SONY

2-318-768-**81** (1)

D-NF421

Operating Instructions

ATRAC CD Walkman FM/AM

Portable CD Player

http://www.sony.net/

Sony Corporation Printed in Malaysia

* 2 3 1 8 7 6 8 8 1 * (1)

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WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

To prevent fire, do not cover the ventilation of the apparatus with newspapers, table-cloths, curtains, etc. And don't place lighted candles on the apparatus.

To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the apparatus.

CAUTION

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

Certain countries may regulate disposal of the battery used to power this product. Please consult with your local authority.

CAUTION

- INVISIBLE LASER RADIATION WHEN OPEN
- DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS
- CLASS 1M INVISIBLE LASER RADIATION WHEN OPEN
- DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS

The validity of the CE marking is restricted to only those countries where it is legally enforced, mainly in the countries EEA (European Economic Area).

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This manual describes how to use the CD player. For the supplied software SonicStage, please see "Installation/Operating Guide."

Notice for users

On the supplied software

Depending on the type of the text and characters, the text shown on SonicStage may not be displayed properly on the device. This is due to:

– The limitations of the connected player.

– The player is not functionning normally.

ATRAC3plus is a trademark of Sony Corporation.

"WALKMAN" is a registered trademark of Sony Corporation to represent Headphone Stereo products. WALKMAN is a trademark of Sony Corporation.

Create Your Own ATRAC CDs

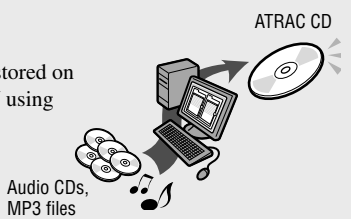
In addition to the usual audio CDs, you can play an original CD, called “ATRAC CD,” that you create with the supplied software, SonicStage. Using SonicStage, about 30 audio CDs* can be recorded on one CD-R or CD-RW.
The following is a quick overview of how you listen to music on your ATRAC CD.

Install SonicStage on your computer.

SonicStage is software that takes music downloaded from audio CDs on your computer and creates original CDs. It can be installed from the supplied CD-ROM.

Create an ATRAC CD.

After selecting your favorite songs from music stored on your computer, record them on a CD-R/CD-RW using SonicStage.



Listen to them with this CD player.

You can take lots of songs wherever you go on your original CD.

Please see the supplied “Installation/Operating Guide” for how to install SonicStage and how to create ATRAC CDs.

* When the total playing time of one CD (album) is estimated at 60 minutes and you are recording on a 700 MB CD-R/CD-RW at 48 kbps in ATRAC3plus format.

Which discs can you play on this CD player?

Audio CDs:

CD-DA format CDs

CD-DA (Compact Disc Digital Audio) is a recording standard used for Audio CDs.

ATRAC CDs:

CD-R/CD-RW on which audio data compressed in the ATRAC3plus format has been recorded by using SonicStage*

ATRAC3plus (Adaptive Transform Acoustic Coding3plus) is audio compression technology that satisfies the demand for high sound quality and high compression rates. ATRAC3plus can compress audio files to about 1/20 of their original size at 64 kbps.

Bit rates and sampling frequencies this CD player can play are:

	Bit rates	Sampling frequencies
ATRAC3	66/105/132 kbps	44.1 kHz
ATRAC3plus	48/64/256 kbps	44.1 kHz

Up to 62 characters can be displayed on this CD player.

MP3 CDs:

CD-R/CD-RW on which audio data compressed in the MP3 format has been recorded by using a software other than SonicStage*

Bit rates and sampling frequencies this CD player can play are shown below. Variable Bit Rate (VBR) files can also be played.

	Bit rates	Sampling frequencies
MPEG-1 Layer3	32 - 320 kbps	32/44.1/48 kHz
MPEG-2 Layer3	8 - 160 kbps	16/22.05/23 kHz
MPEG-2.5 Layer3	8 - 160 kbps	8/11.025/12 kHz

This CD player conforms to Version 1.0/1.1/2.2/2.3/2.4 of the ID3 tag format. ID3 tag is a format for adding certain information (track name, album name, artist name, etc.) to MP3 files. Up to 64 characters of ID3 tag information can be displayed on this CD player.

CD-Extra and Mix-Mode CDs:

CD-R/CD-RW on which CD-DA format data and CD-ROM format data are recorded together.*

If you cannot play your CD, change the “CD-EXTRA” setting in the OPTION menu (☞ page 25). Then you may play your CD.

An ATRAC CD on which audio data compressed in the MP3 format has been recorded using software other than SonicStage can also be played.
With SonicStage, you cannot create a CD on which mixed format audio data is recorded.

* Only ISO 9660 Level 1/2 and Joliet extension format discs can be played.

Music discs encoded with copyright protection technologies

This product is designed to play back discs that conform to the Compact Disc (CD) standard. Recently, various music discs encoded with copyright protection technologies are marketed by some record companies. Please be aware that among those discs, there are some that do not conform to the CD standard and may not be playable by this product.

Difference in file structures of ATRAC CDs and MP3 CDs

ATRAC CDs and MP3 CDs consist of "files" and "groups." A "file" is equivalent to a "track" of an audio CD. A "group" is a bundle of files and is equivalent to an "album."

For MP3 CDs, this CD player recognizes an MP3 folder as a "group" so that ATRAC CDs and MP3 CDs can be operated in the same way.

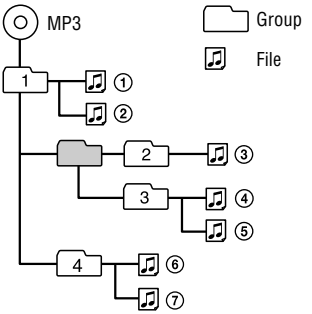
The usable number of groups and files

- Maximum number of groups: 256
- Maximum number of files: 999

Playing order of ATRAC CDs and MP3 CDs

For ATRAC CDs, files are played in the order selected in SonicStage.

For MP3 CDs, the playing order may differ depending on the method used to record MP3 files on the disc. A "play list" which contains an MP3 file playing order can also be played. In the following example, files are played in order of ① to ⑦.



