

SONY[®]

3-294-664-11 (2)

Mini HI-FI Component System

Operating Instructions
MHC-EC68USB



WARNING

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

To prevent fire, do not cover the ventilation of the apparatus with news papers, 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.

Install this system so that the power cord can be unplugged from the wall socket immediately in the event of trouble.

Batteries or batteries installed apparatus shall not be exposed to excessive heat such as sunshine, fire or the like.

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

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

This appliance is classified as a CLASS 1 LASER product. This marking is located on the rear exterior.

NOTICE FOR THE CUSTOMERS IN THE UNITED KINGDOM

A moulded plug complying with BS1363 is fitted to this equipment for your safety and convenience. Should the fuse in the plug supplied need to be replaced, a fuse of the same rating as the supplied one and approved by ASTA or BSI to BS1362, (i.e., marked with ⚡ or ⚡ mark) must be used. If the plug supplied with this equipment has a detachable fuse cover, be sure to attach the fuse cover after you change the fuse. Never use the plug without the fuse cover. If you should lose the fuse cover, please contact your nearest Sony service station.



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.



Disposal of waste batteries (applicable in the European Union and other European countries with separate collection systems)

This symbol on the battery or on the packaging indicates that the battery provided with this product shall not be treated as household waste. By ensuring these batteries are disposed of correctly, you will help prevent potentially negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling of the battery. The recycling of the materials will help to conserve natural resources.

In case of products that for safety, performance or data integrity reasons require a permanent connection with an incorporated battery, this battery should be replaced by qualified service staff only. To ensure that the battery will be treated properly, hand over the product at end-of-life to the applicable collection point for the recycling of electrical and electronic equipment.

For all other batteries, please view the section on how to remove the battery from the product safely. Hand the battery over to the applicable collection point for the recycling of waste batteries.

For more detailed information about recycling of this product or battery, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

Notice for the customer in the countries applying EU Directives

The manufacturer of this product is Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan. The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters please refer to the addresses given in separate service or guarantee documents.

Note 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.

The recorded music is limited to private use only. Use of the music beyond this limit requires permission of the copyright holders.

- “WALKMAN” and “WALKMAN” logo are registered trademarks of Sony Corporation.
- MICROVAULT is a trademark of Sony Corporation.
- MPEG Layer-3 audio coding technology and patents licensed from Fraunhofer IIS and Thomson.

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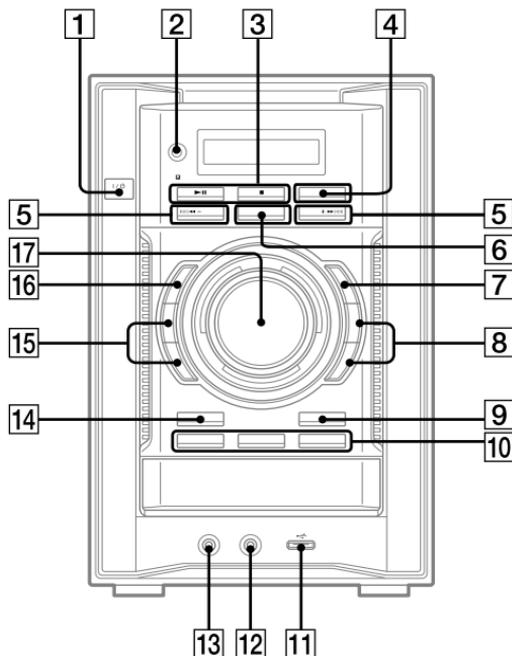
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Guide to parts and controls

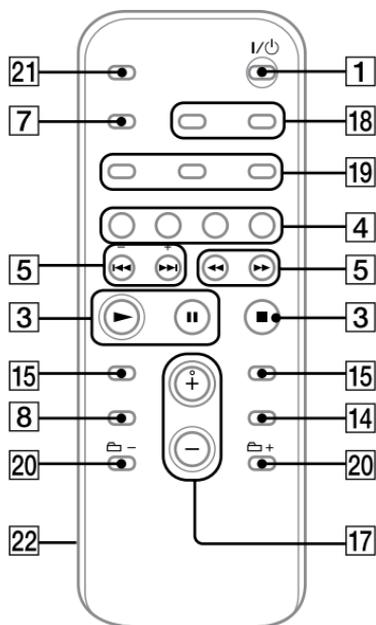
This manual mainly explains operations using the remote, but the same operations can also be performed using the buttons on the unit having the same or similar names.

Unit



Continued

Remote



1
I/O (on/standby) (page 10, 11, 25, 30)
Press to turn on the system.

2
Remote sensor (page 26)

3
Unit: ►|| (play/pause) (page 10, 12, 18, 19, 29)

Remote: ► (play) (page 12, 18, 23, 29)

|| (pause) (page 12, 19)
Press to start or pause playback.

■ (stop) (page 12, 14, 16, 17, 19, 30)
Press to stop playback.

4
FUNCTION (page 20, 30)
Press to select the function.

CD (page 12, 23, 30)
Press to select the CD function.

TUNER/BAND (page 14)
Press to select the TUNER function.
Press to select FM or AM reception mode.

USB (page 17, 18)
Press to select the USB function.

5
◀◀/▶▶ (go back/go forward) (page 11, 12, 17, 19, 23, 25)
Press to select a track or file.

Unit: TUNING +/- (page 14)
Remote: +/- (tuning) (page 14)
Press to tune in the desired station.

◀◀/▶▶ (rewind/fast forward) (page 12, 19)
Press to find a point in a track or file.

6**Unit: USB (page 17, 19)**

Press to select the USB function.

7**DISPLAY (page 11, 21, 23)**

Press to change the information on the display.

8**Unit: DSGX, EQ (page 21)****Remote: EQ (page 21)**

Press to select the sound effect.

9**▲ (open/close) (page 12)**

Press to insert and eject a disc.

10**Unit: DISC 1 – 3 (page 12)**

Press to select a disc. Press to switch to the CD function from other function.

