

This is a method of embedding track-related information in a 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 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 logic of CD-ROM folders and files. For the ISO9660 format, there are regulations for the following two levels.

Level 1:

The file name is in 8.3 format (the name 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.

m3u

Playlists created using the "WINAMP" software have a playlist file extension (.m3u).

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 in one disc.

MP3

MP3 is short for MPEG Audio Layer3. 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.

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.

VBR

VBR is short for Variable Bit Rate. Generally speaking CBR (Constant Bit Rate) is more widely used. But to flexibly adjust the bit rate according to the needs of audio compression, it is possible to achieve compression prioritizes sound quality.

Additional Information

Specifications

Conoral		
General		14.4.4.000
Power sou	rce	
Constitution and the		(10.8 – 15.1 V allowable)
_	system	. Negative type
Max. curre	nt consumption	
		. 10.0 A
	is (W \times H \times D):	
(DIN)	Chassis	. 178 × 50 × 157 mm
		$[7 \times 2 \times 6 - 1/8 \text{ in}]$
	Nose	188 × 58 × 19 mm
		$[7-3/8 \times 2-1/4 \times 3/4 \text{ in}]$
(D)	Chassis	178 × 50 × 162 mm
		$[7 \times 2 \times 6.3/8 \text{ in}]$
	Nose	170 × 46 × 14 mm
		$[6-3/4 \times 1-3/4 \times 1/2 \text{ in}]$
Weight		
Audio		
Continuou	s power output i	s 22 W per channel min. int
		en 50 to 15,000 Hz with no
more than		

Maximum power output 50 W x 4

for subwoofer (70 W \times 1 ch/2 Ω)

Load impedance 4 Ω (4 – 8 Ω [2 Ω for 1 ch]

Preout max output level/output impedance

...... 4 V/1 kΩ

Equalizer (3-Band Parametric Equalizer): (Low)

> Frequency 40/80/100/160 Hz Q Factor 0.35/0.59/0.95/1.15 (+6 dB when boosted)

Gain ±12 dB

(Mid)

Frequency 200/500/1 k/2 k Hz Q Factor 0.35/0.59/0.95/1.15 (+6 dB when boosted)

Gain ±12 dB

(High)

Frequency 3.15 k/8 k/10 k/12.5 k Hz Q Factor 0.35/0.59/0.95/1.15

(+6 dB when boosted)

Gain ±12 dB

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 ±12 dB

(Treble)

Frequency 2.5 k/4 k/6.3 k/10 k Hz

Gain ± 12 dB

HPF:

Frequency 50/80/125 Hz

Slope-12 dB/oct

Subwoofer:

Frequency 50/80/125 Hz Slope -18 dB/oct Gain ± 12 dB

Phase Normal/Reverse

CD player

System Compact disc audio system Usable discs Compact disc

Signal format:

Sampling frequency ... 44.1 kHz Number of quantization bits

...... 16; linear

Frequency characteristics

..... 5 – 20,000 Hz (±1 dB)

Signal-to-noise ratio 94 dB (1 kHz) (IHF-A network)

Dynamic range 92 dB (1 kHz)

Number of channels 2 (stereo)

MP3 decoding format MPEG-1&2 Audio Layer-3

FM tuner Frequency range 87.9 – 107.9 MHz Usable sensitivity 9 dBf (0.8 μ V/75 Ω , mono, S/N:30 dB) 50 dB quieting sensitivity ... 15 dBf (1.5 μ V/75 Ω , mono) Signal-to-noise ratio 70 dB (IHF-A network) Distortion 0.3% (at 65 dBf, 1 kHz, Frequency response 30 – 15,000 Hz (± 3 dB) Stereo separation 40 dB (at 65 dBf, 1 kHz) Selectivity 70 dB Three signal intermodulation

(Desire signal level) 30 dBf (two undesire signal level: 100 dBf)

AM tuner

Frequency range 530 – 1,710 kHz (10 kHz) Usable sensitivity 18 µV (S/N: 20 dB) Selectivity 50 dB (± 10 kHz)



Note

 Specifications and the design are subject to possible modifications without notice due to improvements. En