(Maximum directory levels: 8)

Notes

- If ATRAC3plus files and MP3 files are recorded on the same CD, this CD player plays the ATRAC3plus files first.
- The playback capability of this CD player may vary depending on the quality of the disc and the condition of the recording device.
- Acceptable characters are A to Z, a to z, 0 to 9, and _ (underscore).
- On a disc that has ATRAC3plus/MP3 files, do not save files in other formats and do not make unnecessary folders.

About ATRAC CDs

- CD-Rs/CD-RWs recorded in the ATRAC3plus format cannot be played on your computer.

About MP3 CDs

- Be sure to add the file extension "mp3" to the file name. However, if you add the extension "mp3" to a file other than an MP3 file, the player will not be able to recognize the file properly.
- To compress a source in an MP3 file, we recommend setting the compression parameters to "44.1 kHz," "128 kbps," and "Constant Bit Rate."
- To record up to the maximum capacity, set the writing software to "halting of writing."
- To record up to the maximum capacity at one time on media that has nothing recorded on it, set the writing software to "Disc at Once."

Precautions

On safety

- Should any solid objects or liquid fall into the CD player, unplug it and have it checked by qualified personnel before operating it any further.
- Do not put any foreign objects in the DC IN 3 V (external power input) jack.

On the CD player

- Keep the lens on the CD player clean and do not touch it. If you do so, the lens may be damaged and the CD player will not operate properly.
- Do not put any heavy object on top of the CD player. The CD player and the CD may be damaged.
- Do not leave the CD player in a location near heat sources, or in a place subject to direct sunlight, excessive dust or sand, moisture, rain, mechanical shock, unleveled surface, or in a car with its windows closed.
- If the CD player causes interference to the radio or television reception, turn off the CD player or move it away from the radio or television.
- Discs with non-standard shapes (e.g., heart, square, star) cannot be played on this CD player. Attempting to do so may damage the CD player. Do not use such discs.

On handling CDs

- To keep the CD clean, handle it by its edge. Do not touch the surface.
- Do not stick paper or tape onto the CD.
- Do not expose the CD to direct sunlight or heat sources such as hot air ducts. Do not leave the CD in a car parked under direct sunlight.

On headphones/earphones

Road safety

Do not use headphones/earphones while driving, cycling, or operating any motorized vehicle. It may create a traffic hazard and is illegal in some areas. It can also be potentially dangerous to play your headsets at high volume while walking, especially at pedestrian crossings. You should exercise extreme caution or discontinue use in potentially hazardous situations.

Preventing hearing damage

Avoid using headphones/earphones at high volume. Hearing experts advise against continuous, loud and extended play. If you experience a ringing in your ears, reduce volume or discontinue use.

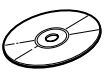
Consideration for others

Keep the volume at a moderate level. This will allow you to hear outside sounds and to be considerate to the people around you.

Checking the Supplied Accessories

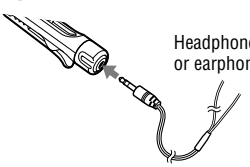
- Earphones
- Remote

- CD-ROM (SonicStage)
  Do not play this CD-ROM on an audio CD player including this player.



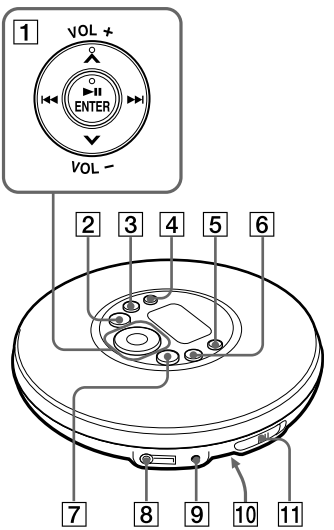
- AC power adaptor
- Operating instructions (This book)
- Installation/Operating Guide

Connect the plug of your earphones/ headphones to the remote securely.

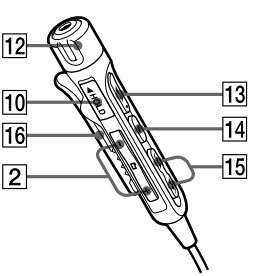


Guide to Parts and Controls

CD player



Remote



1 Operation button
▶II (play/pause)*/ENTER (☞ page 12-15, 17, 19-21, 23, 27, 28, 30, 31)
I◀◀/▶▶I (☞ page 13, 15, 21, 30)
^*/v (☞ page 14, 15, 17, 19-21, 23, 27, 28, 30, 31)
VOL +/– (☞ page 12)

2 CD player:
🗀 –•TUNE – button (☞ page 13, 14, 20, 27, 29)
Remote:
🗀 +/–•tune +/– buttons (☞ page 15, 27)

3 ■•RADIO OFF button (☞ page 13, 15, 20, 22, 24, 27, 30)

4 SEARCH button (☞ page 14, 15, 29)

5 RADIO ON/BAND•MEMORY button (☞ page 27, 29-31)

6 DISPLAY/MENU button (☞ page 16, 17, 19, 21, 23, 27, 28, 30, 31)

7 🗀 +•TUNE + button (☞ page 13, 14, 20, 27, 29)

8 ∩ (headphones) jack (☞ page 12)

9 DC IN 3 V jack (☞ page 11)

10 HOLD switch (on the back of the CD player) (☞ page 14)

11 OPEN switch (☞ page 10, 12)

12 VOL +/– control (☞ page 12)

13 ▶II (play/pause)* button (☞ page 12, 13)

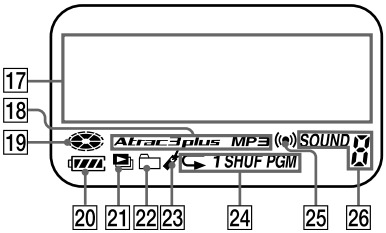
14 ■ (stop)•RADIO ON/BAND•RADIO OFF button (☞ page 13, 27)

15 I◀◀/▶▶I•PRESET –/+ buttons (☞ page 13)

16 Clip

* This button has a tactile dot.

