



ATH-ANC500BT

User Manual
Wireless Noise-Cancelling Headphones



Introduction

Thank you for purchasing this Audio-Technica product.

Before using the product, please read through the Quick Start Guide and Caution Guide, as well as this user manual when necessary, to ensure that you use the product correctly.

Safety precautions

Although this product was designed to be used safely, failing to use it correctly may result in an accident. To ensure safety, observe all warnings and cautions while using the product.

Cautions for the product

- Do not use the product near medical equipment. Radio waves may affect cardiac pacemakers and medical electronic equipment. Do not use the product inside medical facilities.
- When using the product in aircraft, follow airline instructions.
- Do not use the product near automatic control devices such as automatic doors and fire alarms. Radio waves may affect electronic equipment and cause accidents due to malfunction.
- Do not disassemble, modify or attempt to repair the product to avoid electric shock, malfunction or fire.
- Do not subject the product to strong impact to avoid electric shock, malfunction or fire.
- Do not handle the product with wet hands to avoid electric shock or injury.
- Disconnect the product from a device if the product begins to malfunction, producing smoke, odor, heat, unwanted noise or showing other signs of damage. In such a case, contact your local Audio-Technica dealer.
- Do not allow the product to get wet to avoid electric shock or malfunction.
- Do not put foreign matter such as combustible materials, metal, or liquid in the product.
- Do not cover the product with a cloth to avoid fire or injury by overheating.
- Follow applicable laws regarding mobile phone and headphone use if using headphones while driving.
- Do not use the product in places where the inability to hear ambient sound presents a serious risk (such as at railroad crossings, train stations, and construction sites).
- When charging, make sure to use the included USB charging cable.
- Do not charge with devices that have quick-charge functionality (with a voltage of 5 V or more). Doing so may cause the product to malfunction.
- To prevent damage to your hearing, do not raise the volume too high. Listening to loud sound for an extended period may cause temporary or permanent hearing loss.
- Discontinue use if skin irritation results from direct contact with the product.
- Do not catch your fingers or other body parts between the housing and the arm or inside the joints.

Safety precautions

Cautions for rechargeable battery

The product is equipped with a rechargeable battery (lithium polymer battery).

- If battery fluid gets into eyes, do not rub them. Rinse thoroughly with clean water such as tap water and consult a doctor immediately.
- If battery fluid leaks, do not touch fluid with bare hands. If fluid remains inside the product, it may cause malfunction. If battery fluid leaks, contact your local Audio-Technica dealer.
 - If fluid gets in your mouth, gargle thoroughly with clean water such as tap water and consult a doctor immediately.
 - If your skin or clothing comes in contact with fluid, immediately wash the affected skin or clothing with water. If you experience skin irritation, consult a doctor.
- To avoid leakage, generation of heat or explosion:
 - Never heat, disassemble or modify the battery, nor dispose of it in a fire.
 - Do not attempt to pierce with a nail, hit with a hammer or step on the battery.
 - Do not drop the product or subject it to strong impact.
 - Do not get the battery wet.
- Do not use, leave or store the battery in the following places:
 - Area exposed to direct sunlight or high temperatures and humidity
 - Inside of a car under the blazing sun
 - Near heat sources such as heat registers
- Charge only with the included USB cable to avoid malfunction or fire.
- The internal rechargeable battery of this product cannot be replaced by the user. The battery may have reached the end of its service life if the usage time becomes significantly shorter even after the battery has been fully charged. If this is the case, the battery needs to be repaired. Contact your local Audio-Technica dealer for repair details.
- When the product is disposed of, the built-in rechargeable battery needs to be discarded properly. Contact your local Audio-Technica dealer to learn how to properly dispose of the battery.

For customers in the USA

FCC Notice

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.

Caution

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

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

RF Exposure Statement

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter used in other systems. This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment has very low levels of RF energy that is deemed to comply without testing of specific absorption rate (SAR).