11**↔ (USB) port (page 15, 16, 17, 18, 28)**

Connect an optional USB device (Digital music player or USB storage media).

12**AUDIO INPUT jack (page 20)**

Connect to an audio component (Portable audio player, etc.).

13**PHONES jack**

Connect the headphones.

14**Unit: DISC SKIP/EX-CHANGE (page 12)**

Press to select a disc. Press to exchange a disc while playing.

Remote: DISC SKIP (page 12, 23)

Press to select a disc.

15**Unit: ERASE (page 17)**

Press to erase MP3 files and folders from the connected optional USB device (Digital music player or USB storage media).

ENTER (page 11, 16, 17, 23, 24, 25)

Press to enter the settings.

Remote: CLEAR (page 23)

Press to delete a pre-programmed track or file.

16**USB SYNC REC/REC1 (page 16)**

Press to record from a disc onto the connected optional USB device (Digital music player or USB storage media).

17**Unit: MASTER VOLUME (page 12, 14, 18, 20, 25)**

Turn to adjust the volume.

Remote: VOLUME +/- (page 12, 14, 18, 20, 25)

Press to adjust the volume.

18**CLOCK/TIMER SET (page 11, 25)**

Press to set the clock and the timers.

Continued 

19

REPEAT/FM MODE (page 12, 14, 19)

Press to listen to a disc, an USB device, a single track or file repeatedly.

Press to select the FM reception mode (monaural or stereo).

TUNER MEMORY (page 24)

Press to preset the radio station.

PLAY MODE/TUNING MODE
(page 13, 14, 16, 19, 23, 24, 27)

Press to select the play mode of a CD, MP3 disc or an optional USB device (Digital music player or USB storage media).

Press to select the tuning mode.

20

 **+/-** (select folder) (page 12, 17, 19, 23)

Press to select a folder.

21

SLEEP (page 25)

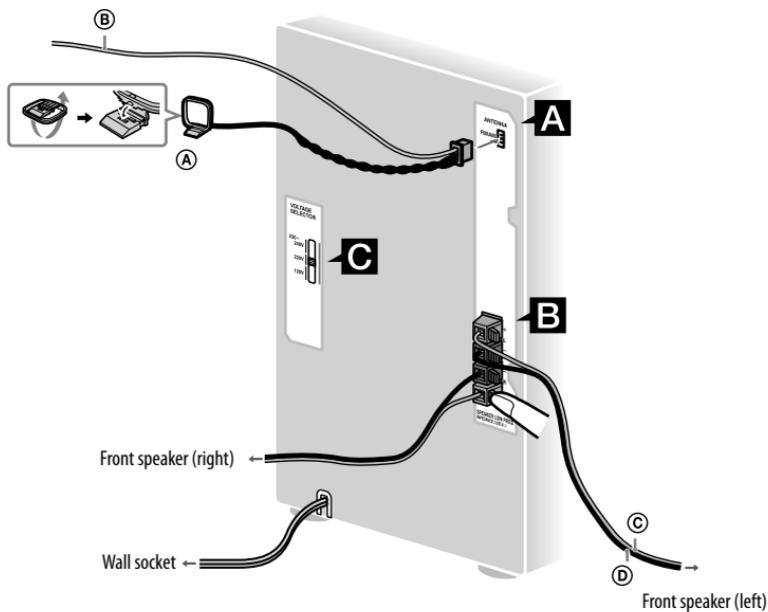
Press to set the Sleep Timer.

22

Battery compartment lid (page 11)

Getting Started

Hooking up the system securely



- Ⓐ AM loop antenna
- Ⓑ FM lead antenna (Extend it horizontally.)
- Ⓒ Red (Solid/⊕)
- Ⓓ Black (Solid/⊖)

Continued

A Antennas

Find a location and an orientation that provide good reception, and then set up the antennas.

Keep the antennas away from the speaker cords, the power cord and the USB cable to avoid picking up noise.

B Speakers

Insert only the stripped portion of the cords into the SPEAKER jacks.

C Power

For models with a voltage selector, set VOLTAGE SELECTOR to the local power line voltage.

Connect the power cord to a wall socket.

If the plug does not fit the wall socket, detach the supplied plug adaptor (only for models equipped with an adaptor).

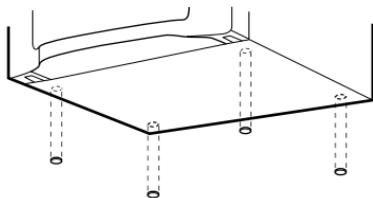
When carrying this system

Use buttons on the unit.

- 1 Remove all discs to protect the CD mechanism.
- 2 Hold down **▶||** **3** on the unit, and press **I/⏻** **1** on the unit until "STANDBY" appears.
- 3 After "LOCK" appears, unplug the power cord.

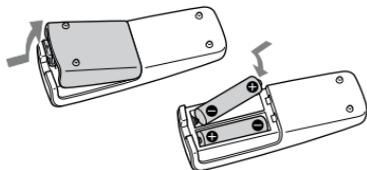
Speaker pads

Attach the supplied speaker pads to the bottom of the front speakers to prevent slipping.



To use the remote

Slide and remove the battery compartment lid [22], and insert the two supplied R6 (size AA) batteries,  side first, matching the polarities shown below.



Notes

- With normal use, the batteries should last for about six months.
- Do not mix an old battery with a new one or mix different types of batteries.
- If you do not use the remote for a long period of time, remove the batteries to avoid damage from battery leakage and corrosion.
- Batteries installed devices shall not be exposed to excessive heat such as sunshine, fire or the like.

Setting the clock

Use buttons on the remote to set the clock.

- 1 Press I/⏻ [1] to turn on the system.
- 2 Press CLOCK/TIMER SET [18].
The hour indication flashes. If “PLAY SET” flashes, press ◀▶ [5] repeatedly to select “CLOCK,” and then press ENTER [15].
- 3 Set the time.
- 4 Press ◀▶ [5] repeatedly to set the hour, and then press ENTER [15].
- 5 Use the same procedure to set the minutes.

Note

The clock settings are lost when you disconnect the power cord or if a power failure occurs.

