

# Noise Canceling Headphones

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If you install the Smart Key app\* from Google Play store, the track and volume adjustment on your smartphone will be enabled with Multi-function button.

\* Only for Xperia™ phones. The app may not be available in some countries and/or regions. Depending on the music playback application, it may not operate as you set. In this case, change the headset setting on the music playback application. You may need to update the application according to the Android OS version-upgrade in the future.

如果您從Google Play商店安裝了Smart Key應用程式\*, 可用多功能按鈕啟用智慧型手機的曲目和音量調整。

\* 僅適用Xperia手機。在某家國家和/或地區, 可能無法使用該應用程式。視音樂播放應用程式而定, 它可能無法按您的設定來操作。在此情況下, 請變更音樂播放應用程式上的耳機設定。根據未來的Android OS版本升級, 您可能需要更新應用程式。

Google Play 상점에서 Smart Key 앱을 다운로드하여 설치하면 다기능 버튼으로 스마트폰의 트랙 및 볼륨을 조절할 수 있습니다. 이 앱은 특정 국가나 지역에서 다운로드가 불가능할 수 있습니다. 음악 재생 앱에 따라 설정대로 작동하지 않을 수 있습니다. 이 경우 음악 재생 앱에서 헤드셋 설정을 변경하십시오. 나중에 Android OS 버전 업그레이드에 따라 앱을 업데이트해야 할 수 있습니다.

https://play.google.com/store/apps/details?id=com.sonymobile.extras.liveware.extension.smartkey&feature



English Noise Canceling Headphones

## WARNING

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

The validity of the CE marking is restricted to only those countries where it is legally enforced, mainly in the countries EEA (European Economic Area).



## How to use/使用方式/사용 방법

### 1 Installing a battery/安裝電池/배터리 설치하기

① indication 표시  
② 표시  
Tactile dot (on the left) 觸感圓點 (在左邊)  
동기 (왼쪽)

OPEN  
R  
+

2  
1  
R

### 2 Connecting/連接/연결하기

Smartphone 智慧型手機 스마트폰  
Digital music player, etc. 數位音樂播放器等 디지털 음악 플레이어 등

Inline remote and microphone cord for smartphones 智慧型手機適用的內嵌遠端和麥克風導線 스마트폰용 인라인 원격 및 마이크로폰 코드

Connecting cord 連接導線 연결 코드

### 4 Wearing and controlling/配戴和控制/착용 및 제어하기

Multi-function button 多功能按鈕 다기능 버튼  
Microphone 麥克風 마이크로폰

### Using the AINC function/使用AINC功能/AINC 기능 사용하기

ON  
AINC  
AINC

### 3 Turning on the power/開啟電源/전원 켜기

POWER OFF  
ON  
POWER

### After use

Turn off the power of the headphones.  
使用後 關閉頭戴式耳機電源。  
헤드폰을 사용한 후 헤드폰의 전원을 끕니다.

## Specifications

<b>General</b>	
Type	Closed, dynamic
Driver units	40 mm, dome type (CCA adopted)
Power handling capacity	100 mW
Impedance	50 Ω at 1 kHz (when the power is on) 24 Ω at 1 kHz (when the power is off)
Sensitivity	101 dB/mW (when the power is on) 100 dB/mW (when the power is off)
Frequency response	6 Hz – 24,000 Hz
Total Noise Suppression Ratio <sup>1)</sup>	Approx. 22 dB <sup>2)</sup>
Power source	DC 1.5 V, 1 × LR03 (size AAA) battery
Mass	Approx. 205 g including battery, not including cord
Talk microphone	Open circuit voltage level –40 dB (0 dB = 1 V/Pa)

<b>Battery life</b>	
<b>Battery</b>	<b>Approx. hours <sup>3)</sup></b>
Sony alkaline battery LR03 SIZE AAA	20 hours <sup>4)</sup>

