SONY

2-688-576-**11**(1)

Micro HI-FI
Component System

Operating Instructions

GB

CMT-EH20DAB

DAB — Digital Audio Broadcasting
R·D·S

© 2006 Sony Corporation   Printed in China

http://www.sony.net/

COMPACT DISC DIGITAL AUDIO
eco info

Printed on 100% recycled paper using VOC (Volatile Organic Compound)-free vegetable oil based ink.

WARNING

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

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 unit to an easily accessible AC outlet. Should you notice an abnormality in the unit, 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.

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 commander

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.

MPEG Layer-3 audio coding technology and patents licensed from Fraunhofer IIS and Thomson.
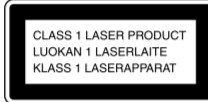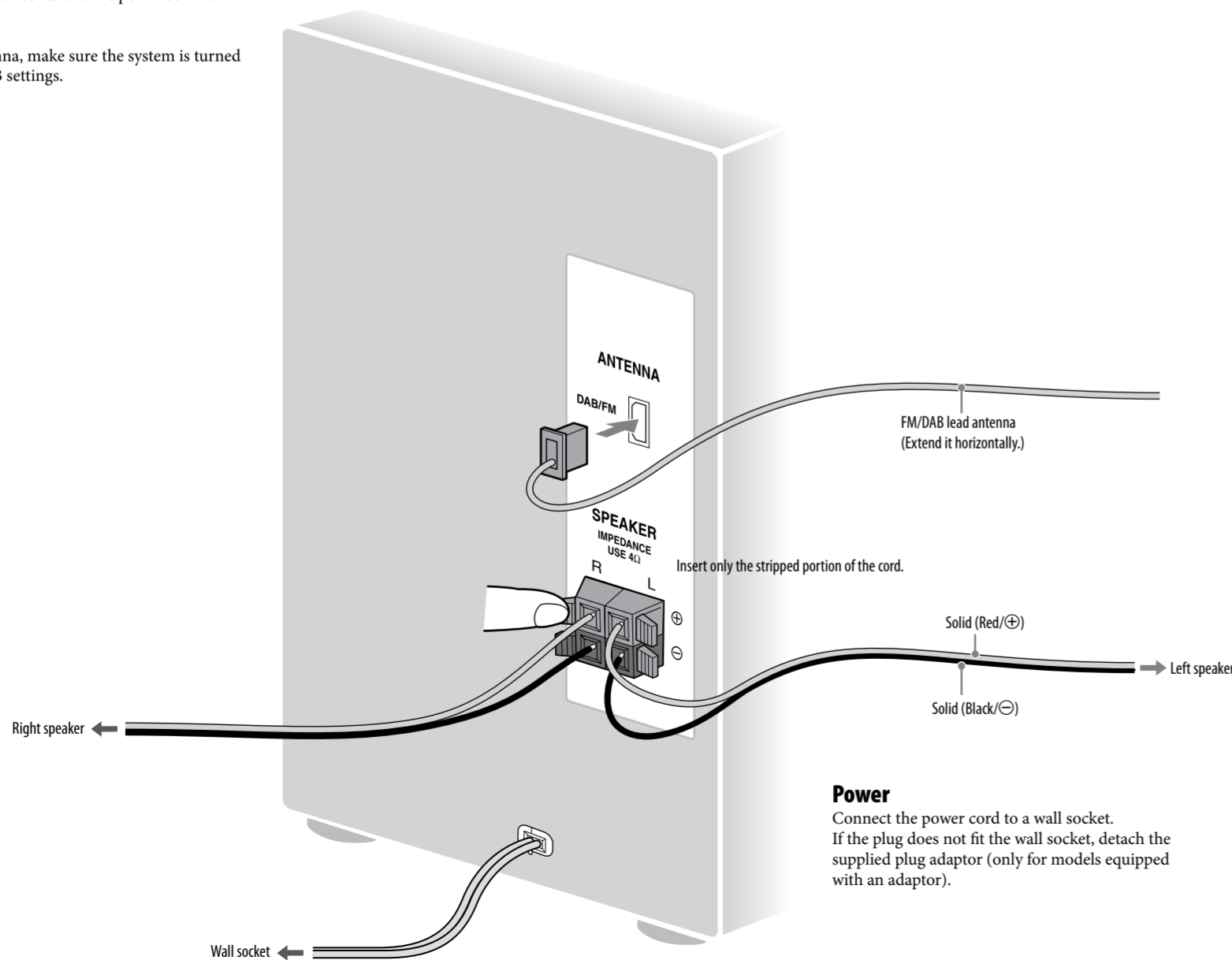
Except for customers in the U.S.A. and Canada