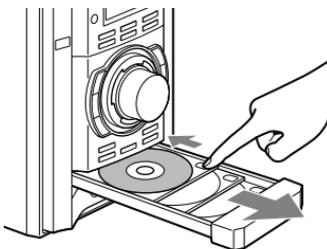
To display the clock when the system is off

Press DISPLAY [7] repeatedly until the clock is displayed. The clock is displayed for about 8 seconds.

Basic Operations

Playing a CD/MP3 disc

- 1 Select the CD function.
Press CD [4].
- 2 Place a disc.
Press ▲ [9] on the unit, and place a disc with the label side up on the disc tray. To place additional discs, slide the disc tray with your finger as shown below.
To close the disc tray, press ▲ [9] on the unit.



Do not force the disc tray closed with your finger, as this may damage the unit.

- 3 Select a disc.
If the discs are currently stopped, press DISC SKIP [14]. To change discs while in other functions, press DISC 1 - 3 [10] on the unit.
- 4 Start playback.
Press ► (or ►|| on the unit) [3].
To exchange other discs during playback, press DISC SKIP [14].
- 5 Adjust the volume.
Press VOLUME +/- [17].

Other operations

To	Press
Pause playback	(or ► on the unit) [3]. To resume play, press the button again.
Stop playback	■ [3].
Select a folder on an MP3 disc	📁 +/- [20].
Select a track or file	◀◀/▶▶ [5].
Find a point in a track or file	Hold down ◀◀/▶▶ [5] during playback, and release the button at the desired point.
Select Repeat Play	REPEAT [19] repeatedly until "REP" or "REP1" appears.
Select a disc	DISC SKIP [14] (or DISC 1 - 3 on the unit [10]) in stop mode.
Switch to CD function from other function	DISC 1 - 3 [10] on the unit (Automatic Source Selection).
Exchange other discs while playing	DISC SKIP/EXCHANGE [14] on the unit.

* When using a CD-DA disc, you can use the same operation to select a track.

To change the play mode

Press PLAY MODE  repeatedly while the player is stopped. You can select normal play (“ALL DISCS” for all discs or “1 DISC” for a disc or * for all MP3 files in the folder on the disc), shuffle play (“ALL DISCS SHUF” or “1 DISC SHUF” or  SHUF*”), or program play (“PGM”).

* When playing a CD-DA disc,  (SHUF) Play performs the same operation as 1 DISC (SHUF) Play.

Notes on Repeat Play

- All tracks or files on a disc are played repeatedly up to five times.
- You cannot select “REP” and “ALL DISCS SHUF” at the same time.
- “REP1” indicates that a single track or file is repeated until you stop it.

Notes on playing MP3 discs

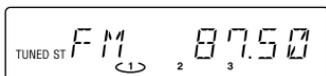
- Do not save other types of files or unnecessary folders on a disc that has MP3 files.
- Folders that have no MP3 files are skipped.
- MP3 files are played back in the order that they are recorded onto the disc.
- The system can only play MP3 files that have a file extension of “.mp3”.
- If there are files on the disc that have the “.mp3” file extension, but that are not MP3 files, the unit may produce noise or may malfunction.
- The maximum number of:
 - folders is 150 (including the root folder).
 - MP3 files is 255.
 - MP3 files and folders that can be contained on a single disc is 300.
 - folder levels (the tree structure of files) is 8.
- Compatibility with all MP3 encoding/writing software, recording device, and recording media cannot be guaranteed. Incompatible MP3 discs may produce noise or interrupted audio or may not play at all.

Notes on playing multisession discs

- If the disc begins with a CD-DA (or MP3) session, it is recognized as a CD-DA (or MP3) disc, and playback continues until another session is encountered.
- A disc with a mixed CD format is recognized as a CD-DA (audio) disc.

Listening to the radio

- 1 Select "FM" or "AM."
Press TUNER/BAND [4] repeatedly.
- 2 Select the tuning mode.
Press TUNING MODE [19] repeatedly until "AUTO" appears.
- 3 Tune in the desired station.
Press +/- (or TUNING +/- on the unit) [5]. Scanning stops automatically when a station is tuned in, and then "TUNED" and "ST" (for stereo programs only) appear.



- 4 Adjust the volume.
Press VOLUME +/- [17].

To stop automatic scanning

Press ■ [3].

To tune in a station with a weak signal

If "TUNED" does not appear and the scanning does not stop, press TUNING MODE [19] repeatedly until "MANUAL" appears, and press +/- (or TUNING +/- on the unit) [5] repeatedly to tune in the desired station.

To reduce static noise on a weak FM stereo station

Press FM MODE [19] repeatedly until "MONO" appears to turn off stereo reception.

Recording from a disc onto an USB device

You can connect an optional USB device (Digital music player or USB storage media) to the  (USB) port **11** on the unit and record music from a disc to the USB device.

You can record from a CD-DA disc or MP3 disc only.

The audio format of files recorded by this system is MP3.

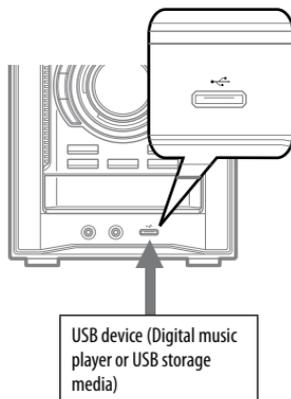
The approximate size of the recording is about 1 MB per minute of recording time from a CD. The size may be larger when recording from an MP3 disc.

See “Playable/Recordable USB devices” (page 35) for a list of USB devices that can be connected to this system.

Synchro Recording

You can easily record an entire disc onto an USB device.

- 1 Connect a recordable USB device to the  (USB) port **11** as shown below.



When USB cable connection is necessary, connect the USB cable supplied with the USB device to be connected.

See the operation manual supplied with the USB device to be connected for details on the operation method.

- 2 Select the CD function, then load the disc you want to record.

- 3 Press PLAY MODE **[19]** repeatedly to select the play mode when the CD player is stopped.

