SONY

3-277-987-**12**(1)

CD Radio
Cassette-Corder

Operating Instructions   GB

CFD-RS60CP

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http://www.sony.net/

WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

To reduce the risk of fire, do not cover the ventilation of the apparatus with newspapers, tablecloths, curtains, etc. And do not place lighted candles on the apparatus.

To reduce the risk of fire or electric shock, do not place objects filled with liquids, such as vases, on the apparatus.

Connect the apparatus to an easily accessible AC outlet. Should you notice an abnormality in the apparatus, disconnect the main plug from the AC outlet immediately.

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

Do not expose the battery to excessive heat such as direct sunlight, fire or the like.

Excessive sound pressure from earphones and headphones can cause hearing loss.

Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.
Applicable accessories: Remote control

Notes on DualDiscs

A DualDisc is a two sided disc product which mates DVD recorded material on one side with digital audio material on the other side. However, since the audio material side does not conform to the Compact Disc (CD) standard, playback on this product is not guaranteed.

Music discs encoded with copyright protection technologies

This product is designed to playback 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.

MPEG Layer-3 audio coding technology and patents licensed from Fraunhofer IIS and Thomson.

Specifications

CD player section
System
  Compact disc digital audio system
Laser diode properties
  Emission duration: Continuous
  Laser output: Less than 44.6 µW
  (This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)
Spindle speed
  200 r/min (rpm) to 500 r/min (rpm) (CLV)
Number of channels
  2
Frequency response
  20 – 20 000 Hz +1/–2 dB
Wow and flutter
  Below measurable limit

Radio section
Frequency range

120 V model	
FM: 87.5 - 108 MHz	
AM: 530 - 1 710 kHz	
Other models	
FM: 87.5 - 108 MHz	
AM: 531 - 1 611 kHz (9 kHz step)	
530 - 1 610 kHz (10 kHz step)	

Antennas
FM: Telescopic antenna
AM: Built-in ferrite bar antenna

Cassette-corder section
Recording system
  4-track 2 channel stereo
Fast winding time
  Approx. 120 s (sec.) with Sony cassette C-60
Frequency response
  TYPE I (normal): 80 - 10 000 Hz

USB section
Supported bit rate
  MP3 (MPEG 1 Audio Layer-3):
  32 - 320 kbps, VBR
Sampling frequencies
  MP3 (MPEG 1 Audio Layer-3):
  32/44.1/48 kHz
  (USB) port
  USB-A (Full Speed)

General
Speaker
  Full range: 10 cm dia., 3.2 Ω, cone type (2)
Input
  (USB) port: Type A, maximum current 500 mA
Outputs
  Headphones jack (stereo minijack)
  For 16 - 68 Ω impedance headphones
Power output
  2.3 W + 2.3 W (at 3.2 Ω, 10% harmonic distortion)
Power requirements
  For CD radio cassette-corder:
  Malaysia, Singapore and Thailand models: 230 - 240 V AC, 50 Hz
  Mexico model: 120 V AC, 60 Hz
  Other models: 230 V AC, 50 Hz
  9 V DC, 6 R20 (size D) batteries
  For remote control:
  3 V DC, 2 R03 (size AAA) batteries
Power consumption
  AC 18 W
Battery life
  For CD radio cassette-corder:

FM recording	
Sony R20P: approx. 13.5 h	
Sony alkaline LR20: approx. 20 h	
Tape playback	
Sony R20P: approx. 7 h	
Sony alkaline LR20: approx. 12 h	
CD playback	
Sony R20P: approx. 2.5 h	
Sony alkaline LR20: approx. 7 h	

Dimensions
  Approx. 420 × 158.5 × 260 mm (w/h/d)
  (incl. projecting parts)
Mass
  Approx. 3.8 kg (incl. batteries)
Supplied accessories
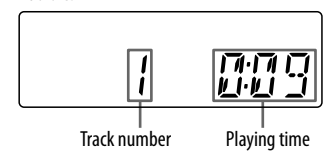 AC power cord (1)
  Remote control (1)

Design and specifications are subject to change without notice.
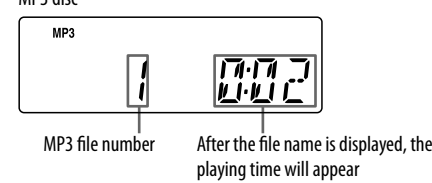
Optional accessories
Sony MDR headphones series

Power sources

Connect the AC power cord **A** or insert six R20 (size D) batteries (not supplied) into the battery compartment **B**.

Notes
- Replace the batteries when the OPR/BATT **16** indicator dims or when the unit stops operating. Replace all the batteries with new ones. Before you replace the batteries, be sure to take out the CD from the unit.
- To use the unit on batteries, disconnect the AC power cord from the unit.
- When you operate the unit on batteries, you cannot turn on the unit using the remote.

Preparing the remote

Insert two R03 (size AAA) batteries (not supplied).

Replacing batteries

With normal use, the batteries should last for about six months. When the remote no longer operates the unit, replace all the batteries with new ones.

Basic Operations

Before using the unit

About the operating voltage
The unit's operating voltage is shown on the bottom of the unit. For changing the AM tuning interval, radio frequency range, and AC operation, check the operating voltage of your unit.

To turn on/off the power
Press OPERATE **15**.

To adjust the volume
Press VOLUME +, – (VOL +, – on the remote) **9**.

To listen through headphones
Connect the headphones to the 🎧 (headphones) jack **2**.

To select the sound characteristic
Press SOUND **7** on the unit repeatedly to select the audio emphasis you want.