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

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

Hooking up the system securely

Antennas

Find a location and an orientation that provide good reception, and then set up the antenna.
Keep the antenna away from the speaker cords and the power cord to avoid picking up noise.
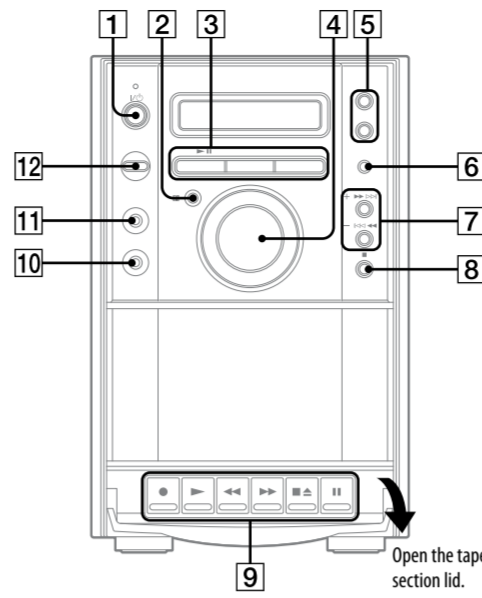
Before unplugging the FM/DAB antenna, make sure the system is turned off to preserve your own FM and DAB settings.

ANTENNA
DAB/FM
FM/DAB lead antenna (Extend it horizontally.)
SPEAKER
IMPEDANCE USE 4Ω
R   L
Insert only the stripped portion of the cord.
Solid (Red/⊕)
Solid (Black/⊖)
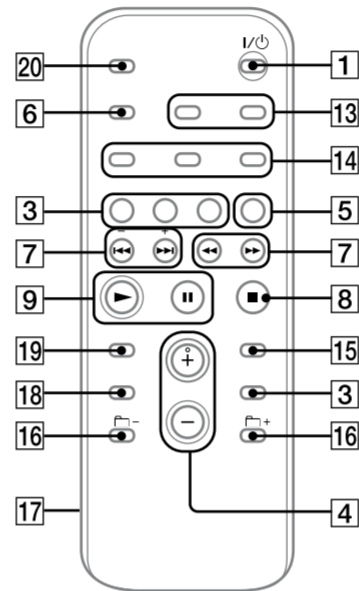Right speaker
Left speaker

Power

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).

Wall socket

Basic Operations

Open the tape section lid.

Before using the system

To use the remote

Slide and remove the battery compartment lid 17, and insert the two R6 (size AA) batteries (not supplied), ⊖ side first, matching the polarities shown below.

Notes on using the remote

• 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.

To set the clock

1 Turn on the system.
Press I/⏻ (power) 1.

2 Select the clock set mode.
Press CLOCK/TIMER SET 13 on the remote. If the current mode appears on the display, press I◀◀/▶▶I 7 on the remote repeatedly to select "CLOCK," and then press ENTER 15 on the remote.

3 Set the time.
Press I◀◀/▶▶I 7 on the remote repeatedly to set the hour, and then press ENTER 15 on the remote. Use the same procedure to set the minutes.
The clock settings are lost when you disconnect the power cord or if a power failure occurs.

To run the DAB Automatic Scan

When you turn on the system for the first time after you purchase the system, DAB Automatic Scan starts automatically and creates a list of available services. If you want to run the DAB Automatic Scan again, perform the procedure below.