Display



17 Character information display (☞ page 16)

18 Atrac3plus/MP3 indicator (☞ page 5)

19 Disc indicator (☞ page 12)

20 Battery indicator (☞ page 10)

21 Play list indicator

22 Group indicator

23 Bookmark indicator (☞ page 19)

24 Play mode indicator

25 Timer indicator (☞ page 24)

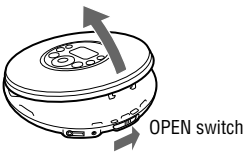
26 Sound indicator

Preparing a Power Source (Dry Battery)

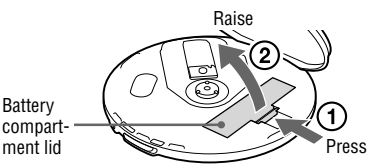
Use only the following dry battery type for your CD player:

• LR6 (size AA) alkaline battery

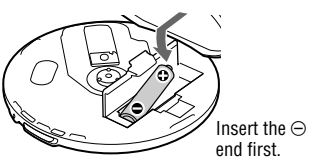
1 Slide the OPEN switch to open the lid of your player.



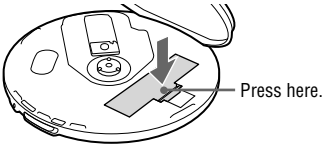
2 Open the battery compartment lid inside the player.



3 Insert the LR6 (Size AA) battery (not supplied) by matching the ⊕ to the diagram in the battery compartment.

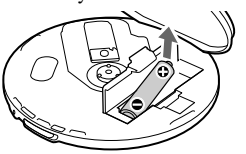


4 Close the lid until it clicks into place.



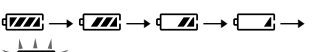
To remove the dry battery

Remove the battery as illustrated below.



Checking the remaining power of the battery

The remaining power of the battery is indicated in the display as shown below. As the black indicator section decreases, the remaining power is depleted further.



→ “Low Battery” *

* Beep sounds.

When the battery is depleted, replace it with a new one.

Notes

- The display shows the approximate battery power remaining. For example, one section does not always indicate one-fourth of the battery power.
- Depending on the operating conditions, the display may increase or decrease relative to the actual power remaining.

Battery life [1)]

When using a Sony alkaline battery LR6 (SG) (produced in Japan)	G-PROTECTION	
	"1"	"2"
Audio CD	22	20
ATRAC CD [2)]	41	38
MP3 CD [3)]	26	24
RADIO ON	30	

1)Measured value using the JEITA standard (Japan Electronics and Information Technology Industries Association)

Playing time shown is approximate hours, when you use the player on a flat and stable surface and "POWER SAVE" is set to "ON" (☞ page 25). This value varies depending on how the player is used.

2)Recorded at 48 kbps

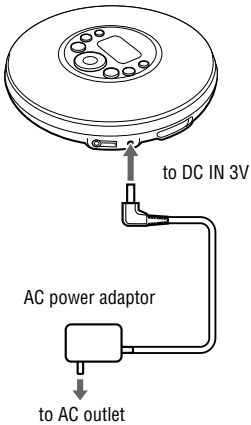
3)Recorded at 128 kbps

Notes on dry batteries

- Do not throw the batteries into a fire.
- Do not carry batteries in a pocket, etc. with coins or other metallic objects. The battery can generate heat if its positive and negative terminals are accidentally allowed to come into contact with a metallic object.
- When the batteries are not to be used for a long time, remove them.
- If battery leakage occurs, wipe off any deposit left in the battery compartment, and install new batteries. If the deposit adheres to your skin, wash it off thoroughly.

When using the AC power adaptor

You can use the player powered by the AC power adaptor without the battery.



1 Connect the AC power adaptor to the DC IN 3V jack of your CD player and an AC outlet.

Notes on the AC power adaptor

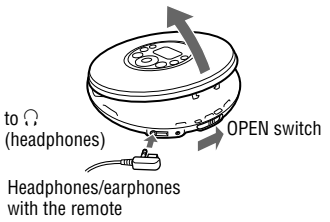
- Disconnect all power sources when the player is not to be used for a long time.
- Use only the AC power adaptor supplied. If your player is not supplied with the one, use an AC-E30HG AC power adaptor (not available in Australia and Argentina). If you use any other AC power adaptor, malfunction may occur.

- Do not touch the AC power adaptor with wet hands.
- Connect the AC power adaptor to an easily accessible AC outlet. Should you notice an abnormality in the AC power adaptor, disconnect it from the AC outlet immediately.

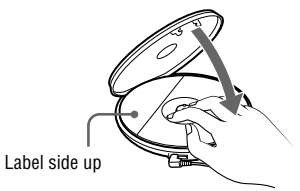
Playing a CD

1 Slide the OPEN switch to open the player lid.

Connect the headphones/earphones to the player beforehand.

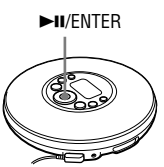


2 Place the CD on the tray and close the lid.

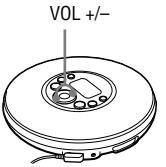


3 Press ►II/ENTER.

(disc) moves, and the player starts playback.



4 Adjust the volume by pressing VOL +/–.



On the remote:

After placing the CD on the tray in step **2**, press ►II and adjust the volume by turning VOL +/–.

To remove the CD

Remove the CD while pressing the pivot in the center of the tray.

Basic playback operations (Play, stop, search)

To		Operation
Play	Play from the first track	From stop, press and hold ▶II/ENTER (▶II on the remote) until playback starts.
Stop	Pause/Resume play after pausing	Press ▶II/ENTER (▶II on the remote).
	Stop playback	Press ■ (stop).
Search	Find the beginning of the current track [1)]	Press I◀◀ once.
	Find the beginning of previous tracks [1)]	Press I◀◀ repeatedly.
	Find the beginning of the next track [1)]	Press ▶▶I once.
	Find the beginning of succeeding tracks [1)]	Press ▶▶I repeatedly.
	Go backwards quickly [1) 3)]	Press and hold I◀◀.
	Go forward quickly [1) 3)]	Press and hold ▶▶I.
	Jump to succeeding groups [2)]	Press 🗀 (group) + repeatedly.
	Jump to previous groups [2)]	Press 🗀 (group) – repeatedly.

1)You can operate during both play and pause.

2)You can operate during play of a CD other than audio CDs.

3)You cannot operate when using an MP3 file recorded on a CD-R/CD-RW in a packet write format.