Choose	To get
ROCK	powerful, clean sounds, emphasizing low and high range audio
POP	light, bright sounds emphasizing high and middle range audio
JAZZ	percussive sounds, emphasizing bass audio
VOCAL	the presence of vocals, stressing middle range audio
OFF	the whole dynamic range for music such as classical music

To reinforce the bass sound
Press MEGA BASS **7** on the unit.
"MEGA BASS" appears in the display.
To return to normal sound, press the button again.

Playing a CD/MP3 disc

1 Press CD **12** on the unit.
(On the remote, press OPERATE **15** and then press FUNCTION **12** repeatedly until "CD" appears in the display.)

2 Press ⏏ PUSH OPEN/CLOSE **8** on the unit, and place a disc with the label side up on the CD compartment.
To close the CD compartment, press ⏏ PUSH OPEN/CLOSE **8** on the unit.

3 Press ▶❙❙ on the unit (▶ on the remote) **6**.
The unit plays all the tracks/MP3 files once.
When you place MP3 discs, "MP3" appears in the display after the unit reads the file information.

Basic Operations

Audio CD
Track number   Playing time

MP3 disc
MP3

MP3 file number   After the file name is displayed, the playing time will appear

To	Press
Pause playback	▶❙❙ on the unit (❙❙ on the remote) **6**. To resume play, press it again.
Stop playback	■ **6**.
Go to the next track/MP3 file	▶▶❙ **10**.
Go back to the previous track/MP3 file	❙◀◀ **10**.
Select a folder on an MP3 disc	☐ + on the unit to go forward and ☐ – to go backward **11**. (On the remote, use FOLDER + or – **11**.)
Locate a point while listening to the sound	▶▶ (forward) or ◀◀ (backward) **1** on the unit while playing and hold it until you find the point (On the remote, use ▶▶❙ or ❙◀◀ **10**.)
Locate a point while observing the display	▶▶ (forward) or ◀◀ (backward) **1** on the unit in pause and hold it until you find the point (On the remote, use ▶▶❙ or ❙◀◀ **10**.)
Locate a specific track/MP3 file directly	the number button **22** of the track/MP3 file on the remote.
Remove the CD	⏏ PUSH OPEN/CLOSE **8**.

Tips
- Playback starts from the track/MP3 file you last stopped playing (Resume play). During stop, the track/MP3 file number to be played is displayed.
- To cancel the resume play (to start play from the beginning of the first track/MP3 file), press ■ **6** or open the CD compartment in stop mode.

To locate a track by number on the remote
(Example)
For track/MP3 file number 1: Press 1 **22**, and then ENTER **23**.
For track/MP3 file number 12: Press 1, 2 **22**, and then ENTER **23**.
For track/MP3 file number 123: Press 1, 2, 3 **22**, and then ENTER **23**.

Note
You cannot locate a specific track/MP3 file if "SHUF" or "PGM" is lit in the display. Turn off the indication by pressing MODE **18**.

Example of folder structure and playing order
The playing order of the folders and files is as follows:

CD-R
CD-RW   Folder
                        ♪ MP3 file

Notes on MP3 discs
- When the disc is inserted, the unit reads all the files on that disc. During this time, "READING" is displayed. If there are many folders or non-MP3 files on the disc, it may take a long time for play to begin or for the next MP3 file to start play.
  Do not save unnecessary folders or files other than MP3 ones in the disc to be used for MP3 listening.
- Locating a specific MP3 file using the number buttons **22** on the remote is only available for the MP3 files in the selected folder.
- A folder that does not include an MP3 file is skipped.
- Maximum number of files: 255
- Maximum number of folders: 150
  Maximum number of folders and files in total: 300
  Maximum directory steps: 8
- Folder names and file names can be displayed with up to 32 characters.
- The characters A - Z, a - z, 0 - 9, and _ can be displayed on this unit. Other characters are displayed as "_".
- This unit conforms to Version 1.1 of the ID3 tag format. If the file has the ID3 tag information, "song title", "artist name", and "album name" can be displayed.
- When naming, be sure to add the file extension "mp3" to the file name.
- If you put the extension "mp3" to a file other than an MP3 file, the unit cannot recognize the file properly and will generate random noise that could damage your speakers.
- The file name does not correspond to the ID3 tag.

Basic Operations

Listening to the radio

1 Press RADIO **12** on the unit (BAND **21** on the remote) repeatedly.
Each time you press the button, the indication changes as follows:
"FM" → "AM".

2 Hold down TUNE + or – **1** until the frequency digits begin to change in the display.
The unit automatically scans the radio frequencies and stops when it finds a clear station.
If you cannot tune in a station, press TUNE + or – **1** repeatedly to change the frequency step by step.
When an FM stereo broadcast is received, "ST" appears.

Tip
If the FM broadcast is noisy, press MODE **18** until "Mono" appears in the display and the radio will play in monaural.

Changing the AM tuning interval (Except for the 120 V model)
If you need to change the AM tuning interval, do the following:

1 Press RADIO **12** on the unit until "AM" is displayed.

2 Press DISP/ENT/MEMORY **17** on the unit for 2 seconds.

3 Press RADIO **12** on the unit for 2 seconds.
"9K STEP" or "10K STEP" flashes.

4 Press PRESET + or – **10** on the unit to select "9K STEP" for 9 kHz interval or "10K STEP" for 10 kHz interval.

5 Press DISP/ENT/MEMORY **17** on the unit.
After changing the tuning interval, you need to reset your preset AM radio stations.

Playing a tape

Use buttons on the unit for the operation.