1 Press DAB AUTO SCAN 5 on the unit.
"DAB SCAN" and "PUSH DAB" appear.

2 Press DAB 5.
Scanning begins. The scanning progress is indicated by advancing asterisks. Depending on the DAB services available in your area, scanning may take a few minutes.

When scanning is complete, a list of available services is created.

Notes

• If your country or region does not support DAB broadcast, "NO SERV" appears.
• Do not press any button on the unit or the remote during DAB Automatic Scan. Scanning is interrupted and service list may not be created properly. In this case, run the DAB Automatic Scan again.
• If you move to another area, repeat this procedure to store the stations for your new area.
• This procedure clears all previously stored presets.
• Before unplugging the DAB antenna, make sure the system is turned off to preserve your own DAB settings.
• This tuner does not support data services.

Selecting a music source

Press the following buttons (or press FUNCTION 3 repeatedly).

To select	Press
CD	CD 3 on the remote.
Tuner	TUNER/BAND 3.
DAB	DAB 5.
Tape	TAPE 3 on the remote.
Component* (connected using an audio cord)	FUNCTION 3 repeatedly until "AUDIO IN" appears.

* If the component has the AVLS (Automatic Volume Limiter System) or BASS BOOST function, turn off the function to avoid distorted sound from the speakers.

Adjusting the sound

To adjust the volume

Press VOLUME +/– on the remote (or turn the VOLUME control on the unit) 4.

To add a sound effect

To	Press
Generate a more dynamic sound (Dynamic Sound Generator X-tra)	DSGX 12 on the unit.
Set the sound effect	EQ 18 on the remote.

Playing a CD/MP3 disc

1 Select the CD function.
Press CD on the remote (or FUNCTION repeatedly) 3.

2 Place a disc.
Press ▲PUSH OPEN/CLOSE 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 on the unit.

▲PUSH OPEN/CLOSE

3 Start playback.
Press ▶ (play) 9 on the remote (or CD/▶II (play/pause) 3 on the unit).

To	Press
Pause playback	II (pause) 9 on the remote (or CD/▶II (play/pause) 3 on the unit). To resume play, press it again.
Stop playback	■ (stop) 8.
Select a folder on an MP3 disc	⌂ +/– 16 on the remote.
Select a track or file	I◀◀/▶▶I (go back/go forward) on the remote (I◁◁/▷▷I on the unit) 7.
Find a point in a track or file	Hold down ◀◀/▶▶ (rewind/fast forward) 7 during playback, and release it at the desired point.
Select Repeat Play	REPEAT 14 on the remote repeatedly until "REP" appears.

To change the play mode

Press PLAY MODE 14 on the remote repeatedly while the player is stopped. You can select normal play ("⌂") for all MP3 files in the folder on the disc), shuffle play ("SHUF" or "⌂ SHUF*"), or program play ("PGM").
* When playing a CD-DA disc, ⌂ (SHUF) Play performs the same operation as SHUF Play.

Notes on Repeat Play

• All tracks or files on a disc are played repeatedly up to five times.
• "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 tracks or 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 256.
  – folder levels (the tree structure of files) is eight.
• 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

Before you can receive DAB, you must complete the DAB Automatic Scan procedure (see "Before using the system").

1 Select "DAB" or "FM."
Press TUNER/BAND 3 repeatedly. You can also select DAB directly by pressing DAB 5.

2 Select the tuning mode.
Press TUNING MODE 14 on the remote repeatedly until "AUTO" appears.

3 Tune in the desired station.
Press +/– on the remote (or TUNING + or – on the unit) 7. Scanning stops automatically when a station is tuned in, and then "TUNED" (DAB only) and "STEREO" (for stereo programs) appear. When you tune in a DAB station or an FM station that provides RDS services, the service name or station name appears on the display.

Tip
Press ■ (stop) 8 to stop automatic scanning (FM band only).

