

Wireless Noise Canceling Stereo Headset

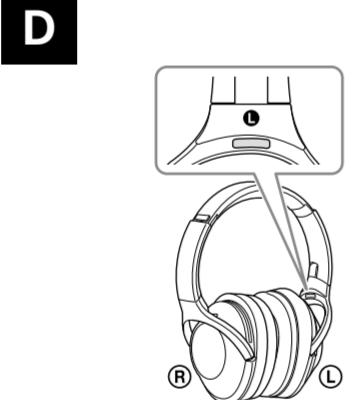
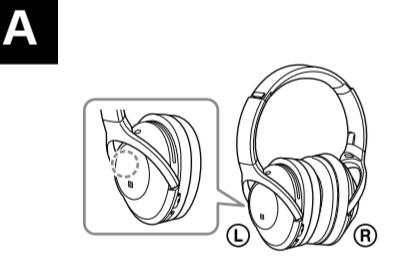
Reference Guide	GB
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MDR-1000X

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English

WARNING

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

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

Do not expose the batteries (battery pack or batteries installed) to excessive heat such as sunshine, fire or the like for a long time. Do not dismantle, open or shred secondary cells or batteries. In the event of a cell leaking, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice. Secondary cells and batteries need to be charged before use. Always refer to the manufacturer's instructions or equipment manual for proper charging instructions. After extended periods of storage, it may be necessary to charge and discharge the cells or batteries several times to obtain maximum performance. Dispose of properly.

Complies with
IDA Standards
DB00353

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Precautions

On BLUETOOTH communications

- BLUETOOTH wireless technology operates within a range of about 10 m. Maximum communication range may vary depending on obstacles (human body, metal, wall, etc.) or electromagnetic environment.
- The antenna is built into the unit as illustrated in the dotted line (Fig. A). The sensitivity of the BLUETOOTH communications will improve by turning the direction of the built-in antenna to the connected BLUETOOTH device. When obstacles are between the antenna of the connected device and the built-in antenna of this unit, noise or audio dropout may occur, or communications may be disabled.
- BLUETOOTH communications may be disabled, or noise or audio dropout may occur under the following conditions.
 - There is a human body between the unit and the BLUETOOTH device.
 - This situation may be improved by placing the BLUETOOTH device facing the antenna of the unit.
 - There is an obstacle, such as metal or wall, between the unit and the BLUETOOTH device.
 - A device using 2.4 GHz frequency, such as a Wi-Fi device, cordless telephone, or microwave oven, is in use near this unit.
- Because BLUETOOTH devices and Wi-Fi (IEEE802.11b/g/n) use the same frequency (2.4 GHz), microwave interference may occur resulting in noise or audio dropout or communications being disabled if this unit is used near a Wi-Fi device. In such a case, perform the following.
 - Use this unit at least 10 m away from the Wi-Fi device.
 - If this unit is used within 10 m of a Wi-Fi device, turn off the Wi-Fi device.
 - Install this unit and the BLUETOOTH device as near to each other as possible.
- Microwaves emitting from a BLUETOOTH device may affect the operation of electronic medical devices. Turn off this unit and other BLUETOOTH devices in the following locations, as it may cause an accident:
 - where inflammable gas is present, in a hospital, or a petrol station
 - near automatic doors or a fire alarm
- When you use the unit on an airplane, follow the instructions of cabin attendants or ask the airline you fly with about conditions for using the unit.
- If you do not use the supplied headphone cable, radio waves may affect instruments, causing risk of accident due to malfunction. Be sure that you use the supplied headphone cable on an airplane.
- Due to the characteristic of BLUETOOTH wireless technology, the sound played on this unit is slightly delayed from the sound played on the BLUETOOTH device during talking on the telephone or listening to the music.
- This unit supports security capabilities that comply with the BLUETOOTH standard to provide a secure connection when the BLUETOOTH wireless technology is used, but security may not be enough depending on the setting. Be careful when communicating using BLUETOOTH wireless technology.
- We do not take any responsibility for the leakage of information during BLUETOOTH communications.
- Connection with all BLUETOOTH devices cannot be guaranteed. A device featuring BLUETOOTH function is required to conform to the BLUETOOTH standard specified by Bluetooth SIG, Inc. and be authenticated.
- Even if the connected device conforms to the above mentioned BLUETOOTH standard, some devices may not be connected or work correctly, depending on the features or specifications of the device.
- While talking on the phone hands free, noise may occur, depending on the device or communication environment.
- Depending on the device to be connected, it may require some time to start communications.