The play mode automatically changes to normal play mode, if you start recording in shuffle play mode, repeat play mode or in program play mode (when no tracks or MP3 files are programmed).

For details about the play mode, see “To change the play mode” (page 19).

- 4 Press USB SYNC REC/REC1 **[16]** on the unit.

“REC” flashes, and the display cycles through “CD SYNC,” “FREExxxx” (remaining space on the USB device), and “PUSH ENTER.”

The USB device stands by for recording and the CD player pauses for play.

- 5 Press ENTER **[15]**.

Recording starts. When the recording is completed, the CD player and the USB device stop automatically.

Recording a single track or MP3 file during playback (REC1)

You can easily record the track or MP3 file that is currently being played back onto an USB device.

- 1 Connect a recordable USB device to the **↔** (USB) port **[11]**.

- 2 Select the CD function, then load the disc you want to record.

- 3 Select the track or MP3 file you want to record, then start play.

- 4 Press USB SYNC REC/REC1 **[16]** on the unit while the selected track or MP3 file is being played back.

“REC” flashes, and the display cycles through “REC1,” “FREExxxx” (remaining space on the USB device), and “PUSH ENTER.”

The USB device stands by for recording and the CD player pauses for play.

- 5 Press ENTER **[15]**.

Recording starts. When the recording is completed, the CD player continues to play.

To stop recording

Press **■** **[3]**.

To remove the USB device

- 1 Check that there is no data being transferred through the USB device while recording, erasing, etc.
- 2 Hold down **■** **[3]** on the unit until “NoDEVICE” appears on the display.
- 3 Remove the USB device.

Tip

You can also remove the device safely after the system is turned off.

To erase MP3 files or folders from the USB device

You can erase MP3 files or folders from the USB device.

- 1 Connect a recordable USB device to the  (USB) port **[11]**.
- 2 Select the USB function.
Press USB **[4]**.
- 3 Press **◀◀/▶▶** **[5]** or **Ⓜ +/-** **[20]** repeatedly to select the MP3 file or folder you want to erase.
- 4 Press ERASE **[15]** on the unit.
“TRACK ERASE” or “FOLDER ERASE,” and “PUSH ENTER” appear alternately in the display.
To cancel the erase operation, press **■** **[3]**.
- 5 Press ENTER **[15]**.
The selected MP3 file or folder is erased.

Folder and file generation rules

When first recording to an 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 Recording¹⁾

Recording source	Folder name	File name
MP3	Same as the recording source ²⁾	
CD-DA	“FLDR001” ³⁾	“TRACK001” ⁴⁾

REC1 recording

Recording source	Folder name	File name
MP3	“REC1” ⁵⁾	Same as the recording source ²⁾
CD-DA		“TRACK001” ⁴⁾

¹⁾ In Program Play mode, the folder name is “FLDRxxx,” and the file name depends on the recording source (CD-DA disc or MP3 disc).

²⁾ Up to 32 characters of the name are assigned.

³⁾ Folder numbers are assigned serially thereafter.

⁴⁾ File numbers are assigned serially thereafter.

⁵⁾ A new file is recorded in the “REC1” folder each time REC1 recording is performed.

Notes

- Do not connect the system and the USB device through an USB hub.
- When recording from a CD, the tracks are recorded as 128 kbps MP3 files. 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 recorded in the created MP3 files.
- If you cancel the recording partway, an MP3 file is created up to the point when the recording was stopped.
- Recording stops automatically if:
 - the USB device runs out of space during recording.
 - the number of MP3 files on the USB device reaches the limit for the number that the system can recognize.
- Up to 999 MP3 files or 997 folders can be contained on a single USB device. 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 mode or program play mode.
- If the folder to be erased contains non-MP3 format files or sub folders, these are not erased.
- If a folder or file that you are trying to record already exists on the USB device with the same name, a sequential number is added after the name without overwriting the original folder or file.
- When recording after the erase operation has been performed, the new folders and files are registered to the erased locations, so files may not be played back in the recorded order.
- The Program Play setting is erased when the erase operation is performed.

Listening to music of an USB device

You can listen to music stored in the USB device.

The audio format that can be played back by this system is MP3* only.

See "Playable/Recordable USB devices" (page 35) for a list of USB devices that can be connected to this system.

* Files with copyright protection (Digital Rights Management) cannot be played by this system.

- 1** Select the USB function.
Press USB [4].
- 2** Connect an optional USB device to the  (USB) port [11] on the unit.

When the USB device is connected, the display changes as follows: "READING" → "STORAGE*"

* When connecting USB storage media, the volume label is displayed next if recorded.

Note

It may take about 10 seconds before "READING" appears depending on the type of USB device connected.

- 3** Start playback.
Press  (or  on the unit) [3].
- 4** Adjust the volume.
Press VOLUME +/- [17].

Note

Some files may not be detected by the unit even if the file format is supported. In such case, see page 27, 28 for details.

To remove the USB device

- 1 Press **■** [3] to stop playback.
- 2 Check that there is no data being transferred through the USB device while recording, erasing, etc.
- 3 Hold down **■** [3] on the unit until “NoDEVICE” appears on the display.
- 4 Remove the USB device.

Tip

You can also remove the device safely after the system is turned off.

Other operations

To	Press
Pause playback	 (or ▶ on the unit) [3]. To resume play, press the button again.
Stop playback	■ [3]. To cancel resume play, press the button twice and check that “RESUME” disappears from the display.
Select a folder	📁 +/- [20].
Select a file	◀▶▶▶ [5].
Find a point in a file	Hold down ◀▶▶▶ [5] during playback, and release the button at the desired point.
Select Repeat Play	REPEAT [19] repeatedly until “REP” or “REPI” appears.