To tune in a station with a weak signal (FM band only)

If the scanning does not stop, press TUNING MODE 14 on the remote repeatedly until "MANUAL" appears, and then press +/– on the remote (or TUNING + or – on the unit) 7 repeatedly to tune in the desired station.

Notes on listening to DAB stations

• When tuning in a DAB station, it may take a few seconds before you hear any sound.
• Primary service is automatically received when secondary service ends.

Playing a tape

Use buttons on the unit for the operation.

1 Select a tape function.
Press FUNCTION repeatedly (or TAPE on the remote) 3.

2 Insert a tape.
Press ■▲ (stop/eject) 9 on the unit, and insert the tape into the cassette holder. Make sure there is no slack in the tape to avoid damaging the tape or the tape deck.

3 Start playback.
Press ▶ (play) 9 on the unit.

To	Press
Pause playback	II (pause) 9 on the unit. To resume play, press it again.
Stop playback	■▲ (stop/eject) 9 on the unit.
Rewind or fast forward*	◀◀/▶▶ 9 on the unit.

* Be sure to press ■▲ (stop/eject) 9 on the unit after the tape has been wound or rewound to the end.

Note
Do not turn off the system during playback or recording.

Changing the display

To change	Press
Information on the display[1]	DISPLAY 6 repeatedly when the system is on.
Display mode (Clock)	DISPLAY 6 when the system is off[2]. The clock is displayed for eight seconds.

[1] For example, you can view:
  – CD/MP3 disc information such as the track or file number, folder name (during normal play), or the total play time (while the player is stopped).
  – DAB station information such as the service name, channel label, DLS (Dynamic Label Segment), or ensemble label.
[2] The STANDBY indicator lights up when the system is turned off.

Notes on the display information

• The following are not displayed correctly;
  – total playing time for a disc with MP3 files.
  – elapsed playing time and remaining time of an MP3 file encoded using a VBR (variable bit rate) when the file is played or is shifted with fast forward or fast reverse.
  – folder and file names that do not follow either the ISO9660 Level 1 or 2 standard.
• The following are displayed;
  – ID3 tag information for MP3 files when ID3 version 1 and version 2 tags are used.
  – up to 15 characters of ID3 tag information using uppercase letters (A to Z), numbers (0 to 9), and symbols (" $ % ' ( ) * + , – . / < = > @ [\ ] _ ` { | } ! ? ^).
  – up to 8 characters of service name, up to 128 characters of DLS (Dynamic Label Segment) and up to 16 characters of ensemble label using uppercase letters (A to Z), numbers (0 to 9), and symbols (" $ % ' ( ) * + , – . / < = > @ [\ ] _ ` { | } ! ? ^).

Using optional audio components

To connect an optional headphones

Connect headphones to the PHONES jack 10 on the unit.

To connect an optional component

Connect additional audio source component to the AUDIO IN jack 11 on the unit using an audio analog cord (not supplied). Turn down the volume on the system, and then select the AUDIO IN function.

Creating your own CD program
(Program Play)

Use buttons on the remote to create your own program.

1 Press CD [3] to select the CD function.

2 Press PLAY MODE [14] repeatedly until "PGM" appears while the player is stopped.

3 Press |◄◄/►►| (or |◄◄/►►| on the unit) [7] repeatedly until the desired track number appears.

When programing MP3 files, press [⊡] +/− [16] repeatedly to select the desired folder, and then select the desired file.

Selected track or file number

```
┌─────────────────┐
│        PGM      │
│   [□]           │
└─────────────────┘
```
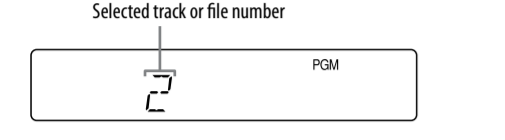
4 Press ENTER [15] to add the track or file to the program.

5 Repeat steps 3 through 4 to program additional tracks or files, up to a total of 15 tracks or files.

6 To play your program of tracks or files, press ►
(play) [9] (or CD/►II (play/pause) [3] on the unit).

The program remains available until you open the CD compartment. To play it again, select the CD function, and press ► (play) [9] (or CD/►II (play/pause) [3] on the unit).