1 Press TAPE **12** on the unit.

2 Press ■⏏ **13** on the unit, and insert the tape into the tape compartment with the side you want to play facing you. Use TYPE I (normal) tape only. Close the compartment.
Make sure there is no slack in the tape to avoid damaging the tape or the unit.

3 Press ◀◀ **13** on the unit.
The unit starts playing.

To	Press
Pause playback	❙❙ **13** on the unit. To resume play, press it again.
Stop playback	■⏏ **13** on the unit.
Fast-forward or rewind	◀◀ or ▶▶ (fast forward or rewind) **13** on the unit.
Eject the cassette	■⏏ **13** on the unit.

Recording on a tape

Use buttons on the unit for the operation.

1 Press ■⏏ **13** on the unit to open the tape compartment and insert a blank tape with the side you want to record on facing you. Use TYPE I (normal) tape only. Close the compartment.

2 Select the program source you want to record.
To record from the CD player, place a CD and press CD **12** on the unit.
To record from the radio, tune in the station you want.

3 Press ● **13** on the unit to start recording (◀◀ is depressed automatically).

To	Press
Pause recording	❙❙ **13** on the unit. Press the button again to resume recording.
Stop recording	■⏏ **13** on the unit.

Tips
- Adjusting the volume or the audio emphasis will not affect the recording level.
- If the AM program makes a whistling sound after you've pressed ● **13** in step 3, press MODE **18** on the unit to select the position of ISS (Interference Suppress Switch) that most decreases the noise.
- For the best results, use the AC power as a power source for recording.
- To erase a recording, proceed as follows:
  1 Insert the tape whose recording you want to erase.
  2 Press TAPE **12** on the unit.
  3 Press ● **13** on the unit.

Basic Operations

Listening to music of a USB device

You can listen to music stored on an optional USB device (digital music player or USB storage media).
Only music files in the MP3 format* can be played on this unit.
See "Playable/Recordable USB devices" on the back page for a list of the USB devices that can be connected to this unit.
* Files with copyright protection (Digital Rights Management) cannot be played on this unit.

1 Press USB **12** on the unit.

2 Connect the USB device to the (USB) port **3** on the unit.
"USB MEMORY" appears in the display.

3 Press ▶❙❙ **6**.
The unit starts playing.

USB MP3
USB MEMORY

MP3 file number   After the file name is displayed, the playing time will appear

4 Press VOLUME + or – (or VOL + or – on the remote) **9** to adjust the volume.

Other operation

To	Press
Pause playback	▶❙❙ (or ❙❙ on the unit) **6**. To resume play, press the button again*.
Stop playback	■ **6**.
Select a folder	☐ + or – **11**.
Select a file	❙◀◀ or ▶▶❙ **10**.
Find a point in a file	Hold down ▶▶❙ or ❙◀◀ **1** during playback, and release the button at the desired point.
Select Repeat Play	REPEAT **19** on the unit repeatedly until "↻" or "↻ 1" appears.
Remove the USB device	Hold down ■ **6** until "NO DEV" appears, then remove the USB device.

* When playing a VBR MP3 file, the unit may resume playback from a different point.

To change the play mode
Press MODE **18** repeatedly while the USB device is not playing. You can select Normal Play ("☐" for all files in the folder on the USB device), Shuffle Play ("SHUF" or "☐ SHUF"), or Program Play ("PGM").

Notes on the USB device
- You cannot change the play mode during playback.
- Some time may be needed before playback starts when:
  – the folder structure is complex.
  – the USB device is close to capacity.
- When a USB device is connected, the unit reads all the files on the device. If there are many folders or files on the device, it may take a long time for the unit to finish reading them.
- Do not connect a USB device to the unit through a USB hub.
- In the case of some USB devices, when an operation is performed on the USB device, there may be a delay before it is carried out on this unit.
- This unit may not support all the functions provided on the connected USB device.
- Files recorded by this unit are played back in the order of folder creation. Files recorded by a device other than this unit (such as a computer) may not play back in the order in which they were recorded.
- The playback order on this unit may differ from the playback order on the connected USB device.
- Always hold down ■ **6** and make sure that "NO DEV" appears before removing the USB device. Removing the USB device while "NO DEV" is not displayed may corrupt the data on the USB device or damage the USB device itself.
- Do not save non-MP3 files or unnecessary folders to a USB device that contains MP3 files.
- During playback, folders that contain no MP3 files are skipped.
- This unit can play only MP3 files that have the "MP3" file extension. If there are files on the USB device that have the ".MP3" file extension, but are not MP3 files, the unit may produce noise or malfunction.
- A maximum of 999 MP3 files and 999 folders can be contained on a single USB device.
  The maximum number of MP3 files and folders may vary, depending on the file and folder structure.
- Compatibility with all MP3 encoding/writing software, recording devices, and recording media cannot be guaranteed. If you use an incompatible USB device, the sound skipping or noise may be produced, or the device may not play at all.

Recording from a disc to a USB device

By connecting a USB device (digital music player or USB storage media) to the (USB) port **3** on the unit, you can record music from a disc to the USB device.
This unit supports recording from CD-DA and MP3 discs only. Sound from this unit's cassette player or radio cannot be recorded to a USB device.
Audio files are recorded on this unit in the MP3 format. The approximate recording size is about 1 MB per minute of recording time from a CD. The file size may be larger for recordings made from an MP3 disc.
See "Playable/Recordable USB devices" on the back page for a list of the USB devices that can be connected to this unit.

Synchro Recording

This function allows you to easily record an entire disc onto a USB device. See also "Recording a single track or MP3 file to a USB device during playback" on the back page.