If sound skips frequently during playback

- The situation may be improved by setting the sound quality mode to "priority on sound quality". For details, refer to the Help Guide.

• The situation may be improved by changing the wireless playback quality settings or fixing the wireless playback mode to SBC on the transmitting device. For details, refer to the operating instructions supplied with the transmitting device.

On the use of calling apps for smartphones and computers

- This unit supports normal incoming calls only. Calling apps for smartphones and computers are not supported.

On charging the unit

- This unit can be charged using USB only. Personal computer with USB port is required for charging.
- This unit cannot be turned on, nor can the BLUETOOTH and noise canceling functions be used, during charging.
- You can use the unit by connecting the supplied headphone cable, even while charging the unit.
- If you do not use the unit for a long time, the rechargeable battery may not be able to keep sufficient charge. The battery will be able to keep a charge properly after repeatedly discharging and charging several times.
- If you store the unit for a long time, charge the battery once every half year to prevent over-discharge.
- If the length of time you can use the unit became extremely short, the rechargeable battery should be replaced with a new one. Please contact your nearest Sony dealer for a battery replacement.

Note on static electricity

• Static electricity accumulated in the body may cause mild tingling in your ears. To minimize the effect, wear clothes made from natural materials.

If the unit does not operate properly

- Reset the unit (Fig. B). Press the (D) and NC buttons simultaneously while charging. The unit will be reset. Pairing information is not deleted.
- If the problem persists even after the resetting operation above, initialize the unit as follows. Disconnect the micro-USB cable from the micro-USB port, turn off the unit, then hold down the (D) and AMBIENT SOUND buttons simultaneously for more than 7 seconds. The indicator (blue) flashes 4 times, and the unit is reset to the factory settings. All pairing information is deleted.
- After the unit is initialized, it may not connect to your iPhone or computer. In this case, delete the pairing information of the unit from the iPhone or computer, and then pair them again.

What is noise canceling?

- The noise canceling circuit actually senses outside noise with built-in microphones and sends an equal-but-opposite canceling signal to the unit.
- Depending on how you wear the unit, the noise canceling effect may vary or a beeping sound (howling) may occur. In these cases, take off the unit and put it on again.
- The noise canceling effect may vary depending on how you wear the unit.
- The noise canceling function works for noise in the low frequency band primarily. Although noise is reduced, it is not canceled completely.
- When you use the unit in a train or a car, noise may occur depending on street conditions.
- Mobile phones may cause interference and noise. Should this occur, locate the unit further away from the mobile phone.
- Do not cover the microphones of the unit (D) with your hands. The noise canceling function or the Ambient Sound Mode may not work properly, or a beeping sound (howling) may occur. In these cases, take your hands off of the microphones of the unit (Fig. C).

Others

- If you paste stickers, etc. on the touch sensor, the touch sensor may not operate correctly.
- Be careful not to catch your finger in the unit when folding.
- When you use the unit as wired headphones, use the supplied headphone cable only. Make sure that the headphone cable is firmly inserted.
- Do not place this unit in a place exposed to humidity, dust, soot or steam, or subject to direct sunlight. Do not leave the unit in a car for a long time. It may cause a malfunction.
- Using the BLUETOOTH device may not function on mobile phones, depending on radio wave conditions and location where the equipment is being used.
- Listening with this unit at high volume may affect your hearing.
- For traffic safety, do not use this unit while driving or cycling.

• Do not use the unit in places where it would be dangerous if you are unable to hear ambient sound, such as at railroad crossings, train station platforms, and construction sites.

• Do not put weight or pressure on this unit as it may cause the unit to deform during long storage.

• Do not subject the unit to excessive shock.

• Clean the unit with a soft dry cloth.