To cancel Program Play, press PLAY MODE [14] repeatedly until "PGM" disappears while the player is stopped.

To delete the last track or file of the program, press CLEAR [19] while the player is stopped.

To view program information, such as total track number of the program, press DISPLAY [6] repeatedly.

Presetting radio stations

You can preset your favorite 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").

2 Press TUNER MEMORY [14].

Preset number

```
┌─────────────────┐
│  MEMORY  1      │
└─────────────────┘
```
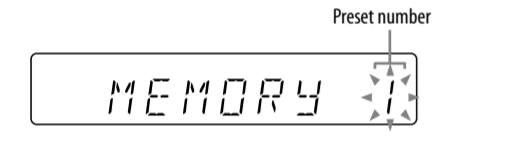
3 Press +/− (or TUNING + or − on the unit) [7] repeatedly to select your desired preset number.

If another station is already assigned to the selected preset number, the station is replaced by the new station.

4 Press ENTER [15].

5 Repeat steps 1 through 4 to store other stations.

You can preset up to 20 DAB and 20 FM 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 [14] repeatedly until "PRESET" appears, and then press +/− (or TUNING + or − on the unit) [7] repeatedly to select the desired preset number.

Note on presetting DAB stations
You can preset a DAB service only when it can be received.

Recording onto a tape

Use a TYPE I (normal) tape only.

You can record just the portions you like from a sound source, including connected audio components.
Use buttons on the unit to control tape recording.

1 Insert a recordable tape into the cassette holder with the side you want to record facing forward.

2 Prepare the recording source.
Select the desired source to record.
Place the disc you want to record.
When recording a folder from an MP3 disc, press PLAY MODE [14] on the remote repeatedly to select "[⊡]," and then press [⊡] +/− [16] on the remote repeatedly to select the desired folder.
To record only your favorite CD tracks or MP3 files in your desired order, perform steps 2 to 5 of "Creating your own CD program."

3 Start recording.
Press ● (record) [9], and then start playing the desired recording source.
The CD starts playing automatically.
If there is noise while recording from the tuner, reposition the appropriate antenna to reduce the noise.
While recording, you cannot listen to other sources.

To stop recording, press ■▲ (stop/eject) [9].

Tip
We recommend that you press II (pause) [9] first, and then press ■▲ (stop/eject) [9] to avoid noise being recorded when you stop recording.

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 [20] on the remote repeatedly. If you select "AUTO," the system automatically turns off after the current disc or tape stops or in 100 minutes.
If the tape deck is still playing or recording at the set time, the system turns off after the tape deck stops.

Play Timer:
You can wake up to CD or tuner at a preset time.
Use buttons on the remote to control the Play Timer.
Make sure you have set the clock.

1 Prepare the sound source.
Prepare the sound source, and then press VOLUME +/− (or turn the VOLUME control on the unit) [4] to adjust the volume.
To start from a specific CD track or MP3 file, create your own CD program.

2 Press CLOCK/TIMER SET [13].

3 Press |◄◄/►►| [7] repeatedly to select "PLAY SET," and then press ENTER [15].
"ON TIME" appears, and the hour indication flashes.

4 Set the time to start playing.
Press |◄◄/►►| [7] repeatedly to set the hour, and then press ENTER [15].
The minute indication flashes. Use the procedure above to set the minute.

5 Use the same procedure as in step 4 to set the time to stop playing.

6 Select the sound source.
Press |◄◄/►►| [7] repeatedly until the desired sound source appears, and then press ENTER [15]. The display shows the timer settings.

7 Press I/⏻ [1] to turn off the system.
The system turns on 15 seconds before the preset time.
If the system is on at the preset time, the Play Timer will not play.

To activate or check the timer again, press CLOCK/TIMER SELECT [13], press |◄◄/►►| [7] repeatedly until "PLAY SEL" appears, and then press ENTER [15].

To cancel a 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 canceled manually.

