

SONY

3-810-317-12 (1)

Noise Canceling Stereo Headphones

Operating Instructions
Manual de instrucciones

MDR-NC20

Sony Corporation © 1996 Printed in Japan

English

WARNING

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

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

WARNING

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Owner's Record

The model number is located at the rear side of the battery box.

The serial number is located at the both sides of the head band.

Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. MDR-NC20 _____

Serial No. _____

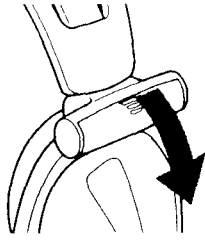
Features

- Noise canceling headphones reduce ambient noise, and provide a quieter environment to enhance audio entertainment. Ambient sound is synthesized with an anti-sound signal produced by the noise canceling circuit, and reduced. (Over 10 dB is reduced at 300 Hz.)
- Compact folding Style
- Neodymium magnets are used to deliver powerful sound.
- Operates as passive headphone when noise canceling circuit is not activated.
- Plug adaptor is supplied to connect directly to stereo or dual jack of inflight music services.
- Plug types are compatible with Sony WALKMAN*, Discman or MD WALKMAN remote controllers and stereo mini jacks of audio and visual equipment.

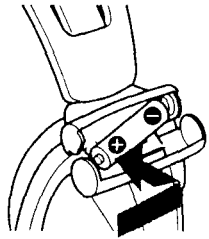
* WALKMAN is a registered trademark of Sony Corporation.

Installing a battery

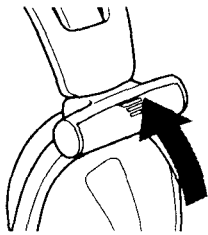
- 1 Open the lid of the battery box on the right outer side of the headphone.



- 2 Insert one R03 (size AAA) battery by matching the + and - on the battery to the + and - in the battery box.



- 3 Close the lid.



Battery life

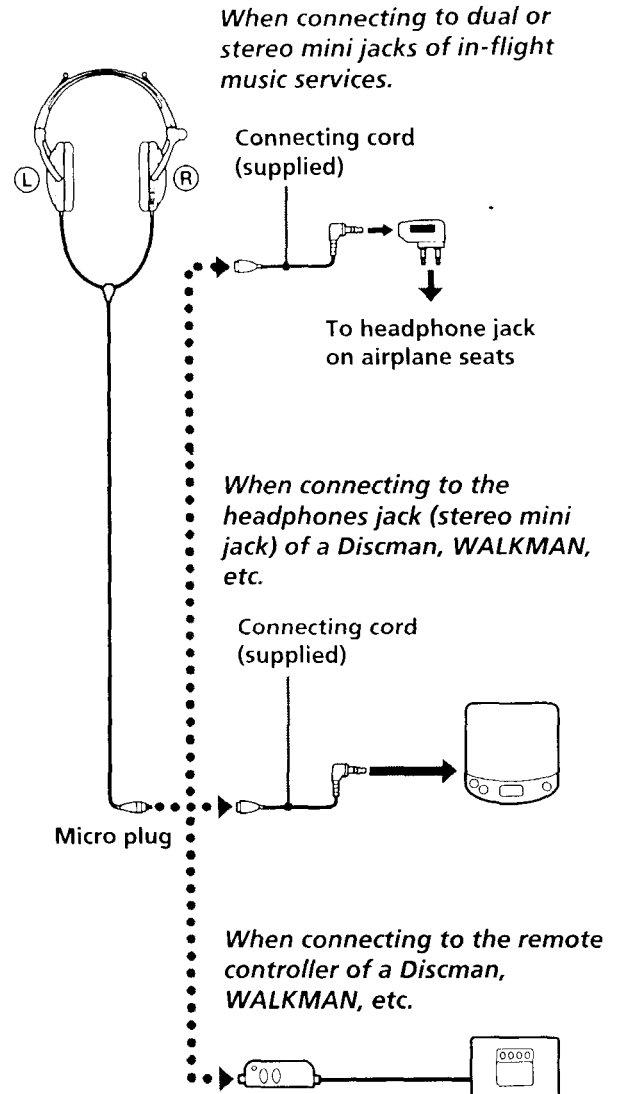
Battery	Approx. hours
Sony alkaline battery LR03/ AM-4 (N)	45 hours
Sony battery R03/UM-4 (NU)	23 hours

When to replace the battery

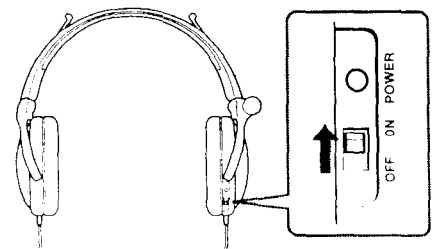
Replace the battery with a new one when the POWER indicator dims.