For customers in Canada

IC statement

CAN ICES-3 (B)/NMB-3(B)

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This device complies with RSS-102 radiation exposure limits set forth for an uncontrolled environment.

Notes on use

- Be sure to read the connected device's user manual before use.
- Audio-Technica will not be liable in any way for any loss of data in the unlikely event that such losses should occur while using the product.
- On public transportation or in other public places, keep the volume low so as not to disturb other people.
- Minimize the volume on your device before connecting the product.
- When using the product in a dry environment, you may feel a tingling sensation in your ears. This is caused by static electricity accumulated on your body, not by product malfunction.
- Do not subject the product to strong impact.
- Do not store the product in direct sunlight, near heating devices, or in hot, humid, or dusty places. Additionally, do not allow the product to get wet.
- When the product is used for a long time, the product may become discolored due to ultraviolet light (especially direct sunlight) and wear.
- Make sure to hold the plug when connecting and disconnecting the USB charging cable. The USB charging cable may become severed or an accident may occur if you pull on the cable itself.
- When you are not using the USB charging cable, disconnect it from the product.
- If the product is placed in a bag while the USB charging cable is still connected, the USB charging cable may become caught, severed, or broken.
- This product can be used to talk on the phone only when using a mobile telephone network. Support for telephony apps that use a mobile data network is not guaranteed.
- If you use the product near an electronic device or transmitter (such as a mobile phone), unwanted noise may be heard. In this case, move the product away from the electronic device or transmitter.
- If you use the product near a TV or radio antenna, noise may be seen or heard in the television or radio signal. In this case, move the product away from the TV or radio antenna.
- To protect the built-in rechargeable battery, charge it at least once every 6 months. If too much time passes between charges, the life of the rechargeable battery may be reduced, or the rechargeable battery may no longer be able to be charged.
- The volume of the product differs depending on if the noise-cancelling function is on or off.

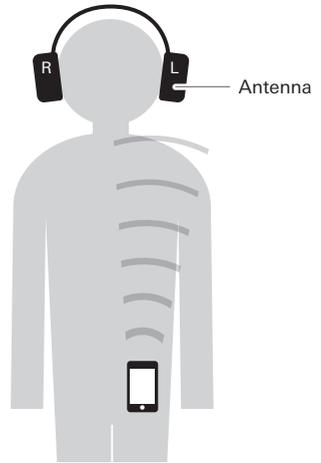
About the active noise-cancelling function

The product is designed to use its built-in microphone to pick up noise from the surrounding environment (noise from vehicles, noise from air conditioners, etc.) and to cancel out that noise by producing sounds in negative phase. This results in a reduction in the sounds in your environment.

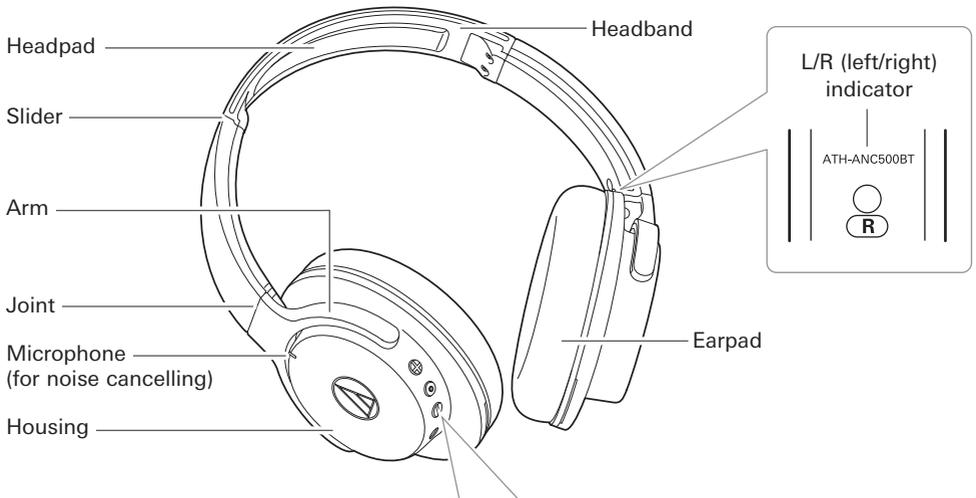
- The product's noise-cancelling function mainly reduces noises of 300 Hz or lower. Because of this, it has almost no effect on noises above that frequency (ringtones, speaking voices, etc.).
- Not all sounds are cancelled.
- Depending on the type of noise (or in quiet locations), you may not notice the noise-cancelling effect.
- There is a "humming" sound when you turn on the noise-cancelling function. This is the sound of the noise-cancelling function operating; it is not a malfunction.
- The noise-cancelling effect may vary or a bleep (howling) may occur depending on how you wear the product. In these cases, take off the product and put it on again correctly.
- When you use the product in a train, car, bus or truck, noise may be heard depending on rail/street conditions.