---

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 the STANDBY indicator flashes

Immediately unplug the power cord, and check the following item.
• If your system has a voltage selector, is the voltage selector set to the correct voltage?
After the STANDBY indicator stops flashing, reconnect the power cord, and turn on the system. If the issue persists, contact your nearest Sony dealer.

General

The system unexpectedly shuts off while operating.
• Are the + and − speaker cords short-circuited? Make sure the speaker cords are correctly connected.

There is no sound.
• Are the + and − speaker cords short-circuited?
• Connect only the supplied speakers.
• Do not obstruct the ventilation holes.
• The specified station may have temporarily stopped broadcast.

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.

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.
• Return to Normal Play by pressing PLAY MODE [14] repeatedly until both "PGM" and "SHUF" disappear.

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.

Tuner

Severe hum or noise, or stations cannot be received. ("TUNED" or "STEREO" 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 antenna away from the speaker cords and the power cord to avoid picking up noise.
• Turn off nearby electrical equipment.

"TUNED" does not appear in the display (DAB only).
• Check all antenna connections, then perform the DAB Automatic Scan (see "Before using the system").
• The current DAB service may not be available. Press +/− on the remote (or TUNING + or − on the unit) [7] to select a different service.
• If you have moved to another area, some services/frequencies may have changed and you may not be able to tune into your usual broadcast.
Perform the DAB Automatic Scan procedure to re-register the contents of broadcasts. (Performing this procedure clears all previously stored presets.)

Tape deck

The sound exhibits excessive wow or flutter or dropout.
• Clean the capstans and pinch rollers. Also, clean and demagnetize the tape heads. See "Precautions" for details.

To reset the system to factory settings

If the system still does not operate properly, reset the system to factory settings.
Use buttons on the unit to reset the unit to its factory default settings.

1 Disconnect and reconnect the power cord, and then turn on the system.

2 Press ■ [8], I/⏻ [1], and DSGX [12] at the same time.
All user-configured settings, such as preset radio stations, timer, and the clock, are deleted.

COMPLETE : The preset operation ended normally.
FULL : You tried to program more than 15 tracks (steps).
NO DISC : There is no disc in the player, or you have loaded a disc that cannot be played.
NO PRESET (DAB only): There is no stored preset station.
NO SERV (DAB only): There is no supported DAB broadcast in your country or region.
NO STEP : All of the programed tracks have been erased.
NO TEXT (DAB only) : There is no text information in the received service.
NOT IN USE : You pressed an invalid button.
OVER : You have reached the end of the disc while pressing ►► [7] during playback or pause.
PUSH SELECT : You tried to set the clock or timer during timer operation.
PUSH STOP : You pressed PLAY MODE [14] during playback.
READING : The system is reading information from the disc. Some buttons are not available.
SET CLOCK : You tried to select the timer when the clock is not set.
SET TIMER : You tried to select the timer when the Play Timer is not set.
TIME NG : The Play Timer start and end times are set to the same time.

Display examples

Display	indicates
⌐	2 (two)
5	5 (five)
6	6 (six)
8	8 (eight)
0	0 (zero)
Я	A
В	B
Ⴇ	D
⌂	G
H	H
K	K
M	M
Ⴍ	O
Ⴍ	Q
R	R
S	S
Z	Z
¦	! or |
"	"
$	$
%	%
'	'
.	.
?	?
@	@
⁼	^

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 or multisession
• 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)
• Some discs that have adhesive tape, paper, or sticker attached to them
• Some rental or used discs with attached seals where the glue extends beyond the seal
• Some 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 center out to the edge.
• Do not clean discs with solvents, such as benzine 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 socket, 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.
• The AC power cord can be changed only by a qualified service facility.

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, benzine, or alcohol.

To prevent a tape from being accidentally recorded over
Break off the cassette's overwrite protection tab from side A or B as illustrated.