To change the play mode

Press **PLAY MODE** [19] repeatedly while the USB device is stopped. You can select normal play (“**📁**” for all files in the folder on the digital music player), 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 to start playback when:
 - the folder structure is complex.
 - the memory capacity is excessive.
- When the USB device is inserted, the system reads all the files on the USB device. If there are many folders or files on the USB device, it may take a long time to finish reading the USB device.
- Do not connect the system and the USB device through an USB hub.
- With some connected USB devices, after an operation is performed, there may be a delay before it is performed by this system.
- If the system is turned off during Resume Play mode, when the system is turned on again playback starts from the beginning of the MP3 file that was in Resume Play mode.
- This system does not necessarily support all the functions provided in a connected USB device.
- Files recorded by this system are played back in the order of folder creation. Files recorded by a device other than this system such as a computer may not be played back in the order in which they were recorded.
- The playback order for the system may differ from the playback order of the connected USB device.
- Always turn off the system before removing the USB device. Removing the USB device while the system is on may corrupt the data on the USB device.
- Do not save other types of files or unnecessary folders on an USB device that has MP3 files.

Continued 

- Folders that have no MP3 files are skipped.
- The system can only play MP3 files that have a file extension of “.mp3.”
- If there are files on the USB device that have the “.mp3” file extension, but that are not MP3 files, the unit may produce noise or may malfunction.
- Up to 999 MP3 files or 997 folders can be contained on a single USB device. The maximum number of MP3 files and folders may vary depending on the MP3 file and folder structure.
- Compatibility with all MP3 encoding/writing softwares, recording devices, and recording media cannot be guaranteed. Incompatible USB device may produce noise or interrupted audio or may not play at all.

Using optional audio components

- 1** Connect additional audio component to the AUDIO INPUT jack **[12]** on the unit using an analog audio cord (not supplied).
- 2** Turn down the volume.
Press VOLUME – **[17]**.
- 3** Select the AUDIO IN function.
Press FUNCTION **[4]** repeatedly until “AUDIO IN” appears.
- 4** Start playing the connected component.
- 5** Adjust the volume.
Press VOLUME +/- **[17]**.

To connect an optional headphones

Connect headphones to the PHONES jack **[13]** on the unit.

Adjusting the sound

To add a sound effect

To	Press
Generate a more dynamic sound (Dynamic Sound Generator X-tra)	DSGX [8] on the unit.
Set the sound effect	EQ [8].

Changing the display

To	Press
Change information on the display*	DISPLAY [7] repeatedly when the system is on.
Change Display mode (See below.)	DISPLAY [7] repeatedly when the system is off.

* For example, you can view CD/MP3 disc information or the USB device information, such as:

- track or file number during normal play.
- track or file name (“🎵”) during normal play.
- artist name (“👤”) during normal play.
- album or folder name (“📁”) during normal play.
- total playing time while the player is stopped.

The system offers the following display modes.

Display mode	When the system is off,
Power Saving Mode ¹⁾	The display is turned off to conserve power. The timer and clock continue to operate.
Clock ²⁾	The clock is displayed.

¹⁾ You cannot set the clock in Power Saving Mode.

²⁾ The clock display automatically turns on Power Saving Mode after 8 seconds.

Notes on the display information

- Characters that cannot be displayed appear as “_”.
- The following is not displayed:
 - total playing time and remaining playing time for an MP3 disc and USB device.
- The following are not displayed correctly:
 - elapsed playing time of a file encoded using a VBR (variable bit rate).
 - folder and file names that do not follow either the ISO9660 Level 1, Level 2 or Joliet in the expansion format.
- The following are displayed:
 - total playing time for a CD-DA disc when the play mode is “1 DISC.”
 - remaining playing time for a track.
 - ID3 tag information for MP3 files when ID3 version 1 and version 2 tags are used (ID3 version 2 tag information display has priority when both ID3 version 1 and version 2 tags are used for a single file).
 - up to 15 characters of ID3 tag information using uppercase letters (A to Z), numbers (0 to 9), and symbols (“\$%’()*,-./<=>@[\]_’{|}!/?^”).

Other Operations

Creating your own program

(Program Play)

Use buttons on the remote to create your own program.

1 Select the desired function.

CD

Press CD [4] to select the CD function.

USB

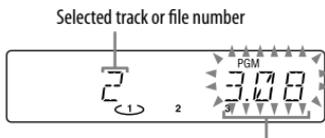
Press USB [4] to select the USB function.

2 Press PLAY MODE [19] repeatedly until "PGM" appears while the system is stopped.

3 Press DISC SKIP [14] repeatedly to select a disc.

4 Press I◀◀/▶▶I [5] repeatedly until the desired track or file number appears.

When programming MP3 files, press  +/- [20] repeatedly to select the desired folder, and then select the desired file.



Total playing time of the selected track

5 Press ENTER [15] to add the track or file to the program.

CD

"- .- .-" appears when the total program time exceeds 100 minutes for a CD or when you select an MP3 file.

USB

The total program time cannot be displayed, so "- .- .-" appears.

6 Repeat steps 3 through 5 to program additional tracks or files, up to a total of 25 tracks or files.

7 To play your program of tracks or files, press ▶ [3].

The program remains available until you open the disc tray or remove the USB device. To play the same program again, press ▶ [3].

To cancel Program Play

Press PLAY MODE [19] repeatedly until "PGM" disappears while the system is stopped.

To delete the last track or file of the program

Press CLEAR [15] while the system is stopped.

To view program information, such as total track number of the program

Press DISPLAY [7] repeatedly.

Presetting radio stations

You can preset your favourite radio stations and tune them in instantly by selecting the corresponding preset number.

Use buttons on the remote to preset stations.

- 1 Tune in the desired station (see "Listening to the radio" (page 14)).
- 2 Press TUNER MEMORY **[19]**.



- 3 Press +/- **[5]** repeatedly to select your desired preset number.
If another station is already assigned to the selected preset number, the station is replaced by the new stations.
- 4 Press ENTER **[15]**.

- 5 Repeat steps 1 through 4 to store other stations.
You can preset up to 20 FM and 10 AM stations. The preset stations are retained for about half a day even if you disconnect the power cord or if a power failure occurs.
- 6 To call up a preset radio station, press TUNING MODE **[19]** repeatedly until "PRESET" appears, and then press +/- **[5]** repeatedly to select the desired preset number.