For a more comfortable Bluetooth® communication experience

The effective communication range of this product varies depending on obstructions and radio wave conditions. For a more enjoyable experience, please use the product as close as possible to the Bluetooth device. To minimize noise and sound disruptions, avoid placing your body or other obstacles between the product's antenna (L side) and the Bluetooth device.



Part names and functions



Multi-indicator lamp

Displays the operating status and battery level of the product.

Noise-cancelling indicator lamp

Displays the operating status of the noise-cancelling function.

Power switch

Turns the power on and off.

Microphone (for calls)

Battery jack

Use to connect the included USB charging cable and charge the product.

Connector jack

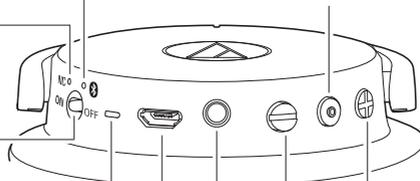
Use to connect the included cable for wired connections (playthrough function).

Multifunction button

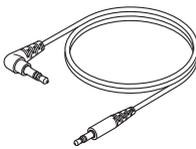
Use to play or pause music, and operate calls.

Volume buttons

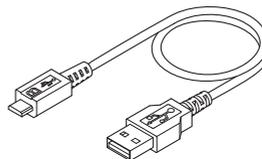
Adjust the volume using + and -.



■ Accessories



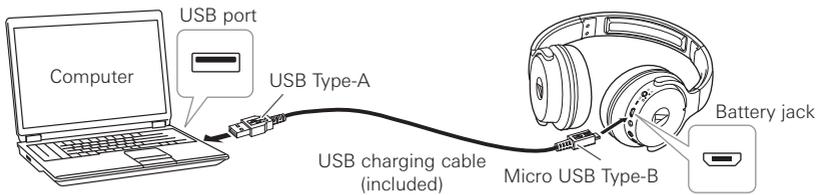
- Cable 1.2 m (3.9') / 3.5 mm (1/8") gold-plated stereo mini-plug/L-type



- USB charging cable (30 cm (1') long)

Charging the battery

- Fully charge the battery when using for the first time.
 - If the rechargeable battery power is running low, the product will beep through the headphones, and the multi-indicator lamp will flash in red. In this case, charge the battery.
 - It takes about 4 hours maximum to charge the battery fully. (This time may vary depending on usage conditions.)
 - While charging the battery, the product's Bluetooth connection remains disabled and therefore the product's Bluetooth feature cannot be used.
1. Connect the included USB charging cable (Micro USB Type-B side) to the battery jack.
 - The included USB charging cable is designed for exclusive use with the product. Do not use any other USB charging cable.
 - When inserting the USB charging cable into the USB port or battery jack, check that the connector is facing in the correct direction before inserting it directly (horizontally).