Continued

Locking the controls (HOLD)

You can prevent accidental button presses while carrying the player by locking the controls.

1 Slide the HOLD switch on the player (on the back) or on the remote in the direction of the arrow.

"HOLD" flashes if you press any button when the HOLD function is activated. You can use the HOLD function for the remote and the player (on the back) separately. For example, even if the HOLD function on the player is activated, you can operate the player by using the remote unless you set HOLD on the remote to on, too.

To unlock the controls

Slide the HOLD switch in the direction opposite to that of arrow.

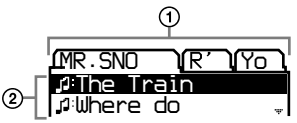
Searching for Your Favorite Track/File

Searching by viewing groups (File View)

On a CD such as an ATRAC CD or an MP3 CD on which a number of files are recorded, you can search for a file by checking the names of groups (except on an audio CD) or files around the file being played.

1 Press SEARCH repeatedly.

The names of groups and files around the current file appear on the display.



① Group names
② File names

2 Press 🗀 + or 🗀 – to select a group.

3 Press ^ or v to select a file.

4 Press ►II/ENTER.

The file you have selected starts playing.

To cancel searching

Press ■.

Searching by viewing a list of groups/files (List View)

You can search for a track/file by checking the format type of the music source and the names of groups and files.

1 Press SEARCH repeatedly.

If you play a CD on which mixed audio data has been recorded:
The screen for selecting the format type such as “ATRAC ROOT” and “MP3 ROOT” appears first.
Press ►II/ENTER.

2 Press ^ or v to select a group and press ►II/ENTER.

3 Press ^ or v to select a file.

4 Press ►II/ENTER.

The file you have selected starts playing.

To return to the previous screen

Press I◄◄ or 🗀–.

To cancel searching

Press ■.

Checking CD information on the display

You can check CD information on the display. Depending on the region in which you purchased your CD player, the default language may not be “ENGLISH.” Change the LANGUAGE setting, if necessary (☞ page 24).
When you are playing an MP3 CD containing files with an ID3 tag, ID3 tag information is displayed. (When there is no ID3 tag information, file name or group name is displayed.) (☞ page 5)

Notes

- The characters A-Z, a-z, 0-9, and _ can be displayed on this player.
- Before playing a file, the player reads all file and group (or folder) information on the CD. “Reading” is displayed. Depending on the content of the CD, it may take some time to accomplish this reading.
- If the file does not belong to any group, “MP3 ROOT” appears on the display.

Continued

To check information on the display

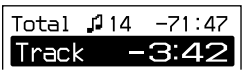
Press DISPLAY/MENU repeatedly.

Audio CD

Track number, elapsed playing time (Artist name, track name)[1)]

↓

Total number of tracks on the CD, total remaining time of the CD, remaining time of the current track [2)]



↓

File view screen

ATRAC CD/MP3 CD

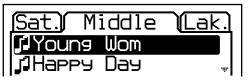
File name, artist name [3)], file number, elapsed playing time

↓

Group name [3)], CODEC information [4)], total number of files

↓

File view screen



1)When you are playing an audio CD containing text informatin such as CD-TEXT, information in parentheses is displayed.

2)The displays appear only during normal play.

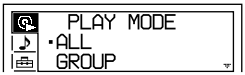
3)During play, “artist name” is not displayed if the disc does not have ID3 tag information. When the list of group names/file names appears on the display, “artist name” and “group name” are not displayed.

4)Bit rate and sampling frequencies are displayed. While an MP3 file made at VBR (variable bit rate) is being played, “VBR” appears on the display instead of a bit rate. In some cases, “VBR” appears halfway through playback, rather than from the beginning.

Changing Playback Options (PLAY MODE)

You can use various playback options such as selecting songs you want to listen to, and playing songs in your favorite order.
For details about playback options, see ☞ page 18.
You can also play songs repeatedly using the playback options you choose (repeat play, ☞ page 20).

1 Press DISPLAY/MENU until the menu screen appears.



: PLAY MODE
: SOUND
: OPTION

2 Press ^ or v to select "PLAY MODE."

3 After pressing ►II/ENTER, press ^ or v to select the playback option.

The default setting is "ALL" (normal play).

4 Press ►II/ENTER.

5 When "REPEAT" appears, select "ON" or "OFF" and press ►II/ ENTER.

To return to normal play

Select "ALL" in the PLAY MODE menu.

Continued

Playback options (PLAY MODE)

Display on the CD player	Explanation
ALL	All tracks on the CD are played in a track number order. For the ATRAC CD/MP3 CD, a playing order is different according to the setting of the “PLAY ORDER” in the OPTION menu.
GROUP	All files in the selected group or all groups are played (ATRAC CD/MP3 CD only) (☞ page 19).
1	The current track is played once.
SHUFFLE	All tracks on the CD are played once in random order.
GROUP SHUFFLE	All files in the selected group are played once in random order (ATRAC CD/MP3 CD only) (☞ page 19).
BOOKMARK	Tracks to which Bookmarks have been added are played. The play of tracks with Bookmarks starts in track number order, not in the order you added the Bookmarks (☞ page 19).
PLAYLIST	Tracks in the selected m3u play list* are played (MP3 CD only) (☞ page 19).
AUTO RANKING	The tracks you have played most frequently from the CD are played from the 10th to the first.
RANKING SHUF	Up to 32 tracks, which the player has automatically memorized as the most frequently played ones, are played in random order.
PROGRAM	Up to 64 tracks are played in your favorite order (☞ page 20).
INTRO	About the first 10 seconds of all tracks which follow the current track are played once.

*An m3u play list is a file in which an MP3 file playing order has been encoded. To use the play list function, record MP3 files on a CD-R/CD-RW using encoding software that supports the m3u format.

You can play the top 8 lists (listed by file name) on your screen on the CD player.

Playing groups

1 **Perform steps 1 and 2 of "Changing Playback Options (PLAY MODE)" (☞ page 17). In step 3, select "GROUP" or "GROUP SHUFFLE" and press ►II/ENTER.**

2 **Press ^ or v to select a group.**

If you select a group on an MP3 CD, etc. by searching through all the directories, press I◄◄ or ►►I.
If you select a group within the same directory, press ^ or v.