1 Connect a USB device with recording capability to the (USB) port **3**.
If a USB cable is necessary, use the USB cable supplied with the device to be connected.
Refer to the operation manual supplied with the USB device for connection details.

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2 Press CD **12** and insert the disc that you want to record.

3 When the CD player is stopped, press MODE **18** repeatedly to select the play mode.
The play mode automatically changes to Normal Play if the unit is in Shuffle Play, Repeat Play or Program Play (with no tracks or MP3 files programmed) at the start of recording.
For details about play modes, see "To change the play mode" in "Listening to music of a USB device".

4 Press CD-USB SYNC/REC1 **4** on the unit.
"REC" flashes and the display cycles through "CD SYNC", "FREExxxM"* (free space on the USB device), and "PUSH ENT".
The USB device changes to recording standby and the unit to play pause.
* If the amount of free space is in the gigabyte range, "FREExxxG" will be displayed as the unit.

5 Press DISP/ENT/MEMORY **17** on the unit (or ENTER **23** on the remote).
Recording starts. The unit and the USB device automatically stop when the recording is completed.

To stop recording
Press ■ **6**.

To remove the USB device
1 Press USB **12** when the unit is stopped playing.
2 Hold down ■ **6** on the unit until "NO DEV" appears.
3 Remove the USB device.

To erase MP3 files or folders on a USB device
You can erase MP3 files or folders that are on a USB device.
1 Connect a USB device with recording capability to the (USB) port **3**.
2 Press USB **12** on the unit.
3 Press ❙◀◀ or ▶▶❙ **10** repeatedly to select the MP3 file or folder that you want to erase.
4 Press ERASE **5** on the unit.
When you erase a track, "TRACK" appears, followed by "ERASE?"
When you erase a folder, "FOLDER" appears, followed by "ERASE?"
To cancel the erase operation, press ■ **6**.
5 Press DISP/ENT/MEMORY **17** on the unit (or ENTER **23** on the remote).
The selected MP3 file or folder is erased.

Folder and file generation rules
When a recording operation is first performed on a USB device, a "MUSIC" folder is created directly below the "ROOT". Folders and files are generated within this "MUSIC" folder as follows, according to the recording method.

Synchro Recording[1]

Recording source	Folder name	File name
MP3	Same as the recording source[2]	
CD-DA	"FLDR001"[3]	"TRACK001"[4]

REC1 recording[5]

Recording source	Folder name	File name
MP3	"REC1"[6]	Same as the recording source[2]
CD-DA		"TRACK001"[4]

[1] In Program Play, the folder name is "FLDRxxx", and the file name depends on the recording source (CD-DA disc or MP3 disc). For details about play modes, see "To change the play mode" in "Listening to music of a USB device".
[2] Up to 32 characters of the name are assigned.
[3] Folder names are assigned in sequential order up to a maximum of 999 (including root and MUSIC).
[4] File names are assigned in sequential order.
[5] See "Recording a single track or MP3 file to a USB device during playback" on the back page.
[6] A new file is recorded to the "REC1" folder each time REC1 recording is performed.

Notes
- Do not remove the USB device during recording or erase operations. Doing so may corrupt the data on the USB device or damage the USB device itself.
- Do not connect a USB device to the unit through a USB hub.
- When recording from a CD, the tracks are recorded as MP3 files at 128 kbps. When recording from an MP3 disc, MP3 files are recorded with the same bit rate as the original MP3 files.
- While recording from an MP3 disc, no sound is output and "HI-SPEED" appears.
- CD text information is not included in the MP3 files.
- If you cancel a recording before it is completed, an MP3 file is created with the contents up to the point the recording was stopped.
- Recording stops automatically if:
  – the USB device runs out of space during recording, or
  – the number of MP3 files on the USB device reaches the limit that the unit can recognize.
- A maximum of 999 MP3 files and 999 folders can be contained on a single USB device (including root and MUSIC).
  The maximum number of MP3 files and folders may vary, depending on the MP3 file and folder structure.
- You cannot erase MP3 files and folders in Shuffle Play or Program Play.
- If a folder to be erased contains non-MP3 format files or sub folders, these are not erased.
- If a folder or file with the same name as the one you are trying to record already exists on the USB device, a sequential number is added after the name for the newly recorded folder or file to avoid overwriting the existing one.
- When recording tracks from an MP3 disc to a USB device, there is no sound output.
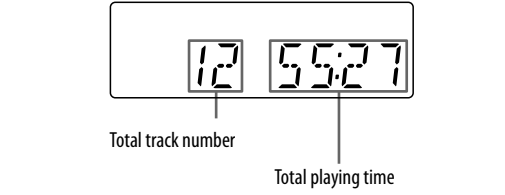
Other Operations

Using the display

You can check information about the CD using the display.
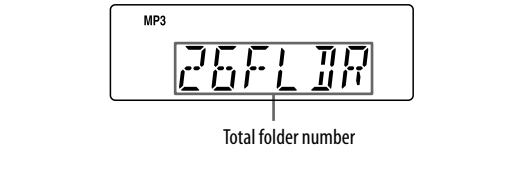
Checking the information of an audio CD

To check the total track number and playing time of the CD
Press ■ 6 to stop the CD playback.

Total track number
Total playing time

Checking the information of an MP3 disc

To check the total folder number on the CD
Press ■ 6 to stop the CD playback.