2. Connect the included USB charging cable (USB Type-A side) to the computer to start charging.
 - While charging, the multi-indicator lamp lights as follows:
 - Lit in red: Charging
 - Lit in blue (3 seconds), and then turns off: Charging complete
3. When charging is complete, disconnect the USB charging cable (USB Type-A side) from the computer.
4. Disconnect the USB charging cable (Micro USB Type-B side) from the product's battery jack.

- If you start to charge while the product is on, it will turn off while charging. When charging is complete, turn off the power switch and then turn it on again.
- When charging, make sure to use the included USB charging cable. The product may not charge with cables other than the included USB charging cable.
- You cannot use this product to listen to music while it is charging.

Connecting via Bluetooth

To connect the product to a Bluetooth device, the product needs to pair (register) with the device.

Pairing a Bluetooth device

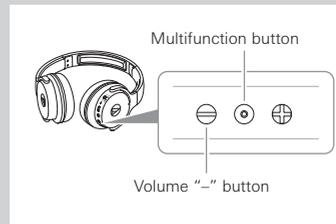
- Read the user manual for the Bluetooth device.
 - Place the Bluetooth device within 1 m (3.3') of the product to perform pairing correctly.
 - To confirm the progress of the pairing process, wear the product while performing this procedure and listen for the confirmation tone.
1. Starting with the product turned off, turn it on.
 - The multi-indicator lamp will alternately flash in red and blue.
 2. Use your Bluetooth device to begin the pairing process and search for the product. When your Bluetooth device finds the product, "ATH-ANC500BT" will be displayed on the device.
 - For information about using your Bluetooth device, refer to the device's user manual.
 3. Select "ATH-ANC500BT" to pair the product and your Bluetooth device.
 - Some devices may ask for a passkey. In this case, enter "0000". The passkey may also be called a passcode, PIN code, PIN number, or password.
 - The product sounds a confirmation tone when pairing is complete.



About pairing

When connecting a new Bluetooth device, you need to pair it with the product. Once the Bluetooth device and the product are paired, you do not need to pair them again. The product supports multipairing, in which a connection history is saved. However, in the following cases you will need to pair again even if the Bluetooth device was paired once:

- If the product is deleted from the Bluetooth device's connection history.
 - If the product is sent out for repair.
-
- When switching to a Bluetooth device, you may not be able to pair because the previously connected Bluetooth device cannot be disconnected. In such cases, press and hold (about 4 seconds) the multifunction button and volume "-" button at the same time as shown in the figure. The product will switch to the "searching for devices" state and you will be able to pair with your desired Bluetooth device.

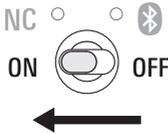
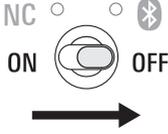


Using the product

The product can use Bluetooth wireless technology to connect to your device and play music, receive phone calls, etc. Use the product for whichever of these purposes suits your needs.

Note that Audio-Technica cannot guarantee the operation of displays, such as the battery level display, or applications via Bluetooth devices.

Power ON/OFF switching

Power supply	Power switch operation	Multi-indicator lamp
ON		Lights in blue, then flashes in red and blue*1*2
OFF		Lights in red, then turns off*2

*1 It may take several seconds for the multi-indicator lamp to light.

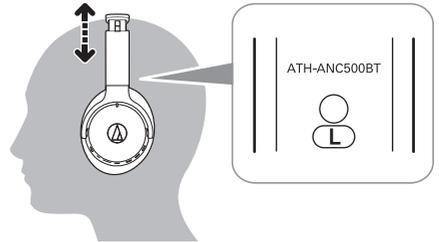
*2 For details, refer to "Multi-indicator lamp display" (p.15).

- If the product is on and not connected to a device after 5 minutes, the Bluetooth connection is disabled automatically. However, the noise-cancelling function (p.12) stays on. Also, if the product is on and you are using the playthrough function (p.12), the product will not turn off.