Using the Timers

The system offers two timer functions. If you use both timers, the Sleep Timer has priority.

Sleep Timer:

You can fall asleep to music. This function works even if the clock is not set.

Press SLEEP [21] repeatedly.

If you select "AUTO," the system automatically turns off after the current disc or USB device stops or in 100 minutes.

Do not select "AUTO" during Synchro Recording to a USB device, or during the erase operation.

Play Timer:

You can wake up to CD, tuner or optional USB device at a preset time.

- 1 Prepare the sound source.
Press VOLUME +/- [17] to adjust the volume.
To start from a specific CD track or file, create your own program (page 23).
- 2 Press CLOCK/TIMER SET [18].
- 3 Press I◀◀/▶▶I [5] repeatedly to select "PLAY SET," then press ENTER [15].
"ON TIME" appears, and the hour indication flashes.

- 4 Set the time to start playback.
Press I◀◀/▶▶I [5] repeatedly to set the hour, and then press ENTER [15].
The minute indication flashes. Use the procedure above to set the minutes.
- 5 Use the same procedure as in step 4 to set the time to stop playback.
- 6 Select the sound source.
Press I◀◀/▶▶I [5] repeatedly until the desired sound source appears, then press ENTER [15]. The display shows the timer settings.
- 7 Press I/⏻ [1] to turn off the system.
The system will be on at the preset time.

To activate or check the timer again

Press CLOCK/TIMER SET [18], press I◀◀/▶▶I [5] repeatedly until "PLAY SEL" appears, then press ENTER [15].

To cancel the timer

Repeat the same procedure as above until "OFF" appears, and then press ENTER [15].

To change the setting

Start over from step 1.

Tip

The Play Timer setting remains as long as the setting is not cancelled manually.

Troubleshooting

- 1 Make sure the power cord and speaker cords are correctly and firmly connected.
- 2 Find your problem in the checklist below, and take the indicated corrective action.
If the issue persists, contact your nearest Sony dealer.

If "PROTECT" appears on the display

Immediately unplug the power cord, and check the following items.

- If your system has a voltage selector, is the voltage selector set to the correct voltage?
- Are the + and - speaker cords short-circuited?
- Are you using only the supplied speakers?
- Is anything blocking the ventilation holes on the top or back of the system?

After you have checked these above items and found to be all right, reconnect the power cord, and turn on the system. If the issue persists, contact your nearest Sony dealer.

General

The system does not turn on.

- Is the power cord plugged in?
- Is the voltage selector set correctly to match the local power line voltage?

Sound comes from one channel, or the left and right volumes are unbalanced.

- Place the speakers as symmetrically as possible.
- Connect only the supplied speakers.

Sound lacks bass.

- Check that the Black (or Red) cord is connected to the speaker's - (or +) jack correctly.

Severe hum or noise.

- Move the system away from sources of noise.
- Connect the system to a different wall socket.
- Install a noise filter (available separately) to the power cord.

The remote does not function.

- Remove any obstacles between the remote and the remote sensor [2] on the unit, and position the unit away from fluorescent lights.
- Point the remote at the system's sensor.
- Move the remote closer to the system.

CD/MP3 player

The sound skips, or the disc will not play.

- Wipe the disc clean, and replace it.
- Move the system to a location away from vibration (for example, on top of a stable stand).
- Move the speakers away from the system, or place them on separate stands. At high volume, speaker vibration may cause the sound to skip.

Play does not start from the first track.

- Press PLAY MODE  repeatedly until both “PGM” and “SHUF” disappear to return to normal play.

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 recorded in multisession mode.
 - a disc that has not been finalized (a disc to which data can be added).
 - a disc that has many folders.

USB device

You cannot start recording to an USB device.

- 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 upper limit.
 - The USB device is write-protected.

Recording is stopped before it is finished.

- You are using an unsupported USB device. See “Playable/Recordable USB devices” (page 35) for the supported device types.
- The USB device is not formatted correctly. Refer to the USB device operation manual for how to format.
- Turn off the system 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 system. Then perform recording again.
- If the recording and erase operations are repeated multiple times, the file structure within the USB device becomes fragmented. Refer to the USB device operation manual for how to deal with this problem.

Recording to an USB device results in an error.

- You are using an unsupported USB device. See “Playable/Recordable USB devices” (page 35) for the supported device types.
- The USB device was disconnected or the power was turned off during recording. Delete the partially-recorded file, and record again. If this does not fix the problem, the USB device may be broken. Refer to the USB device operation manual for how to deal with this problem.
- Turn off the system 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 system. Then perform recording again.

Files are not played back in the recorded order.

- When recording after the erase operation has been performed, the new folders and files are registered to the erased locations, so files may not be played back in the recorded order.

Files or folders on the USB device cannot be erased.

- Check if the USB device is write-protected.
- The USB device was disconnected or the power was turned off during the erase operation. Delete the partially-erased file. If this does not fix the problem, the USB device may be broken. Refer to the USB device operation manual for how to deal with this problem.

Are you using a supported USB device?

- If you connect an unsupported USB device, the following problems may occur. See “Playable/Recordable USB devices” (page 35) for the supported device types.
 - The USB device is not recognized.
 - File or folder names are not displayed on this system.
 - Playback is not possible.
 - The sound skips.
 - There is noise.
 - A distorted sound is output.
 - Recording stops before it is finished.

“OVER CURRENT” appears.

- A problem has been detected with the level of electrical current from the  (USB) port [\[1\]](#). Turn off the system and remove the USB device from the  (USB) port [\[1\]](#). Make sure there is no problem with the USB device. If this display pattern persists, contact your nearest Sony dealer.

There is no sound.

- The USB device is not connected correctly. Turn off the system and reconnect the USB device, then turn on the system and check if “USB MEMORY” appears in the display.

There is noise, skipping, or distorted sound.

- Turn off the system and reconnect the USB device, then turn on the system.
- 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 again.

The USB device cannot be connected into the (USB) port [\[1\]](#).