3 **Press ►II/ENTER for 2 seconds or more.**

The player starts playback of all files in the group you have selected.

4 **When "REPEAT" appears, select "ON" or "OFF" and press ►II/ENTER.**

Note

If the group has no tracks, "Invalid" appears on the display.

Playing your favorite tracks (Bookmark play)

1 **During play of the track to which you want to add a Bookmark, press ►II/ENTER until ✓ flashes slowly.**

2 **If you want to add a Bookmark to two or more tracks, repeat step 1.**

You can add Bookmarks to up to 10 CDs for audio CDs (up to 99 tracks for each CD) and up to 5 CDs for ATRAC CDs/MP3 CDs (up to 999 tracks for each CD).

3 **Press DISPLAY/MENU until the menu screen appears.**

4 **Press ^ or v to select "PLAY MODE," and press ►II/ENTER.**

5 **Press ^ or v to select "BOOKMARK," and then press ►II/ENTER.**

6 **When "REPEAT" appears, select "ON" or "OFF" and press ►II/ENTER.**

To remove Bookmarks

During play of a track with a Bookmark, press and hold ►II/ENTER until ✓ disappears.

Notes

- If you try to add Bookmarks to tracks on an 11th CD (on a 6th CD when playing ATRAC CDs/MP3 CDs), the Bookmarks of the CD you played first will be erased.
- All Bookmarks stored in memory will be erased if you remove all power sources.

Playing your favorite play lists (m3u play list play)

1 **In step 3 of "Changing Playback Options (PLAY MODE)" (☞page 17), select "PLAYLIST."**

2 **Press ^ or v to select a play list.**

3 **Press ►II/ENTER.**

Continued ⟶

Playing tracks in your favorite order (PGM play)

1 While the player is stopped, select "PROGRAM" in step 3 of "Changing Playback Options (PLAY MODE)" (☞ page 17), and then press ►II/ ENTER.

2 Press ^ or v to select a track, and press and hold ►II/ENTER until display changes.

When playing an ATRAC CD/MP3 CD: You can also select a file in another group by pressing 🗀+ or 🗀–.

3 Repeat step 2 to select tracks in your favorite order.

You can select up to 64 tracks.
When you finish entering the 64th track, the track number selected first (audio CD)/file name (ATRAC CD/MP3 CD) appears on the display.
If you select 65 tracks or more, the tracks selected first are erased one by one.

4 Press ►II/ENTER.

Playback starts in the selected order.

To check the program

1 While the player is stopped, select "PROGRAM" in step 3 of "Changing Playback Options (PLAY MODE) (☞ page 17), and then press ►II/ENTER.
2 Press and hold ►II/ENTER until the display changes. Whenever you press ►II/ENTER, the tracks are displayed in playing order.

To cancel the PGM play

Press ■.

Playing tracks repeatedly (Repeat play)

1 Select "ON" in step 5 of "Changing Playback Options (PLAY MODE)" (☞page 17).

To return to normal play

Select "OFF".

Changing Sound Quality

For details about the setting of SOUND items, see ☞ page 22.

Selecting the sound quality

You can set up the "EQUALIZER" setting and/or "CLEARBASS" setting. If you set both at the same time, you can enjoy more bass sound along with the sound quality you want.

1 Press DISPLAY/MENU until the menu screen appears.

2 Press ^ or v to select "♪ SOUND."

3 After pressing ►II/ENTER, press ^ or v to select the item you want to set up and press ►II/ENTER.

4 Press ^ or v to select an option and press ►II/ENTER.

Customizing sound quality

You can adjust sound quality for each frequency range individually, checking the shape of the wave on the display.

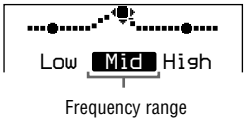
1 Select "EQUALIZER" in step 3 and "CUSTOM" in step 4 of "Selecting the sound quality".

"Low" is displayed first.
There are 3 frequency ranges; "Low" (low range audio), "Mid" (middle range audio), and "High" (high range audio).

2 Press I◄◄ or ►►I for 2 seconds or more to select the frequency range.

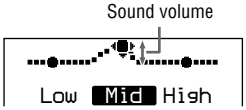
3 Press I◄◄ or ►►I repeatedly to select the shape of the wave.

There are 3 shapes stored in memory for each frequency range.



4 Press ^ or v to select the sound volume.

The sound volume can be adjusted in 7 levels.



5 Repeat steps 2 to 4 to make adjustments for the remainig 2 frequency ranges.

6 Press ►II/ENTER.

To return to the previous screen

Press ■.

To cancel the adjustment operation

Press ■ for 2 seconds or more.

Notes

- If the sound is distorted by your sound settings when you turn up the volume, turn the volume down.
- If you feel a difference in sound volume between the "CUSTOM" sound setting and other sound settings, adjust the volume to your preference.

Continued

SOUND items

To return to the previous screen, press ■. To cancel the setting operation, press ■ for 2 seconds or more.

Item	Options (●: Default setting)	
EQUALIZER (Equalizer setting)	● OFF	Normal sound quality
	SOFT	For vocal, stressing middle range audio
	ACTIVE	Lively sounds, emphasizing high and low range audio
	HEAVY	Powerful sounds, further emphasizing high and low ranges compared with ACTIVE sound
	CUSTOM	Customized sound (see ☞ page 21 for details)
CLEARBASS (Bass sound setting)	● OFF	Normal sound quality.
	1	Emphasizing bass sound.
	2	Emphasizing bass sound more than 1.
	3	Emphasizing bass sound more than 2.

Note

If you change the setting of the EQUALIZER item after you have set the CLEARBASS item, the setting of the EQUALIZER item gets priority.
When you set both the EQUALIZER item and the CLEARBASS item, set the EQUALIZER item first.

Changing Optional Settings

For details about the setting of OPTION items, see page 24.

Setting various functions

You can set the various functions such as the language for the menu and the playback order of the groups/files.

1 Press DISPLAY/MENU until the menu screen appears.

2 Press ^ or v to select "OPTION."

3 After pressing ►II/ENTER, press ^ or v to select the item you want to set up and press ►II/ENTER.

4 Press ^ or v to select an option and press ►II/ENTER.

When you are setting the "LANGUAGE" or "PLAY ORDER," repeat step **3**.