Total folder number

To check file information
Press DISP/ENT/MEMORY 17 on the unit while playing an MP3 disc. The display changes as follows:

→ The current file number and playing time
↓
→ The song title (♫)*
↓
→ The artist name (👤)*
↓
→ The album name (🗀)*
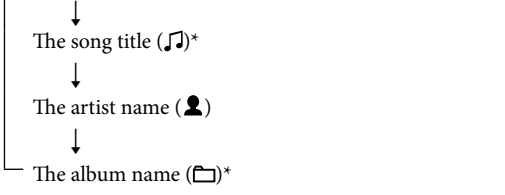
* If the file does not have ID3 information, file name or folder name appears in the display.

Playing tracks/MP3 files repeatedly
(Repeat Play)

You can play tracks/MP3 files repeatedly in normal, shuffle or program play modes.

1 Press CD 12 on the unit.
"CD" appears in the display.
2 Proceed as follows:

To repeat	Do this
a single track/ MP3 file	1 Press REPEAT 19 on the unit until "♫ 1" appears. 2 Press I◄◄ or ►►I 10 to select the track/MP3 file that you want to repeat. 3 Press ►II on the unit (► on the remote) 6.
all tracks/MP3 files on the CD	1 Press REPEAT 19 on the unit until "♫" appears. 2 Press ►II on the unit (► on the remote) 6.
a selected folder (MP3 disc only)	1 Press REPEAT 19 on the unit until "♫" and "🗀" appear. 2 Select the folder by pressing 🗀 + or 🗀 – (FOLDER + or – on the remote) 11. 3 Press ►II on the unit (► on the remote) 6.
tracks/MP3 files in random order	1 Start Shuffle Play (see "Playing tracks/MP3 files in random order"). 2 Press REPEAT 19 on the unit until "SHUF" and "♫" appear. 3 Press ►II on the unit (► on the remote) 6.
MP3 files in a selected folder in random order (MP3 disc only)	1 Start Folder Shuffle Play (see "Playing tracks/MP3 files in random order"). 2 Press REPEAT 19 on the unit until "♫", "SHUF" and "🗀" appear. 3 Press ►II on the unit (► on the remote) 6.
programed tracks/MP3 files	1 Program tracks/MP3 files (see "Creating your own program"). 2 Press REPEAT 19 on the unit until "♫" and "PGM" appear. 3 Press ►II on the unit (► on the remote) 6.

To cancel Repeat Play
Press REPEAT 19 on the unit until "♫" disappears from the display.

Playing tracks/MP3 files in random order (Shuffle Play)

You can play tracks/MP3 files in random order.

1 Press CD 12 on the unit.
"CD" appears in the display.
2 Press MODE 18 until "SHUF" appears in the display.
3 Press ►II on the unit (► on the remote) 6 to start Shuffle Play.

To cancel Shuffle Play
Stop playing first. Then press MODE 18 until "SHUF" disappears from the display.

Tips
• During Shuffle Play, you cannot select the previous track/MP3 file by pressing I◄◄ 10.
• The resume function does not work during Shuffle Play.

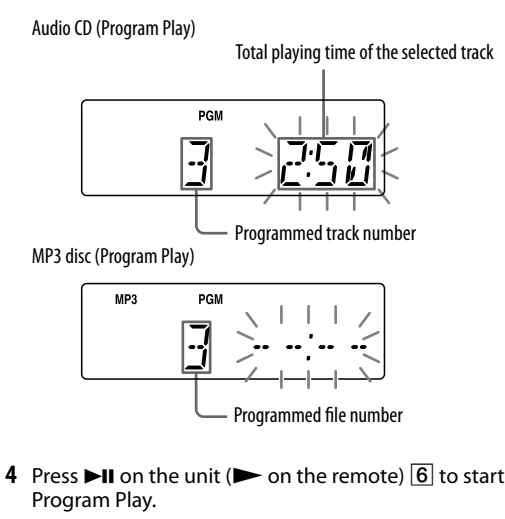## Creating your own program (Program Play)

You can arrange the playing order of up to 25 tracks/MP3 files on a CD.

1 Press CD 12 on the unit.
"CD" appears in the display.
2 Press MODE 18 until "PGM" appears in the display.
3 Press I◄◄ or ►►I 10 to select the track/MP3 file, and then press DISP/ENT/MEMORY 17 to add it to the program.
Repeat to program other tracks in the order that you want.
After programming the first track, "STEP 1" appears, followed by selected track/MP3 file.
Each time you add a track/MP3 file, the step number increments by one.

Audio CD (Program Play)

Total playing time of the selected track
Programmed track number

MP3 disc (Program Play)

Programmed file number

4 Press ►II on the unit (► on the remote) 6 to start Program Play.

To cancel Program Play
Stop playing first. Then press MODE 18 until "PGM" disappears from the display.

To delete the last track of the program
Press CLEAR 20 on the remote while the unit is stopped.

Tips
• You can play the same program again, since the program is saved until you open the CD compartment.
• You can record your own program. After you've created the program, insert a blank tape and press ● 13 on the unit to start recording.
• The resume function does not work during Program Play.

Presetting radio stations

You can store radio stations into the unit's memory. You can preset up to 30 radio stations, 20 for FM and 10 for AM in any order.

1 Press RADIO 12 repeatedly on the unit to select the band.
2 Hold down RADIO 12 on the unit for 2 seconds until "AUTO" flashes in the display.
3 Press DISP/ENT/MEMORY 17 on the unit.
The stations are stored in memory from the lower frequencies to the higher ones.

If a station cannot be preset automatically
You need to preset a station with a weak signal manually.