Using the product

Wearing the product

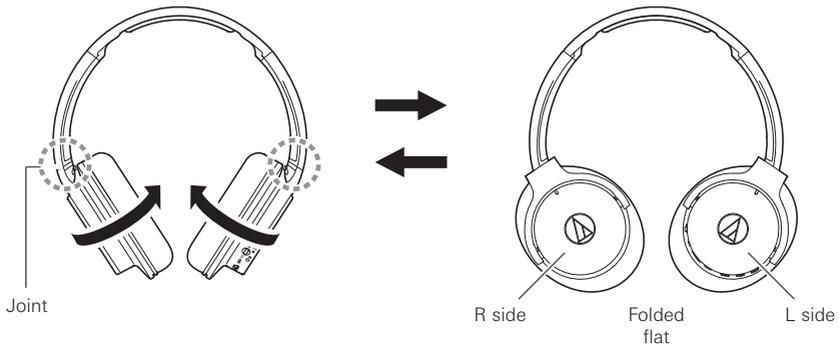
Place the side of the product marked "L" (LEFT) over the left ear and the side marked "R" (RIGHT) over the right ear, slide the slider up or down so that the earpads cover your ears, and then adjust the headband.



Swivel mechanism

You can fold the housing so that it lies flat.

- The swivel mechanism cannot rotate more than 90 degrees. Do not apply excessive force.



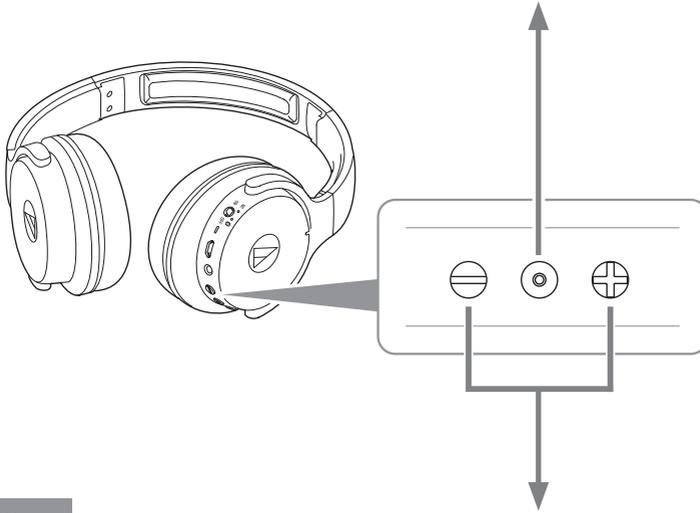
Using the product

Listening to music

- To connect for the first time, pair the product and your device via Bluetooth wireless technology. If you have already paired the product and your Bluetooth device, turn on the Bluetooth device's Bluetooth connection before turning on the product.
- Use your Bluetooth device to start playback, referring to the device's user manual as necessary.

Multifunction button

Press	Play/pause	Plays or pauses music.
Press and hold (about 2 seconds)	Speech recognition feature	Depending on the connected device, activates the device's speech recognition function (such as Siri for compatible iOS devices).



Volume buttons

+ button	Press	Volume up	Increases the volume by 1 level.
	Press and hold (about 2 seconds)	Skip forward	Plays the next track.
- button	Press	Volume down	Decreases the volume by 1 level.
	Press and hold (about 2 seconds)	Skip back	Plays the previous track.

- Some controls may not be available for music playback on some smartphones.
- The volume control of some devices may not work well with the product.

Using the product

Talking on the phone

- If your Bluetooth device supports telephone features, you can use the product to talk on the phone.
- When your Bluetooth device receives a phone call, the product sounds a ring tone.
- If a call is received while you are listening to music, music playback is paused. When you finish the call, music playback resumes.*

When	Operation	Function
Receiving a call	Press the multifunction button.	Answers the call.
	Press and hold (about 2 seconds) the multifunction button.	Rejects the call.
Talking on a call	Press the multifunction button.	Ends the call.
	Press and hold (about 2 seconds) the multifunction button.	Each time you press and hold the button, you switch the call to your mobile phone or to the product.
	Press a volume button (+ or -).	Adjusts the volume (+ or -) of the call.