- The USB device is being connected backwards. Connect the USB device 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 capacity is excessive.
 - The internal memory is fragmented.
 Thus, we recommend following these guidelines.
 - Total folders on USB device: 100 or less
 - Total files per folder: 100 or less

Erroneous display

- Send the music data to the USB device again, as the data stored in the USB device may have been corrupted.
- The character codes that can be displayed by this system are numbers and alphabet only. Other characters are not displayed correctly.

The USB device is not recognized.

- Turn off the system and reconnect the USB device, then turn on the system.
- Connect the supported USB device (page 35).
- The USB device does not work properly. Refer to the USB device operation manual for how to deal with this problem.

Play does not start.

- Turn off the system and reconnect the USB device, then turn on the system.
- Connect the supported USB device (page 35).
- Press  (or  on the unit)  to start play.

Play does not start from the first track.

- Set the play mode to normal play mode.

MP3 files cannot be played back.

- The MP3 file does not have the extension: “.mp3.”
 - The data is not stored in MP3 format (see page 18).
 - USB storage media formatted with file systems other than FAT16 or FAT32 (Cluster size 512 byte — 32 kbyte) are unsupported.*
 - If you use partitioned USB storage media, only MP3 files on the first partition can be played.
 - Playback is possible up to 8 levels.
 - The number of folders has exceeded 997.
 - The number of files has exceeded 999.
 - Files that are encrypted or protected by passwords, etc. cannot be played back.
- * This system supports FAT16 and FAT32, but some USB storage media may not support all of these FAT. For details, see the operation manual of each USB storage media or contact the manufacturer.

Tuner

Severe hum or noise, or stations cannot be received. (“TUNED” or “ST” flashes on the display.)

- Connect the antenna properly.
- Find a location and an orientation that provide good reception, and then set up the antenna again.
- Keep the antennas away from the speaker cords, the power cord and the USB cable to avoid picking up noise.
- Consult your nearest Sony dealer if the supplied AM antenna has come off the plastic stand.
- Turn off nearby electrical equipment.

To change the AM tuning interval

The AM tuning interval is factory-preset to 9 kHz (or 10 kHz) (for some areas: this function is not available on the European models).

Use buttons on the unit to change the AM tuning interval.

- 1 Tune in any AM station, and then turn off the system.
- 2 After “STANDBY” stops flashing, press DISPLAY [7] to display the clock and then press I/⏻ [1] while holding down TUNING + [5] on the unit. All the AM preset stations are erased. To reset the interval to the factory preset, repeat the procedure.

To improve tuner reception

Turn off the CD/USB player power by using the CD/USB power management function. By default, the CD/USB power is turned on.

Use buttons on the unit to turn off the CD/USB player power.

- 1 Press CD [4] to select the CD function.
- 2 Press I/⏻ [1] to turn off the system.
- 3 After “STANDBY” stops flashing, press DISPLAY [7] to display the clock and then press I/⏻ [1] while holding down ■ (stop) [3] on the unit. “CD/USB POWER OFF” appears. When the CD/USB player power is turned off, the disc access time increases. In addition, when the TUNER function is selected, power is not supplied to the USB device, so it is not recognized even if connected. To turn on the CD/USB player power, repeat the procedure until “CD/USB POWER ON” appears.

To reset the system to factory settings

If the system still does not operate properly, reset the system to factory settings. You cannot reset the system to factory settings in Power Saving Mode. Use buttons on the unit to reset the system to its factory default settings.

- 1 Disconnect and reconnect the power cord, and then turn on the system.
- 2 Press ■ [3], FUNCTION [4], and I/⏻ [1] at the same time. All user-configured settings, such as preset radio stations, timer, and the clock, are deleted.

Messages

General

PROTECT: The following causes can be considered:

- The voltage selector may not be set to the correct local power line voltage.
- Speaker cords may be short-circuited.
- The ventilation holes may be blocked.

See “If “PROTECT” appears on the display” (page 26) to check what to do if this message appears.

CD/MP3 player, Tuner

LOCKED: The disc tray does not open.
Contact your nearest Sony dealer.

NO STEP: All of the programmed tracks have been erased.

TIME NG: The Play Timer or start and end times are set to the same time.

OVER: You have reached the end of the disc while pressing ►► [5] during playback or pause.

PUSH SELECT: Select “PLAY SELECT”

PUSH STOP: Stop playback, then select the play mode.

READING: The system is reading information of the disc. Some buttons are not available.

FULL: You tried to program more than 26 tracks or files (steps).

USB device

DATA ERROR: You tried to play a file that is not playable.

DEVICE ERROR: The USB device could not be recognized or an unknown device is connected (page 29).

FATAL ERROR: The USB device was removed during recording or erase operation, and may have been damaged.

NO STEP: All of the programmed tracks or files have been erased.

NO SUPPORT: An unsupported USB device is connected, or the USB device is connected to this system through a hub.

NO TRACK: No playable file is loaded in the system.

NOT USED: You tried to perform a specific operation under conditions where that operation is prohibited.

OVER CURRENT: An over current was detected.

PROTECTED: The USB device is write-protected.

PUSH STOP: You tried to perform an operation that can be performed only when the system is stopped.

READING: The system is reading information of the USB device. Some buttons are not available.

REC ERROR: Recording did not start, stopped partway, or otherwise could not be performed (page 27).

REMOVED: The USB device has been removed.

FULL: You tried to program more than 26 tracks or files (steps).

Precautions

Discs that this system CAN play

- Audio CD
- CD-R/CD-RW (audio data/MP3 files)

Discs that this system CANNOT play

- CD-ROM
- CD-R/CD-RW other than those recorded in music CD format or MP3 format conforming to ISO9660 Level 1/Level 2, Joliet
- CD-R/CD-RW recorded in multisession that have not ended by “closing the session”
- CD-R/CD-RW of poor recording quality, CD-R/CD-RW that have scratches or are dirty, or CD-R/CD-RW recorded with an incompatible recording device
- CD-R/CD-RW which is finalized incorrectly
- Discs containing files other than MPEG 1 Audio Layer-3 (MP3) files
- Discs of non-standard shape (for example, heart, square, star)
- Discs that have adhesive tape, paper, or sticker attached to them
- Rental or used discs with attached seals where the glue extends beyond the seal
- Discs that have labels printed using ink that feels tacky when touched

Notes on discs

- Before playing, wipe the disc with a cleaning cloth from the centre out to the edge.
- Do not clean discs with solvents, such as benzene thinner, or commercially available cleaners or anti-static spray intended for vinyl LPs.
- Do not expose discs to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight.