Continued

OPTION items

To return to the previous screen, press ■. To cancel the setting operation, press ■ for 2 seconds or more.

Items	Options (●: Default settings)		
LANGUAGE [1] (Language for menu, etc.)	MENU	● ENGLISH	Select the language for menu text, warning message, etc.
		FRENCH	
		GERMAN	
		ITALIAN	
		PORTUGUESE	
		RUSSIAN	
		SPANISH	
	TEXT [2] [6]	● AUTO	Select the language for CD-TEXT, ID3 tag, etc. If you select "AUTO," you can read the text in the following language.
		ENGLISH	
		FRENCH	
		GERMAN	
		ITALIAN	
		PORTUGUESE	
		RUSSIAN	
		SPANISH	
G-PROTECTION [2] (To prevent sound skipping)	● 1	Protection against sound skipping is provided with high quality CD sound.	
	2	Enhanced protection against sound skipping is provided.	
AVLS [1] [3] (Limiting volume)	● OFF	The volume changes without limiting the volume level.	
	ON	The maximum volume is limited to protect your hearing.	
TIMER [1] (Off timer)	● OFF	The timer does not work.	
	1-99 min	(•) is displayed on the player. You can check the remaining playback time by selecting this option during play. Press ∧ or ∨ repeatedly to increase or decrease the length of time by 5 minutes, or keep pressing ∧ or ∨ to increase or decrease by 1 minute. The default setting is "10 min."	

Items	Options (●: Default settings)		
BEEP [1] (Sound of operation)	● ON	The beep sounds when you operate the player.	
	OFF	The beep is turned off.	
SEAMLESS [2] [4] (Playing tracks continuously)	● OFF	The CD is played as recorded on the disc, including spaces between tracks.	
	ON	The CD is played without space between tracks.	
POWER SAVE (Saving power)	● OFF	The POWER SAVE function does not work.	
	ON	Setting of the SOUND items is not effective.	
PLAY ORDER [2] (Playback order)	TRACK	● NORMAL	Play back the music source in the order of recording.
		ID3TAG TNO	Play back in the order of ID3 tag number.
		FILE NAME	Play back in the alphabetical order of the file names.
	GROUP	● OFF	Play back the music source in the order of recording.
		ON	Play back the music source in the order of group names.
CD-EXTRA [2] [5] (Playback by disc format)	● OFF	Set to “OFF” as long as you can play your CD normally.	
	ON	If you cannot play your CD-Extra, set to “ON.” You may play it.	
TUNE STEP [6] (Changing the tuning interval)	AREA1 [7]	Tuning interval is set to “9 kHz.”	
	AREA2 [7]	Tuning interval is set to “10 kHz.”	

Continued

Items	Options (●: Default settings)	
PRESET CLEAR [6] (Canceling all preset stations)	Clear?	Select this when you cancel all preset stations.

1)You can also set this up while listening to the radio.

2)You can set this up only while the player is stopped.

3)AVLS is an abbreviation of the Automatic Volume Limiter System.

4)This function works only for ATRAC CDs.

5)This function works only for Audio CDs and CD-Extra CDs.

6)You can set this up only when the radio is turned off.

7)Default settings vary for each area you purchased the CD player.

Notes

- Even if “G-PROTECTION” is set to “2,” sound may skip:
  – when the CD player receives stronger continuous shock than expected,
  – when a dirty or scratched CD is played, or
  – for CD-Rs/CD-RWs, when a poor-quality disc is played or there is a problem with the original recording device or application software.
- Even if “SEAMLESS” is set to “ON,” the tracks may not play continuously depending on how the source music was recorded.

Listening to the Radio

You can enjoy FM and AM programs.

1 Press RADIO ON/BAND•MEMORY (RADIO ON/BAND on the remote) to turn on the radio.

2 Press RADIO ON/BAND•MEMORY (RADIO ON/BAND on the remote) until the band you want appears.

Each time you press the button, the display changes as follows:

→ FM → AM

3 Press TUNE + or – (🗀 + or – on the remote) to tune in the station you want and adjust the volume.

Turning off the radio

Press ■•RADIO OFF.

Tuning in the station quickly

Press an hold TUNE + or – (🗀 + or – on the remote) in step 3 until the frequency digits begin to change on the display. The CD player automatically scans the radio frequencies and stops when it finds a clear station.

Emphasizing the bass sound

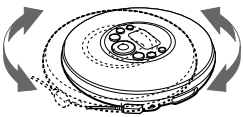
1 While listening to the radio, press DISPLAY/MENU until the menu screen appears.
2 Press ∧ or ∨ to select “SOUND,” then press ►II/ENTER.
3 Press ∧ or ∨ to select “BASS,” then press ►II/ENTER.
4 Press ∧ or ∨ to select “ON,” then press ►II/ENTER to enter the selection.

Improving broadcast reception

For FM, extend the earphones cord.

Earphones

For AM, reorient the CD player itself.



Note

Keep the earphones connected to the ∩ jack of the CD player. The earphones cord works as the FM antenna.

If it is hard to hear the FM broadcast due to interference from strong radio waves

1 While listening to the radio, press DISPLAY/MENU until the menu screen appears.
2 Press ∧ or ∨ to select “OPTION,” then press ►II/ENTER.

3 Press ∧ or ∨ to select “LOCAL/DX,” then press ►II/ENTER.
4 Press ∧ or ∨ to select “LOCAL,” then press ►II/ENTER.

Continued

If it is hard to hear the FM broadcast due to poor reception

1 While listening to the radio, press DISPLAY/MENU until the menu screen appears.
2 Press ∧ or ∨ to select “OPTION,” then press ►II/ENTER.
3 Press ∧ or ∨ to select “MONO/ST,” then press ►II/ENTER.
4 Press ∧ or ∨ to select “MONO,” then press ►II/ENTER.

The noise will be reduced but the radio will play in monaural.

Protecting your hearing

The AVLS (Automatic Volume Limiter System) function keeps the maximum volume down to protect your hearing.