Listening to music

- 1 Connect the headphones to the AV equipment.



- 2 Turn on the power of the headphones. The power indicator lights in red. When the power is turned on, ambient noise is reduced, and you can listen to music more clearly at a lower volume.



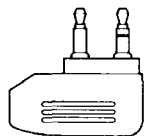
- 3 Put on the headphones so that the ear pads cover your ears.



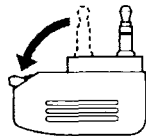
- 4 Turn on the power of the AV equipment.

Notes on using on the airplane

- The supplied plug adaptor can be connected to dual and stereo mini jacks.



dual jacks



stereo mini jacks

- Do not use the headphones when use of electronic equipment is prohibited or when use of personal headphones for inflight music services is prohibited.

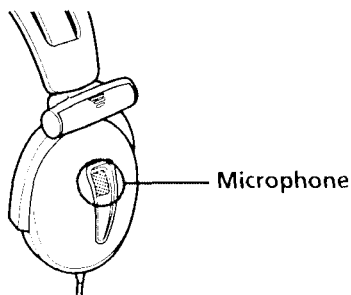
If you have any questions or problems concerning the system that are not covered in this manual, please consult the nearest Sony dealer.

After listening to music

Turn off the power of the headphones.

Notes

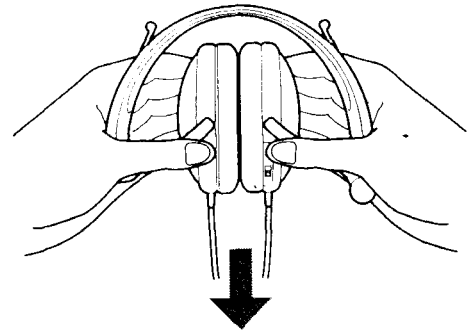
- The noise canceling function is only effective for noise in the low frequency band. Although noise is reduced, it is not canceled completely.
- Do not cover the microphone of the headphones with your hands. The noise canceling function may not work properly.



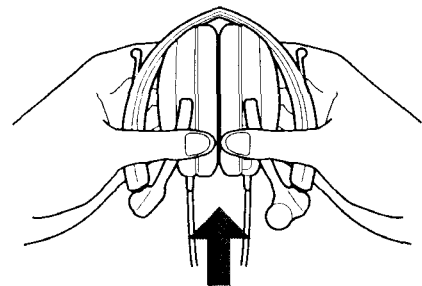
- The noise canceling function may not work properly unless the headphones are put on firmly.
- You can use the headphones without turning on the power. In this case, the noise canceling function is not active, and the headphones operate as passive headphones.

Folding and unfolding the headphones

Unfolding



Folding



Precautions

- Clean the headphones with a soft dry cloth.
- Do not leave the plug dirty otherwise the sound may be distorted.
- Be sure to bring the headphones to a Sony dealer when requiring a change of ear pads or repair work.
- The CE mark on the unit is valid only for products marketed in the European Union.
- Do not leave the stereo headphones in a location subject to direct sunlight, heat or moisture.

Notes on headphones

Preventing hearing damage

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

Do not listen with the headphones while driving or cycling

As your headphones reduce outside sounds, it may cause traffic accident. Also avoid using them where hearing must not be impaired, for example, a railroad crossing, a site of construction, etc.

Troubleshooting

No sound

- Check the connection of the headphones and the AV equipment.
- Check that the connected AV equipment is turned on.
- Turn up the volume of the connected AV equipment.

Muffled sound

- Turn down the volume of the connected AV equipment.
- Replace the battery.

Specifications

General

Type	Dynamic, closed
Driver units	30 mm dia: dome type
Impedance	24 ohms at 1 kHz (when the power is on) 56 ohms at 1 kHz (when the power is off)
Sensitivity	102 dB/mW (when the power is on) 100 dB/mW (when the power is off)
Frequency response	16 – 22,000 Hz
Frequency range of active noise attenuation	40 – 1,500 Hz more than 10 dB at 300 Hz
Input cord	0.5 m cord with a gold-plated microplug
Power source	DC 1.5 V, 1 × R03 (size AAA) battery
Mass	Approx. 175 g (6.2 oz) including battery

Supplied accessories

- Connecting cord 1m (39 ³/₈ in.) (a gold-plated micro jack → a gold-plated L shaped stereo mini plug) (1)
- Plug adaptor for in-flight use (single/dual) (1)
- Carrying case (1)
- Operating instructions (1)

Design and specifications are subject to change without notice.