• Do not expose the unit to water. The unit is not waterproof.

• Remember to follow the precautions below.

- Be careful not to drop the unit into a sink or other container filled with water.

- Do not use the unit in humid locations or bad weather, such as in the rain or snow.

- Do not get the unit wet.

If you touch the unit with wet hands, or put the unit in a damp article of clothing, the unit may get wet and this may cause a malfunction of the unit.

• If you experience discomfort after using the unit, stop using the unit immediately.

• The earpads may deteriorate due to longterm storage or use.

• If you have any questions or problems concerning this unit that are not covered in this manual, please consult your nearest Sony dealer.

Optional replacement earpads can be ordered from your nearest Sony dealer.

Location of the serial number label
See Fig. D.

Specifications

General

Communication system: BLUETOOTH Specification version 4.1

Output: BLUETOOTH Specification Power Class 2

Maximum communication range: Line of sight approx. 10 m¹

Frequency band: 2.4 GHz band (2.4000 GHz - 2.4835 GHz)

Modulation method: FHSS

Compatible BLUETOOTH profiles²:

- A2DP (Advanced Audio Distribution Profile)

- AVRCP (Audio Video Remote Control Profile)

- HFP (Hands-free Profile)

- HSP (Headset Profile)

Supported Codec³: SBC⁴, AAC⁵, aptX, LDAC

Supported content protection method: SCMS-T

Transmission range (A2DP):

20 Hz - 20,000 Hz (Sampling frequency 44.1 kHz)

20 Hz - 40,000 Hz (Sampling frequency LDAC 96 kHz, 990 kbps)

Included items:

- Wireless noise canceling stereo headset (1)

- Micro-USB cable (approx. 50 cm) (1)

- Headphone cable (approx. 1.5 m) (1)

- Carrying case (1)

- Plug adaptor for airplane (1)⁶

- Reference Guide (this sheet) (1)

- Operating Instructions (1)

1) The actual range will vary depending on factors such as obstacles between devices, magnetic fields around a microwave oven, static electricity, reception sensitivity, antenna's performance, operating system, software application, etc.

2) BLUETOOTH standard profiles indicate the purpose of BLUETOOTH communications between devices.

3) Codec: Audio signal compression and conversion format

4) Subband Codec

5) Advanced Audio Coding

6) Depending on the in-flight entertainment services, it may not be supported.

Wireless noise canceling stereo headset

Power source:

DC 3.7 V: Built-in lithium-ion rechargeable battery

DC 5 V: When charged using USB

Mass: Approx. 275 g

Operating temperature: 0 °C to 40 °C

Rated power consumption: 3 W

Usage hours:

When connecting via the BLUETOOTH device

Music playback time:
Max. 20 hours (NC ON, Ambient Sound Mode),
Max. 22 hours (NC OFF)

Communication time:
Max. 24 hours (NC ON, Ambient Sound Mode),
Max. 26 hours (NC OFF)

Standby time:

Max. 34 hours (NC ON, Ambient Sound Mode),
Max. 120 hours (NC OFF)

When connecting via the headphone cable with the unit turned on

Max. 30 hours (NC ON, Ambient Sound Mode),
Max. 36 hours (NC OFF)

Note: Usage hours may be shorter depending on the Codec and the conditions of use.

Charging time:

Aprox. 4 hours

This unit can be used for 6 hours after 1 hour charging.

Note: Charging hours may be different depending on the conditions of use.

Charging temperature: 5 °C to 35 °C

Receiver

Type: Closed, Dynamic

Driver unit: 40 mm

Frequency response: 4 Hz - 40,000 Hz (when connecting via the headphone cable with the unit turned on)

Impedance: 46 Ω (1 kHz) (when connecting via the headphone cable with the unit turned on)

14 Ω (1 kHz) (when connecting via the headphone cable with the unit turned off)

Sensitivity:

103 dB/mW (when connecting via the headphone cable with the unit turned on)

98 dB/mW (when connecting via the headphone cable with the unit turned off)

Microphone

Type: Electret condenser

Directivity: Omni directional

Effective frequency range: 100 Hz - 8,000 Hz