1 While listening to the radio, press DISPLAY/MENU until the menu screen appears.
2 Press ∧ or ∨ to select “OPTION,” then press ►II/ENTER.
3 Press ∧ or ∨ to select “AVLS,” then press ►II/ENTER.
4 Press ∧ or ∨ to select “ON,” then press ►II/ENTER.

To cancel the AVLS function

Perform steps 1 - 4, changing the AVLS setting to “OFF.”

Turning off the radio automatically

You can set the radio to turn off automatically within a range of 1 minute to 99 minutes by 1 minute.

1 While listening to the radio, press DISPLAY/MENU until the menu screen appears.
2 Press ∧ or ∨ to select “OPTION,” then press ►II/ENTER.
3 Press ∧ or ∨ to select “TIMER,” then press ►II/ENTER.
4 Press ∧ or ∨ to select the length of time you want to set from “1 min” to “99 min,” then press ►II/ENTER.

To check the length of time before the radio is automatically turned off

During play, perform steps 1 - 4.

To cancel the TIMER function

The TIMER function for the radio will be canceled:

- When you select “OFF” in step 4 of “Turning off the radio automatically.”
- When you turn off the radio.
- When you start playing a CD.

When listening to the radio on the battery

If you connect the external power source plug to the DC IN 3 V jack of your CD player, the CD player will turn off. Turn it on by pressing RADIO ON/BAND•MEMORY to continue listening to it.

Presetting Radio Stations

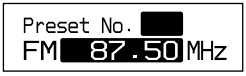
You can preset up to 40 stations: 30 for FM and 10 for AM.

1 Press RADIO ON/BAND•MEMORY to turn on the radio.

2 Press RADIO ON/BAND•MEMORY to select the band.

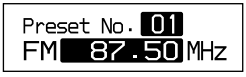
3 Press SEARCH for 3 seconds or more.

The CD player starts scanning the stations from the lower frequencies and stops for about 5 seconds when a station is received.



4 If you want to preset the received station, press ►II/ENTER until the preset number appears.

The received station is preset on the preset number 1 and the CD player starts scanning for the next receivable station. If you do not press ►II/ENTER within 5 seconds, the CD player will start scanning the next receivable station without storing the station.



5 Repeat step 4 until all receivable stations are preset.

If the stations have already been stored, the newly preset stations will replace the old ones.

Note

Presetting will not be completed until scanning of all receivable stations is finished. If you cancel presetting before scanning of all receivable stations is finished, the stations you preset are not stored in the CD player's memory.

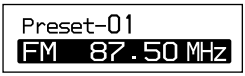
Presetting stations manually

1 Press RADIO ON/BAND•MEMORY to turn on the radio.

2 Press RADIO ON/BAND•MEMORY to select the band.

3 Press TUNE + or – to tune in the station you want.

4 Press and hold RADIO ON/BAND•MEMORY until the preset number appears on the display.



When the station is preset successfully, the beep is heard.
The preset number increases by one.

5 Repeat steps 3 and 4 when you preset the stations in the same band.
When you preset the stations in the different band, press RADIO ON/BAND•MEMORY to select the band.
Repeat steps 3 and 4 until the preset number appears on the display.

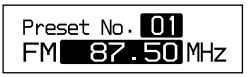
Note

Preset number is selected automatically. You cannot select the preset number.

Continued

To change a preset station

1 Perform steps 1 and 2 of "Presetting stations manually" (☞ page 29).
2 Press I◄◄ or ►►I to select the preset number of the station you want to change.
3 Press RADIO ON/BAND•MEMORY for 2 seconds or more.



4 Press TUNE + or – to tune in the station you want.
Start this operation within 30 seconds after you finished the previous operation. If 30 seconds pass with nothing done, start from step 2.
5 Press and hold ►II/ENTER.
The beep is heard and the preset station has been changed.

To cancel a preset station

1 Perform steps 1-3 of "To change a preset station."
2 Press ■•RADIO OFF.
The station preset last is canceled, and the next preset number decreases by one.

To cancel all preset stations

1 While the radio is turned off and CD play is stopped, press DISPLAY/ MENU until the menu screen appears.
2 Press ^ or v to select "OPTION," then press ►II/ENTER.
3 Press ^ or v to select "PRESET CLEAR," then press ►II/ENTER.
"Clear?" appears in the display. When you press ►II/ENTER, all the preset stations are canceled.

Playing Preset Radio Stations

You can tune in the station easily by pressing I◄◄ or ►►I button.

1 Press RADIO ON/BAND•MEMORY to select the band.

2 Press I◄◄ or ►►I to tune in a stored station.

Changing the Tuning Interval (Except European models)

When using the CD player abroad, change the AM tuning interval on the menu, if necessary.
9 kHz area: Asia and Europe
10 kHz area: the U.S.A., Canada and Latin America

Change it while the radio is turned off and CD play is stopped, as follows.

1 Press DISPLAY/MENU until the menu screen appears.

2 Press ^ or v to select "OPTION," then press ►II/ENTER.

3 Press ^ or v to select "TUNE STEP," then press ►II/ENTER.

4 Press ^ or v to select "AREA1" or "AREA2," then press ►II/ENTER.

Note

After changing the tuning interval, you need to preset radio stations again.

Troubleshooting

Should any problem persist after you have checked these symptoms, consult your nearest Sony dealer.

Sound

Symptom	Cause and/or corrective action
The volume does not increase even if you press VOL + repeatedly.	→ "AVLS" is set to "ON." Set it to "OFF" (☞ page 24).
No sound, or noise is heard.	→ Connect the headphones/earphones plugs firmly. → The plugs are dirty. Clean the headphones/earphones plugs with a dry soft cloth periodically.
A rustling noise is heard from the CD.	→ Close the lid of the battery compartment firmly (☞ page 10).
SOUND items cannot be set up.	→ "POWER SAVE" is set to "ON." Set it to "OFF" (☞ page 25).

Operation/Playback

Symptom	Cause and/or corrective action
The playing time is too short. The CD does not play.	→ Check that you are using an alkaline battery and not a manganese battery. → Replace the dry battery with a new LR6 (size AA) alkaline battery (☞ page 10).
Certain tracks cannot be played.	→ You tried to play files saved in a format that is not compatible with this player (☞ page 5). → Change the setting of "CD-EXTRA" in the OPTION menu. You may play your CD (☞ page 25).
"Low Battery" appears on the display, and the CD does not play.	→ Replace the dry battery with a new LR6 (size AA) alkaline battery (☞ page 10).
"Hi DC in" appears on the display.	→ An AC power adaptor which is rated higher than the one supplied or recommended is being used. Use only the supplied AC power adaptor or the car battery cord recommended in "Optional Accessories" (☞ page 36).