**When the battery is low**  
Replace the battery with a new one when the POWER indicator blinks quickly or lights off.

**Included items**  
Headphones (1)  
Connecting cord (1.5 m, gold plated L-shaped stereo mini plug) (1)  
Inline remote and microphone cord for smartphones (1.2 m, four-conductor gold plated L-shaped stereo mini plug) (1)  
Plug adaptor for in-flight use <sup>5)</sup> (1)  
Carrying case (1)  
Operating Instructions (1)

<sup>1)</sup> Under the Sony measurement standard.  
<sup>2)</sup> Equivalent to approx. 99.4% reduction of energy of sound compared with not wearing headphones.  
<sup>3)</sup> At 1 kHz, 0.1 mW + 0.1 mW output  
<sup>4)</sup> Time stated above may vary, depending on the temperature or conditions of use.  
<sup>5)</sup> May not be compatible with some in-flight entertainment services.

Design and specifications are subject to change without notice.  
iPhone is a trademark of Apple Inc., registered in the U.S. and other countries.  
Android is a trademark of Google Inc.  
Xperia is a trademark of Sony Mobile Communications AB.

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

## Compatible products of inline remote and microphone cord for smartphones

Use this unit with smartphone.

- Notes**
- Depending on the model of smartphone, the microphone of this unit may not function, or the volume level may be low.
  - This unit is not guaranteed to operate digital music players.

## Using the Multi-function button

Press once to answer the call, press again to end; press to play/pause a track.

**Available operations for iPhone**  
Plays/pauses a track of the connected iPhone with a single press. Skips to the next track with a double press. Skips to the previous track with a triple press. Starts the "VoiceOver" feature with a long press (if available). Hold down for about two seconds to reject an incoming call. When you let go, two low beeps confirm the call was rejected.

\* Availability of the "VoiceOver" feature depends on iPhone and its software version.

- Notes**
- The button function may vary depending on the smartphone. Access the following web site to check for compatibility.  
http://www.sony-asia.com/support/headphones/compatibility
  - Be careful not to unintentionally press the button when you carry your smartphone with the inline remote and microphone cord connected.

## Using the AI Noise Canceling function

The AI Noise Canceling function analyzes environmental ambient sound components and automatically selects the most effective noise canceling mode.  
When you press the AINC button while the POWER switch is set to "ON", beep sounds and the headphones start the analysis. During the analysis (approx. 3 seconds), the POWER indicator blinks, and the volume level is reduced from the headphones.  
When the analysis is completed, the most effective noise canceling mode is selected and the volume level is revert to the previous level.

- Noise canceling mode types**
- NC Mode A: Noise mainly in an airplane is effectively reduced.
- NC Mode B: Noise mainly in a bus or a train is effectively reduced.
- NC Mode C: Noise mainly found in an office environment (PC, copier, air ventilation, etc.) is effectively reduced.

**Tips**

- When the headphones are turned on, NC Mode A is set.
- Press the AINC button again to reset the noise canceling mode if ambient noise has changed, such as when you move outdoors from a room.

## Beep sound and indicator status

Status/Function	Beep sound	POWER indicator
Power off	No beep	Lights off
Power on	Beep once	Lights on
AINC	Beep twice	Blinks twice
Low battery	Long beep (2 seconds)	Blinks quickly (30 seconds)

**Notes on using on the airplane**  
Do not use the headphones when use of electronic equipment is prohibited or when use of personal headphones for in-flight entertainment services is prohibited.

## Notes on handling

- To disconnect the cord, pull it out by the plug, not the cord. Otherwise the cord may break.
- When connecting the cord, make sure to fully insert the plug. If the plug is not fully inserted, no sound may result.
- Because of the difference in pin configuration of four-conductor stereo mini plugs, some smartphones cannot be used with the headphones.

## Notes on use

**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 headphones.

### Notes on the noise canceling function

- Adjust the earpads so that they cover your ears, otherwise noise canceling will not function properly.
- The noise canceling effect may vary depending on how you wear the headphones.
- Do not cover the microphone of the headphones with your hands. The noise canceling function may not work properly.