1 Press RADIO 12 repeatedly on the unit to select the band.
2 Tune in a station you want.
3 Hold down DISP/ENT/MEMORY 17 on the unit for 2 seconds until the preset number flashes in the display.
4 Press PRESET + or – 10 on the unit until the preset number you want for the station flashes in the display.
5 Press DISP/ENT/MEMORY 17 on the unit.
The new station replaces the old one.

On the remote

1 Press BAND 21 until the band you want appears in the display.
2 Tune in a station you want.
3 Hold down the number buttons 22 that you want to preset the new station for about 2 seconds.
To select a one-digit preset number, hold down the number for about 2 seconds.
To select a two-digit preset number, press the first digit, and then hold down the second digit for about 2 seconds.
(Example)
For preset number 1: Hold down 1 22 for about 2 seconds.
For preset number 12: Press 1 22, and then hold down 2 22 for about 2 seconds.

Tip
The preset radio stations remain in memory even if you unplug the AC power cord or remove the batteries.

Playing preset radio stations

1 Press RADIO 12 repeatedly on the unit to select the band.
2 Press PRESET + or – 10 on the unit to tune in the stored station.

On the remote

1 Press BAND 21 repeatedly to select the band.
2 Press the number buttons 22 to tune in the stored station.
(Examples)
For preset number 1: Press 1 22, and then ENTER 23.
For preset number 12: Press 1, 2 22, and then ENTER 23.

Falling asleep to music

1 Play the music source you want.
2 Press SLEEP 14 to display "SLEEP".
3 Press SLEEP 14 to select the minutes until the unit goes off automatically.
Each time you press the button, the indication changes as follows:
"AUTO*" → "60MIN" → "30MIN" → "20MIN" → "10MIN" → "OFF".
* When you select "AUTO", the CD stops playing in 90 minutes at most and the unit goes off automatically. When you are listening to the radio, the radio goes off in 90 minutes.
If 4 seconds have passed after you pressed SLEEP 14, the minutes in the display are entered.
When the preset time has passed, the unit goes off automatically.

To cancel the sleep function
Press OPERATE 15 or SLEEP 14 to turn off the power.

Note
When you are playing a tape using this function:
If the tape length of one side is longer than the set time, the unit will not go off until the tape reaches the end.

Recording a single track or MP3 file to a USB device during playback

REC1 Recording
This procedure allows you to easily record the currently playing track or MP3 file to a USB device. See also "Synchro Recording" in "Recording from a disc to a USB device" on the front page.

1 Connect a USB device with recording capability to the ⟷ (USB) port 3.
2 Press CD 12 and insert the disc with the track or MP3 file that you want to record.
3 Select the track or MP3 file and start playing it.
4 Press CD-USB SYNC/REC1 4 on the unit while the selected track or MP3 file is playing.
"REC" flashes and the display cycles through "REC 1", "FREExxxM"* (free space on the USB device) and "PUSH ENT". The USB device changes to recording standby and the unit to play pause.
* If the unit of the free space capacity is giga-byte, "FREExxxG" will be displayed.
5 Press DISP/ENT/MEMORY 17 on the unit (or ENTER 23 on the remote).
Recording starts.
When recording is completed, the CD player continues to play.

To stop recording
Press ■ 6.

Playable/Recordable USB devices

You can use the following Sony USB devices on this unit. Other USB devices are not playable/recordable on this unit.

Verified Sony digital music player (as of January 2007)

Product name	Model name
Walkman®	NWD-B103/B103F/B105/B105F

Verified Sony USB storage media (as of January 2007)

Product name	Model name
MICROVAULT	USM512EX / 1GEX / 2GEX
	USM128J / 256J / 512J / 1GJ / 2GJ / 4GJ
	USM512JX / 1GJX / 2GJX / 4GJX
	USM256H / 512H / 1GH / 2GH / 4GH

Check the websites below for the latest information about compatible devices.
For customers in Europe:
<http://sonydigital-link.com/dna>
For customers in Latin America:
<http://www.sony-latin.com/pa/info>
For customers in Asia and Oceania:
<http://www.css.ap.sony.com/>

Notes
• When formatting the above models, be sure to format using the model itself or the dedicated formatting software for that model. If you format the USB device with your computer, correctly on this unit.
• Do not use USB devices other than these USB devices. Operation of models not listed here is not guaranteed.
• Operation may not always be ensured even when using these USB devices.
• Some of these USB devices may not be available for purchase in certain areas.

Precautions

Discs that this unit CAN play
• Audio CD
• CD-R/CD-RW (CD-DA*/MP3 files)
* CD-DA is the abbreviation for Compact Disc Digital Audio. It is a recording standard used for Audio CDs.

Discs that this unit CANNOT play
• CD-R/CD-RW other than those recorded in music CD format or MP3 format conforming to ISO9660 Level 1/Level 2 or Joliet
• CD-R/CD-RW of poor recording quality, CD-R/CD-RW that has scratches or are dirty, or CD-R/CD-RW recorded with an incompatible recording device
• CD-R/CD-RW which is finalized incorrectly

Notes on discs
• Before playing, clean the CD with a cleaning cloth. Wipe the CD from the center out. If there is a scratch, dirt or fingerprints on the CD, it may cause tracking error.
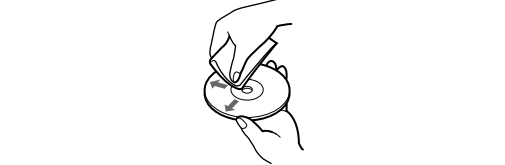
• Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for vinyl LPs.
• Do not expose the CD to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight as there can be a considerable rise in temperature inside the car.
• Do not stick paper or sticker on the CD, nor scratch the surface of the CD.
• After playing, store the CD in its case.