Symptom	Cause and/or corrective action
The CD does not play, or “No Disc” appears on the display when a CD is placed in the player.	→ The CD is dirty or defective. Clean it or change it. → Check that the CD is inserted with the label side up (☞ page 12). → Moisture condensation has occurred. Leave the CD player aside for several hours until the moisture evaporates. → Close the lid of the battery compartment firmly (☞ page 10). → Make sure the battery is inserted correctly (☞ page 10). → Connect the AC power adaptor to an AC outlet securely (☞ page 11). → Press ►II/ENTER after one second or more has passed since the AC power adaptor was connected. → The CD-R/CD-RW in the player is blank. → There is a problem with the quality of the CD-R/CD-RW, recording device, or application software.
“HOLD” flashes on the display when you press a button, and the CD does not play.	→ The buttons are locked. Slide the HOLD switch back (☞ page 14).
Playback starts from the point you stopped (resume function).	→ The resume function is working. To start play from the first track, press and hold ►II/ENTER (►II on the remote) while the player is stopped until the first track starts playing, or open the lid of the player (☞ page 13). Or, remove all power sources, and then insert the battery or connect the AC power adaptor again.
During playback of an ATRAC CD or MP3 CD, the CD does not rotate but you can hear the sound normally.	→ This player is designed to stop the rotation of an ATRAC CD or MP3 CD during playback to reduce the power consumption. The player is not malfunctioning.
“No File” appears on the display after you press ►II/ENTER or when the lid of the player is closed.	→ There are no ATRAC3plus/MP3 files on the CD-R/CD-RW. → A CD-R/CD-RW from which the data has been erased is being used. → The CD is dirty.
The LCD display becomes hard to see or slows down.	→ You are using your CD player at high temperatures (above 40°C/104°F) or at low temperatures (below 0°C/32°F). At room temperature, the display will return to its normal operating condition.

Continued ⟶

Symptom	Cause and/or corrective action
Even though you have not selected "BOOKMARK," (Bookmark) flashes.	→ If you have selected a playback option other than "BOOKMARK," (Bookmark) flashes.
Play stopped abruptly.	→ The off timer has been set. Change the setting of "TIMER" to "OFF" (☞ page 24). → The dry battery is used up completely. Replace the dry battery with a new LR6 (size AA) alkaline battery (☞ page 10).
The TIMER function is canceled.	→ The TIMER function for the CD is canceled if you start listening to the radio. → The TIMER function for the radio is canceled if you start playing a CD.
You cannot operate the player, and a sequence of 8 numbers or letters appear on the display of the CD player.	→ This phenomenon may occur, depending on the CD you are using. Remove all power sources, and then insert the battery or reconnect the AC power adaptor. Try to operate the player again. If the problem persists, consult your nearest Sony dealer.

Radio

Symptom	Cause and/or corrective action
The radio is weak or has poor quality.	→ Replace the battery with a new LR6 (size AA) alkaline battery (☞ page 10). → Move the CD player away from electric appliances (TVs, PCs, etc.) → Keep the AC power adaptor away from the CD player.

Others

Symptom	Cause and/or corrective action
When closing the lid of the CD player, the CD starts to rotate.	→ The player is reading the information on the CD, not malfunctioning.
You cannot operate the CD player properly using the remote.	→ The buttons on the player are kept pressed by mistake. → The remote is not connected securely.

Maintenance

To clean the casing

Use a soft cloth slightly moistened in water or a mild detergent solution. Do not use alcohol, benzine or thinner.

Specifications

CD player

System

Compact disc digital audio system

Laser diode properties

Material: GaAlAs

Wavelength: λ = 770 - 800 nm

Emission duration: Continuous

Laser output: Less than 44.6 µW

(This output is the value measured at a distance of 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)

D-A conversion

1-bit quartz time-axis control

Frequency response

20 - 20 000 Hz $^{+1}_{-2}$ dB (measured by JEITA)

Output (at 3 V input level)

Headphones (stereo minijack)

Approx. 5 mW + Approx. 5 mW at 16 Ω

(Approx. 1.5 mW + Approx. 1.5 mW at 16 Ω)*

*For the customers in Europe

Radio

Frequency range

• European models

FM: 87.5 - 108.0 MHz

AM: 531 - 1 602 kHz

• Other models

9 kHz step:

FM: 87.5 - 108.0 MHz

AM: 531 - 1 602 kHz

10 kHz step:

FM: 87.5 - 108.0 MHz

AM: 530 - 1 710 kHz

Antenna

FM: Earphones cord antenna

AM: Built-in ferrite bar antenna

Continued

General

Power requirements

- LR6 (size AA) battery: 1.5 V DC × 1
- AC power adaptor (DC IN 3 V jack):
  220 V, 50 Hz (Model for China)
  120 V, 60 Hz (Model for Mexico)

Operating temperature

5°C - 35°C (41°F - 95°F)

Dimensions (w/h/d) (excluding projecting parts and controls)

Approx. 137.8 × 30.9 × 137.8 mm (5 1/2 × 1 1/4 × 5 1/2 in.)

Mass (excluding accessories)

Approx. 196 g (6.9 oz.)

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Design and specifications are subject to change without notice.

Optional Accessories

AC power adaptor 1)	AC-E30HG
Active speaker system	SRS-Z1 SRS-Z30
Car battery cord 2)	DCC-E345
Car battery cord with car connecting pack 2)	DCC-E34CP
Car connecting pack 2)	CPA-9C
Earphones	MDR-EX71SL MDR-G04SL MDR-J20SP

1) Specifications for AC power adaptors vary for each area. Check your local voltage and the shape of the plug before purchasing.
2) When listening to the radio using these accessories, noise may occur. We recommend only playing CDs when you use them.

Your dealer may not handle some of the accessories listed above. Please ask the dealer for detailed information about the accessories in your country/region.

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