- After you turn on the power of the headphones, you may hear a slight hiss. This is the operating sound of the noise canceling function, not a malfunction.
- The noise canceling function works for noise in the low frequency band primarily. Although noise is reduced, it is not canceled completely.
- The noise canceling effect may not be pronounced in a very quiet environment, or some noise may be heard.
- When you use the headphones in a train or a car, noise may occur depending on street conditions.
- Howling may occur if you do not wear the headphones correctly.
- Howling may occur if you place an object such as finger close to inside of the headphones. Keep it away from the headphones.
- Mobile phones may cause interference and noise. Should this occur, locate the headphones further away from the mobile phone.

- Because the headphones are designed to fit closely in your ears, forcing them against your ears may result in eardrum damage. Avoid using the headphones where they are liable to be struck by people or other objects, such as a ball, etc.
- Pressing the headphones against your ears may produce a diaphragm click sound. This is not a malfunction.
- Clean the headphones with a soft dry cloth.
- Do not leave the plug dirty otherwise the sound may be distorted.
- Be sure to consult a Sony dealer when the earpads become dirty or damaged, or when the headphones require repair work.
- Do not leave the headphones in a location subject to direct sunlight, heat or moisture.
- Do not subject the headphones to excessive shock.
- Handle the driver units carefully.
- If you feel drowsy or sick while using this headphones, stop use immediately.

**Notes on headphones**  
 High volume may affect your hearing. For traffic safety, do not use while driving or cycling.

As headphones reduce outside sounds, they may cause a traffic accident. Also, avoid listening with your headphones in situations where hearing must not be impaired, for example, a railroad crossing, a construction site, etc.

**Note on static electricity**  
In particularly dry air conditions, noise or sound skipping may occur, or mild tingling may be felt on your ears. This is a result of static electricity accumulated in the body, and not a malfunction of the headphones. The effect can be minimized by wearing clothes made from natural materials.

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

## Troubleshooting

- No sound**
- Replace the battery with a new one. You can use the headphones even without turning on the power. In this case, the noise canceling function, Digital Equalizer and S-Master are not active, and the headphones operate as passive headphones.
  - Check the connection of the headphones and the equipment.
  - Check that the connected equipment is turned on.
  - Turn up the volume of the connected equipment.

**The noise canceling effect is not sufficient**

- The noise canceling function is effective in low frequency ranges such as airplanes, trains, or offices (near air-conditioning, etc.) and is not as effective for higher frequencies, such as human voices.
- Turn on the headphones.

**Distorted sound**

- Turn down the volume of the connected equipment.

**Power does not turn on or the headphones do not operate properly**

- Check if the battery has expired (the POWER indicator lights off) and the battery is inserted in the correct orientation. Replace the battery with a new one or reinsert the battery in the correct orientation.

**No operation works**

- Set the POWER switch of the headphones to "OFF", confirm the connections, and then set the POWER switch back to "ON".

**The connected smartphone does not work**

- Check if the cord is connected correctly. Connect the L type plug to the smartphone and the other plug to the headphones.

## Features

- Digital noise canceling headphones with Sony's unique DNC software Engine and Dual Noise Sensor Technology: High precision canceling signal generated by digital signal processing and microphones located both inside and outside the housings enables outstanding noise canceling performance.
- Automatic AI (Artificial Intelligence) Noise Canceling function: Automatic selection of the optimal noise canceling mode based on intelligent analysis of environmental ambient noise.
- Digital Equalizer and full digital S-Master amplifier: Delivers ideal frequency response and high-quality music reproduction with full digital processing.
- Enfolding structure: Pressure-relieving cushions, tailored for the ears, provide a wrap-around feel with acoustic sealing to deliver powerful lows.
- Lasting comfort: The lightweight and super soft cushions allow for comfortable wearing over a long time.
- Detachable cord: 3.5 mm connecting cord, and inline remote and microphone cord for smartphones