On safety
• As the laser beam used in the CD player section is harmful to the eyes, do not attempt to disassemble the casing. Refer servicing to qualified personnel only.
• Should any solid object or liquid fall into the unit, unplug the unit, and have it checked by qualified personnel before operating it any further.
• Discs with non-standard shapes (e.g., heart, square, star) cannot be played on this unit. Attempting to do so may damage the unit. Do not use such discs.

On power sources
• For AC operation, check that the unit's operating voltage is identical with your local power supply (see "Specifications") and use the supplied AC power cord; do not use any other type.
• The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
• Unplug the unit from the wall outlet when it is not used for an extended period of time.
• When the batteries are not to be used, remove them to avoid damage that can be caused by battery leakage or corrosion.
• The nameplate indicating operating voltage, power consumption, etc. is located at the bottom.

On placement
• Do not leave the unit in a location near heat sources, in a place subject to direct sunlight, excessive dust or mechanical shock or in a car subject to the direct rays of the sun.
• Do not place the unit on an inclined or unstable place.
• Do not place anything within 10 mm of the side of the cabinet. The ventilation holes must be unobstructed for the unit to operate properly and prolong the life of its components.
• Since a strong magnet is used for the speakers, keep personal credit cards using magnetic coding or spring-wound watches away from the unit to prevent possible damage from the magnet.

On operation
• If the unit is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lens inside the CD player section. Should this occur, the unit will not operate properly. In this case, remove the CD and wait about an hour for the moisture to evaporate.
• If the unit has not been used for a long time, set it in the playback mode to warm it up for a few minutes before inserting a cassette.

Notes on cassettes
• Break off the cassette tab from side A or B to prevent accidental recording. If you want to reuse the tape for recording, cover the broken tab with adhesive tape.

Side A
Tab for side B
Tab for side A
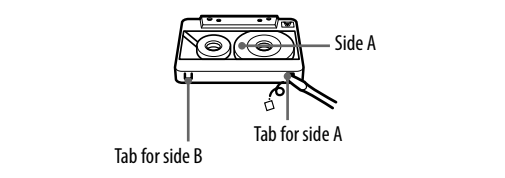
• The use of a cassette with more than 90 minutes of play time is not recommended except for long, continuous recording or playback.

Cleaning the cabinet
• Clean the cabinet, panel and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent, such as alcohol or benzine.

If you have any questions or problems concerning your unit, please consult your nearest Sony dealer.

Troubleshooting

General

The power is not on.
• Connect the AC power cord to the wall outlet securely.
• Make sure the batteries are inserted correctly.
• Replace all the batteries with new ones if they are weak.
• You cannot turn on the unit with the remote when you operate the unit on batteries.

The power is not on, and "BATTERY" and "ERROR" are displayed alternately.
• Make sure the batteries are inserted correctly.
• Replace all the batteries with new ones if they are weak.

There is no audio.
• Unplug the headphones when listening through speakers.

Noise is heard.
• Someone is using a portable telephone or other equipment that emits radio waves near the unit. → Move the portable telephone, etc., away from the unit.

CD/MP3 player

The CD does not play or "NO DISC" is displayed even when a CD is in place.
• Place the CD with the label surface up.
• Clean the CD.
• Take out the CD and leave the CD compartment open for about an hour to dry moisture condensation.
• The CD-R/CD-RW is blank.
• There is a problem with the quality of the CD-R/CD-RW, recording device or application software.
• Replace all the batteries with new ones if they are weak.

The sound drops out.
• Reduce the volume.
• Clean the CD, or replace it if the CD is badly damaged.
• Place the unit in a location free from vibration.
• Clean the lens with a commercially available blower.
• The sound may drop out or noise may be heard when using poor quality CD-Rs/CD-RWs or if there is a problem with the recording device or application software.
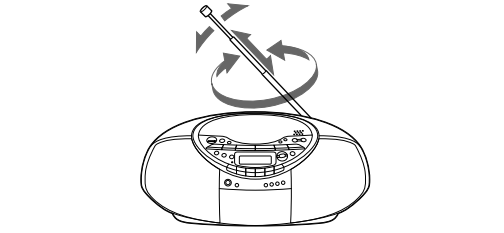
Starting playback takes more time than usual.
• The following discs take a longer time to start playback.
– a disc recorded with a complicated tree structure.
– a disc that has not been finalized (a disc to which data can be added).
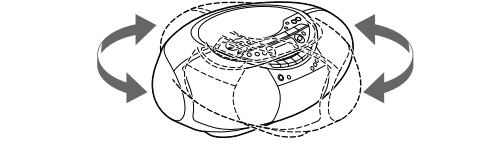– a disc that has many folders or non-MP3 files.

Radio

Reception is poor.
• Reorient the antenna to improve FM reception.

• Reorient the unit itself to improve AM reception.

The audio is weak or has poor quality.
• Replace all the batteries with new ones if they are weak.
• Move the unit away from the TV.
• If you are using the remote while listening to AM radio, noise may be heard.

The picture of your TV becomes unstable.
• If you are listening to an FM program near the TV with an indoor antenna, move the unit away from the TV.

Tape player

The tape does not move when you press an operation button.
• Close the cassette compartment securely.

The ● button 13 does not function or the tape does not play or record.
• Make sure the safety tab on the cassette is in place.