On safety

- 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.
- Completely disconnect the power cord (mains lead) from the wall socket (mains) if it is not going to be used for an extended period of time. When unplugging the unit, always grip the plug. Never pull the cord itself.
- Should any solid object or liquid get into the system, unplug the system, and have it checked by qualified personnel before operating it again.
- AC power cord must be changed only at the qualified service shop.

On placement

- Do not place the system in an inclined position or in locations that are extremely hot, cold, dusty, dirty, or humid or lacking adequate ventilation, or subject to vibration, direct sunlight or a bright light.

- Be careful when placing the unit or speakers on surfaces that have been specially treated (for example, with wax, oil, polish) as staining or discoloration of the surface may result.
- If the system 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, and cause the system to malfunction. In this situation, remove the disc, and leave the system turned on for about an hour until the moisture evaporates.

On heat buildup

- Heat buildup on the unit during operation is normal and is not cause for alarm.
- Do not touch the cabinet if it has been used continuously at a high volume because the cabinet may have become hot.
- Do not obstruct the ventilation holes.

On the speaker system

This speaker system is not magnetically shielded, and the picture on nearby TV sets may become magnetically distorted. In this situation, turn off the TV, wait 15 to 30 minutes, and turn it back on. If there is no improvement, move the speakers far away from the TV.

Cleaning the cabinet

Clean this system 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 thinner, benzene, or alcohol.

Specifications

Main unit

Amplifier section

European model:

Power output (rated):

70 W + 70 W (at 6 Ω , 1 kHz,
1% THD)

RMS output power (reference):

90 W + 90 W (per channel at 6 Ω ,
1 kHz, 10% THD)

Other models:

The following are measured at AC 120, 127,
220, 240 V, 50/60 Hz

Power output (rated):

50 W + 50 W (at 6 Ω , 1 kHz,
1% THD)

RMS output power (reference):

70 W + 70 W (per channel at 6 Ω ,
1 kHz, 10% THD)

Inputs

AUDIO IN (stereo mini jack):

Sensitivity 800 mV, impedance 22 kilohms

⚡ (USB) port: Type A

Outputs

PHONES (stereo mini jack): accepts
headphones with an impedance of 8 Ω or
more

SPEAKER: impedance
6 Ω

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

Transfer speed

Full-Speed

Supported USB device

Mass Storage Class

Maximum current

500 mA

Continued 

CD player section

System: Compact disc and digital audio system

Laser: Semiconductor laser ($\lambda=770 - 810$ nm)

Emission duration: continuous

Frequency response: 20 Hz – 20 kHz

Signal-to-noise ratio: More than 90 dB

Dynamic range: More than 88 dB

Tuner section

FM stereo, FM/AM superheterodyne tuner

Antenna:

FM lead antenna

AM loop antenna

FM tuner section:

Tuning range:

87.5 – 108.0 MHz (50 kHz step)

Intermediate frequency: 10.7 MHz

AM tuner section:

Tuning range

European model:

531 – 1,602 kHz

(with 9 kHz tuning interval)

Other models:

530 – 1,710 kHz

(with 10 kHz tuning interval)

531 – 1,710 kHz

(with 9 kHz tuning interval)

Intermediate frequency: 450 kHz

Speaker

Front speaker (SS-EC68/SS-EC68S)

Speaker system:

2 way 2 Drivers speaker system, Bass reflex

Speaker unit:

Woofer: 16 cm, cone type

Tweeter: 4 cm, horn type

Rated impedance: 6 ohms

Dimensions (Approx.):

220 × 306 × 215 mm (w/h/d)

Mass (Approx.): 2.5 kg

General

Power requirements

European model:

AC 230 V, 50/60 Hz

Mexican model: AC 127 V, 60 Hz

Argentine model: AC 220 V, 50/60 Hz

Other models: AC 120, 220 or 230 – 240 V, 50/60 Hz, adjustable with voltage selector

Power consumption

European model:

130 W

0.5 W (in Power Saving Mode)

Other models: 110 W

Dimensions (w/h/d) (excl. speakers)

Approx. 200 × 306 × 415 mm

Mass (excl. speakers)

European model:

6.0 kg

Other models:

5.6 kg

Supplied accessories: Remote Commander (1), R6 (Size AA) batteries (2), FM lead/AM loop antenna (1), Speaker pads (8)

Design and specifications are subject to change without notice.



- Standby power consumption: 0.5 W
- Halogenated flame retardants are not used in the certain printed wiring boards.
- Halogenated flame retardants are not used in cabinets.

Playable/Recordable USB devices

You can use the following Sony USB devices on this system. Other USB devices cannot be used on this system.

Verified Sony digital music player (as of December 2007)

Product name	Model name
Walkman®	NWD-B103 / B105 / B103F / B105F
	NWZ-A815 / A816 / A818
	NWZ-S515 / S516 / S615F / S616F / S618F

Verified Sony IC Recorder (as of December 2007)

Product name	Model name
IC Recorder	ICD-U50 / U60 / U70

Verified Sony USB storage media (as of December 2007)

Product name	Model name
MICROVAULT	USM512JX / 1GJX / 2GJX / 4GJX

Notes

- The unit is unable to read data in NTFS format.
- The unit is unable to read data other than that saved in the first partition of a hard disk drive.
- 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.
- When formatting the above models, be sure to format using the model itself or the dedicated formatting software for that model. Otherwise, you may be unable to record the USB device properly on this system.

Note on Walkman

When connecting a Walkman® to the system, be sure to connect after the display “Creating Library” or “Creating Database” on the Walkman® has disappeared.