*Depending on your Bluetooth device, music playback may not resume.

- The phone call controls explained above may not be available on some smartphones.

Using the product

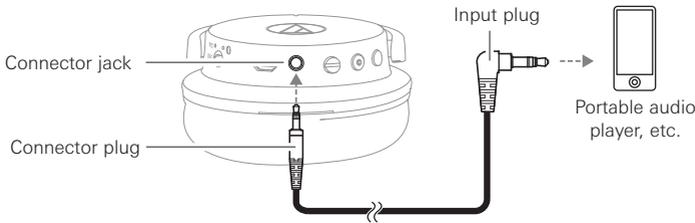
Noise-cancelling function

The microphone built into the product detects ambient noise, and outputs a sound-cancelling signal to effectively reduce noise. When you turn on the product, noise cancelling turns on automatically.

- When you use noise cancelling, the noise-cancelling indicator lamp lights in green.
- When connected via Bluetooth, you cannot turn off the noise-cancelling function.

Wired connection (playthrough function)

The product has a playthrough function that allows you to use it as portable headphones and play back music even when there is no battery level. You can connect the connector plug of the included cable to the product's connector jack, and then connect the input plug into a portable audio player.



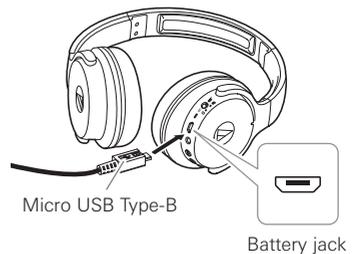
- If there is battery level remaining, you can use the noise-cancelling function by turning on the product even when using the playthrough function.
- There is a difference in volume when noise cancelling is on and off.

Reset function

If the product does not work or other malfunctions occur, refer to "Charging the battery" (p.6) for information on inserting the USB charging cable to provide power, and then do a reset.

Disconnecting and then reconnecting the USB charging cable will reset the product and should resolve any problem you are experiencing. If the problem persists, contact your local Audio-Technica dealer.

Resetting does not change any of your settings (pairing information, volume setting, etc.).



Cleaning

Get into the habit of regularly cleaning the product to ensure that it will last for a long time. Do not use alcohol, paint thinners, or other solvents for cleaning purposes.

- To clean, wipe with a dry cloth.
 - Wipe away any perspiration or dirt from the cable with a dry cloth immediately after use. Failure to clean the cable may cause it to deteriorate and harden over time, resulting in malfunction.
 - Wipe the plug with a dry cloth if dirty. If you use a dirty plug, you may hear distorted or skipping sound.
 - Wipe away any dirt from the earpads, headpad, and headband with a dry cloth. The colors may fade if sweat or water gets on the earpads, headpad, and headband. In this case, we recommend that you wipe them with a dry cloth and let them dry in a shaded spot.
- If the product will not be used for an extended period of time, store it in a well-ventilated place free from high temperatures and humidity.
- The earpads are consumable parts. They degrade through storage and use, so replace them as early as possible. For earpad replacement and other repairs, contact your local Audio-Technica dealer.