Poor or distorted playback, recording or erasing quality.
• Clean the heads by using dry- or wet-type cleaning cassette (available separately) after every 10 hours of use, before you start an important recording, or after playing an old tape. Failure to clean the tape heads can cause degraded sound quality or an inability of the unit to record or play tapes. For details, refer to the instructions of the cleaning cassette.
• The TYPE II (high position) or TYPE IV (metal) tape is being used. Use TYPE I (normal) tape only.
• Demagnetize the heads using a commercially available tape head demagnetizer.
• Replace all the batteries with new ones if they are weak.

USB device

Recording to an USB device cannot be started.
• The following problems may have occurred.
– The USB device is full.
– The number of MP3 files and folders on the USB device has reached the maximum limit.
– The USB device is write-protected.

Recording stopped before completion.
• You are using an unsupported USB device. See "Playable/Recordable USB devices" (on this page) for the supported device types.
• The USB device is not formatted correctly. Refer to the USB device operation manual for details on how to format the USB device.
• Turn off the unit and remove the USB device. If the USB device has a power switch, turn the USB device off and then on again after removing it from the unit. Then perform recording again.
• If recording and erase operations are repeated several times, the file structure within the USB device becomes complex. Refer to the USB device operation manual for details on how to deal with this problem. If the problem persists, contact your nearest Sony dealer.

Recording to a USB device results in an error.
• You are using an incompatible USB device. See "Playable/Recordable USB devices" for a list of the devices that are supported.
• Turn off the unit and remove the USB device. If the USB device has a power switch, turn the USB device off and then on again after removing it from the unit. Then perform recording again.
• The USB device was disconnected or the power was turned off during recording. Delete the partially recorded file and record it again. If this does not solve the problem, the USB device may be broken. Refer to the USB device operation manual for details on how to deal with this problem. If the problem persists, contact your nearest Sony dealer.

MP3 files or folders on the USB device cannot be erased.
• Check whether the USB device is write-protected or not.
• The USB device was disconnected or the power was turned off during the erase operation. Delete the partially-erased file. If this does not solve the problem, the USB device may be broken. Refer to the USB device operation manual for details on how to deal with this problem. If the problem persists, contact your nearest Sony dealer.

Are you using a compatible USB device?
• If you connect an incompatible USB device, the following problems may occur. See "Playable/Recordable USB devices" for a list of the device that are supported.
– The USB device is not recognized.
– File or folder names are not displayed on this unit.
– Playback is not possible.
– The sound skips.
– There is noise.
– The sound output is distorted.
– Recording stops before completion.

"OVER CURRENT" appears.
• An abnormal level has been detected in the electrical current from the ⟷ (USB) port 3. Turn off the unit and remove the USB device from the ⟷ (USB) port 3. Make sure there is no problem with the USB device. If this message persists, contact your nearest Sony dealer.

There is no sound.
• The USB device is not connected correctly. Turn off the unit and reconnect the USB device. Then turn on the unit and check whether the "USB MEMORY" lights up or not in the display.

There is noise, skipping, or distorted sound.
• Turn off the unit and reconnect the USB device. Then turn on the unit again.
• The music data itself contains noise, or the sound is distorted. Noise may have entered during the recording process. Delete the file and try recording it again.

The USB device cannot be connected to the ⟷ (USB) port 3.
• The connector on the USB device or USB cable was not correctly oriented when the connection was attempted. Connect the connector on the USB device or USB cable in the correct orientation.

"READING" is displayed for an extended time, or it takes a long time before playback starts.
• The reading process can take a long time in the following cases:
– There are many folders or files on the USB device.
– The file structure is extremely complex.
– The memory is almost full.
– The internal memory is fragmented.
To avoid the above problems, we recommend that you adhere to the following guidelines:
– Keep the total number of folders on USB device to 100 or less
– Keep the total number of files per folder to 100 or less.

Erroneous display
• The data stored on the USB device may be corrupted. Send the music data to the USB device again.
• This unit can display only numbers and letters of the alphabet. Other characters will not be displayed correctly.

The USB device is not recognized.
• Turn off the unit and reconnect the USB device, then turn on the unit.
• Connect the supported USB device (See "Playable/Recordable USB devices" (on this page) for the supported device types.).
• The USB device does not work properly. Refer to the USB device operation manual for details on how to deal with this problem. If the problem persists, contact your nearest Sony dealer.

Play does not start.
• Turn off the unit and reconnect the USB device.
• Connect a USB device that this unit can play (see "Playable/Recordable USB devices").

Play does not start from the first track.
• Set the play mode to Normal Play.

MP3 files cannot be played back.
• The MP3 files do not have the ".MP3" extension.
• The data was not stored in the MP3 format.
• The USB storage device uses a file system other than FAT16 or FAT32.*
• The USB storage device is partitioned. Only the MP3 files in the first partition can be played.
• Playback is possible up to 8 levels.
• The number of folders has exceeded 999.
• The number of files has exceeded 999.
• The files are encrypted or protected by passwords.

* This unit supports FAT16 and FAT32, but some USB storage media may not support both file systems.
For details, refer to the operation manual of the USB storage device in question or contact the manufacturer.

Remote

The remote does not function.
• Replace all the batteries in the remote with new ones if they are weak.
• Make sure that you are pointing the remote at the remote sensor on the unit.
• Remove any obstacles in the path of the remote and the unit.
• Make sure the remote sensor is not exposed to strong light such as direct sunlight or fluorescent lamp light.
• Move closer to the unit when using the remote.

After trying the remedies, if you still have problems, unplug the AC power cord or remove all the batteries. After all the indications in the display disappear, plug the AC power cord or insert the batteries again. If the problem persists, please consult your nearest Sony dealer.