Break off the cassette tab
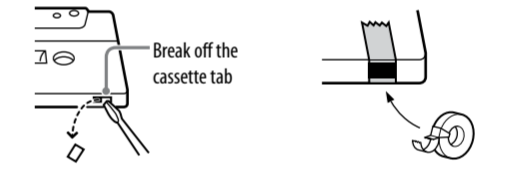
To later reuse the tape for recording, cover the broken tab with adhesive tape.

About a tape longer than 90 minutes
The use of the tape with more than 90 minutes of play time is not recommended except for long, continuous recording or playback.

Cleaning the tape heads
Use 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.

Demagnetizing the tape heads
Use a demagnetizing cassette (available separately) after every 20 to 30 hours of use. Failure to demagnetize the tape heads can cause an increase in noise, a loss of high frequency sound, and an inability to completely erase tapes. For details, refer to the instructions of the demagnetizing cassette.

Main unit

Amplifier section
DIN power output (rated): 4 + 4 W (4 ohms at 1 kHz, DIN)
Continuous RMS power output (reference): 5 + 5 W (4 ohms at 1 kHz, 10% THD)
Music power output (reference): 7 + 7 W
Inputs
  AUDIO IN (stereo mini jack): Sensitivity 800 mV, impedance 47 kilohms
Outputs
  PHONES (stereo mini jack): Accepts headphones with an impedance of 8 ohms or more
  SPEAKER: Accepts impedance of 4 ohms

CD player section
System: Compact disc and digital audio system
Laser Diode Properties
  Emission duration: continuous
  Laser Output*: Less than 44.6μW
  * This output is the value measurement at a distance of 200mm from the objective lens surface on the Optical Pick-up Block with 7mm aperture.
Frequency response: 20 Hz – 20 kHz

Tape deck section
Recording system: 4-track 2-channel, stereo

Tuner section
FM/DAB stereo tuner
Antenna: FM/DAB lead antenna
FM tuner section:
  Tuning range: 87.5 – 108.0 MHz (50 kHz step)
DAB tuner section:
  Frequency range
  Band-III: 174.928 (5A) – 239.200 (13F) MHz
  * For details, see "DAB frequency table" below.

DAB frequency table (Band-III)

Frequency	Label	Frequency	Label
174.928 MHz	5A	209.936 MHz	10A
176.640 MHz	5B	211.648 MHz	10B
178.352 MHz	5C	213.360 MHz	10C
180.064 MHz	5D	215.072 MHz	10D
181.936 MHz	6A	216.928 MHz	11A
183.648 MHz	6B	218.640 MHz	11B
185.360 MHz	6C	220.352 MHz	11C
187.072 MHz	6D	222.064 MHz	11D
188.928 MHz	7A	223.936 MHz	12A
190.640 MHz	7B	225.648 MHz	12B
192.352 MHz	7C	227.360 MHz	12C
194.064 MHz	7D	229.072 MHz	12D
195.936 MHz	8A	230.784 MHz	13A
197.648 MHz	8B	232.496 MHz	13B
199.360 MHz	8C	234.208 MHz	13C
201.072 MHz	8D	235.776 MHz	13D
202.928 MHz	9A	237.488 MHz	13E
204.640 MHz	9B	239.200 MHz	13F
206.352 MHz	9C		
208.064 MHz	9D		

* Frequencies are displayed to two decimal places on this system.

Speaker
Speaker system: Full Range, 8 cm dia., cone type
Nominal impedance: 4 ohms
Dimensions (w/h/d): Approx. 145 × 241.5 × 134 mm
Mass: Approx. 1.4 kg net per speaker

General
Power requirements: AC 230 V, 50/60 Hz
Power consumption: 25 W
  1.0 W (in Power off)
Dimensions (w/h/d) (excl. speakers): Approx. 158 × 241.5 × 233 mm
Mass (excl. speakers): Approx. 2.4 kg

Supplied accessories: Remote Commander (1)/FM/DAB lead antenna (1)

Design and specifications are subject to change without notice.

eco info
• Standby power consumption: 1.0 W
• Halogenated flame retardants are not used in the certain printed wiring boards.
• Lead-free solder is used for soldering certain parts.
• Halogenated flame retardants are not used in cabinets.