Troubleshooting

Problem	Solution
Power is not supplied	<ul style="list-style-type: none">• Charge the product.
Unable to pair.	<ul style="list-style-type: none">• Confirm that the Bluetooth device communicates using Ver. 2.1+EDR or higher.• Place the product and the Bluetooth device within 1 m (3.3') of each other.• Set the profiles for the Bluetooth device. For procedures on how to set profiles, refer to the Bluetooth device's user manual.• Remove the pairing information for the Bluetooth device then pair the product with this device again.• Press and hold (about 4 seconds) the multifunction button and volume “–” button of the product at the same time (p.7). The product will switch to the “searching for devices” pairing state, allowing you to pair with your desired Bluetooth device.
No sound is heard / Sound is faint.	<ul style="list-style-type: none">• Turn on the power of the product and the Bluetooth device.• Turn up the volume of the product and the Bluetooth device.• If the Bluetooth device is set to the HFP/HSP connection, switch to the A2DP connection.• Move away from obstacles between the product and the Bluetooth device, such as people, metal or walls, and place the product and device closer together.• Switch the sound output of the Bluetooth device to the Bluetooth connection.
Sound is distorted / Noise is heard / Sound cuts out.	<ul style="list-style-type: none">• Turn down the volume of the product and the Bluetooth device.• Keep this product away from devices that emit radio waves such as microwaves and wireless routers.• Keep this product away from TVs, radios, and devices with built-in tuners. These devices can also be affected by the product.• Turn off the equalizer settings of the Bluetooth device.• Remove obstacles between the product and the Bluetooth device and place them closer together. For details, please refer to “For a more comfortable Bluetooth® communication experience” (p.4).
Cannot hear the voice of the caller / Voice of the caller is too quiet.	<ul style="list-style-type: none">• Turn on the power of the product and the Bluetooth device.• Turn up the volume of the product and the Bluetooth device.• If the Bluetooth device is set to the A2DP connection, switch to the HFP/HSP connection.• Switch the sound output of the Bluetooth device to the Bluetooth connection.
The product cannot be charged.	<ul style="list-style-type: none">• Securely connect the included USB charging cable and charge the product.
Noise cancelling does not seem to work.	<ul style="list-style-type: none">• Confirm that the noise-cancelling indicator lamp is lit green.• Confirm that the product is properly positioned over your ears.• The ambient noise may not match the cancelling frequency.

- For details about how to operate your Bluetooth device, refer to the device's user manual.
- If the problem still remains, reset the product. To reset the product, refer to “Reset function” (p.12) under “Using the product”.

Specifications

Headphones

Type	Active noise-cancelling
Driver	40 mm
Sensitivity	96 dB/mW (When noise-cancellation used)*1 95 dB/mW (When noise-cancellation not used)*1
Frequency response	20 to 20,000 Hz
Impedance	32 ohms (unit impedance)

Microphone

Type	Electret condenser
Polar pattern	Omnidirectional
Sensitivity	-36 dB (1 V/Pa, at 1 kHz)
Frequency response	50 to 4,000 Hz

Communication specifications

Communication system	Bluetooth version 4.2
RF output	4.0 mW EIRP
Maximum communication range	Line of sight - approx. 10 m (33')
Frequency band	2.402 GHz to 2.480 GHz
Modulation method	FHSS
Compatible Bluetooth profiles	A2DP, AVRCP, HFP, HSP
Support codec	SBC
Supported content protection method	SCMS-T
Transmission band	20 to 20,000 Hz

Other

Power supply	DC 3.7 V lithium polymer battery
Charging time	Approx. 4 hours*2
Operating time	Continuous transmission time (music playback): Max. approx. 20 hours (when Bluetooth and noise-cancellation used)*2 Max. approx. 42 hours (when only noise-cancellation used)*2
Weight	Approx. 180 g (6.3 oz)
Operating temperature	5°C to 40°C (41°F to 104°F)
Accessories	<ul style="list-style-type: none">• USB charging cable (30 cm (12")), USB Type-A/Micro USB Type-B• Cable (1.2 m (3.9') / 3.5 mm (1/8")) gold-plated stereo mini-plug, L-shaped)
Sold separately	<ul style="list-style-type: none">• Earpads

*1 In case of wired connection.

*2 The above figures depend on operating conditions.

For product improvement, the product is subject to modification without notice.

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