

# DENON<sup>®</sup>

## AH-C820W

Wireless Neckband Headphone

# Owner's Manual



## Preparation

<b>Unpacking</b>	<b>4</b>
<b>Features</b>	<b>5</b>
Wireless	5
Sound quality	5
Comfort	5
<b>Features and functions</b>	<b>6</b>
<b>Charging / Battery status</b>	<b>7</b>
<b>Wearing</b>	<b>10</b>
<b>Switching Audio Guidance</b>	<b>11</b>
<b>Turning the vibration function on and off</b>	<b>13</b>

## Connections

<b>Bluetooth operation</b>	<b>14</b>
Pairing	14
Connecting	14
1: Connecting to the headphones for the first time	15
2: Reconnecting paired devices	17
<b>Connecting to a computer via USB</b>	<b>18</b>

## Operation

<b>Listening to music</b>	<b>19</b>
Listening to music using a Bluetooth device	19
Listening to music on a computer via USB	20
<b>Conducting phone calls</b>	<b>22</b>
Making a call	22
Answering an incoming call	22
Ending a call	22
Using the call waiting function	23
Ignoring an incoming call	23
Switching a call from the headphones to a mobile phone	23
Other operations	24
<b>Turning the power off</b>	<b>24</b>
<b>Information</b>	<b>25</b>
Replacing the ear tips	25
Audio Playback and Phone Calls on a Bluetooth Device	26
Deleting pairing information	26



## Troubleshooting

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<b>Troubleshooting</b>	<b>27</b>
Power does not turn on	27
The device cannot be charged	27
No sound comes out	28
Sound is distorted, noisy, or cuts in and out	28
Cannot play media using Bluetooth	29
Cannot make a phone call	30

## Appendix

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<b>Precautions for Use</b>	<b>31</b>
<b>Disposal of these headphones</b>	<b>32</b>
<b>Trademark information</b>	<b>32</b>
<b>Specifications</b>	<b>33</b>

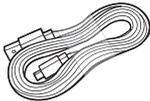
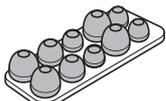


Thank you for purchasing this product.

To ensure proper operation, please read this Owner's Manual carefully before using the product.

## Unpacking

Check that all of these are present before using this device.

 <p>Quick Start Guide</p>	 <p>Safety Instructions</p>	 <p>USB cable (Micro-B connector, approximately 1.3 m)</p>	 <p>Ear tips (L/M/S/LONG M/LONG S)</p>
 <p>Carrying case</p>			



# Features

## Wireless

- You can enjoy listening to music wirelessly by connecting these headphones to your Bluetooth device. Playback operations and volume adjustment can be performed for the paired audio device using the headphones.
- You can also make hands-free phone calls by pairing these headphones to a Bluetooth compatible mobile phone. Equipped with Qualcomm® cVc™ technology that suppresses echoes, enabling low-noise phone calls.

## Sound quality

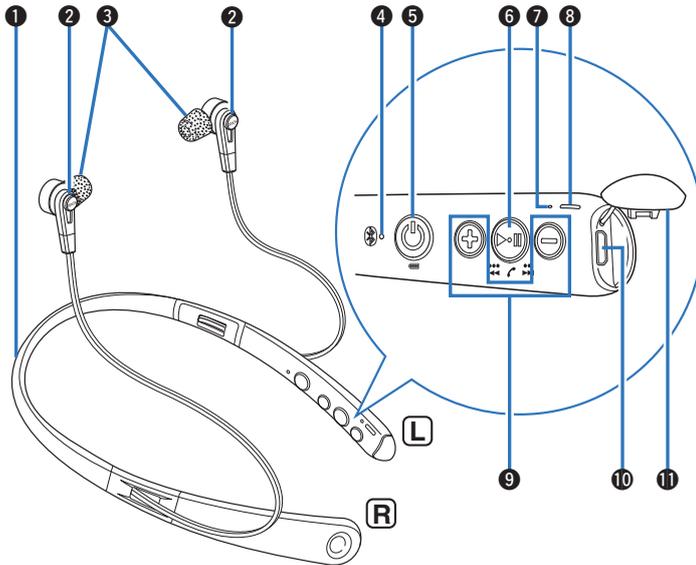
- Two 11.5 mm dynamic drivers are placed parallel to each other for each channel. This creates double the diaphragm area, achieving exceptional volume and powerful sound quality for even the deepest bass zone.
- These headphones are compatible with a wide range of codecs, including the high sound quality codecs aptX, AAC and SBC. These headphones automatically select the optimum compatible codec for your Bluetooth device (smartphone or tablet) so you can enjoy high-grade wireless sound. Additionally, aptX is Low Latency compatible so you can enjoy videos and gaming without audio lag.

## Comfort

- A neckband format is used, with parts such as the battery and control buttons located on the ends of the neckband. The earphones are designed not to come out easily, enabling use for long periods.
- Choose between silicone ear tips in five different sizes and Comply™ foam ear tips made from low repulsion foam to get just the right fit for your ears.
- Audio and vibration can be used to indicate the status and controls of the headphones.



# Features and functions



## 1 Neckband

## 2 Housing

The housing of the earphones contains magnets. This allows you to join the earphones together or attach them to the neckband when you are not using the headphones. (☞ p. 10)

## 3 Ear tips

The Comply™ foam ear tips are attached at the time of purchase. Replace them with any of the accessory ear tips to match your preference. (☞ p. 25)

## 4 Bluetooth LED

## 5 Power button (⏻)

- Indicates the remaining battery power. (☞ p. 8)
- Pairs the headphones with Bluetooth devices. (☞ p. 15)
- Connects to Bluetooth devices. (☞ p. 17)
- Turns the power off. (☞ p. 24)

## 6 Control button (▶||)

Performs playback and phone operations.

- “Listening to music” (☞ p. 19)
- “Conducting phone calls” (☞ p. 22)

## 7 Call microphones

## 8 Charging LED

## 9 Volume buttons (+/-) (☞ p. 20)

## 10 USB port (Micro-B)

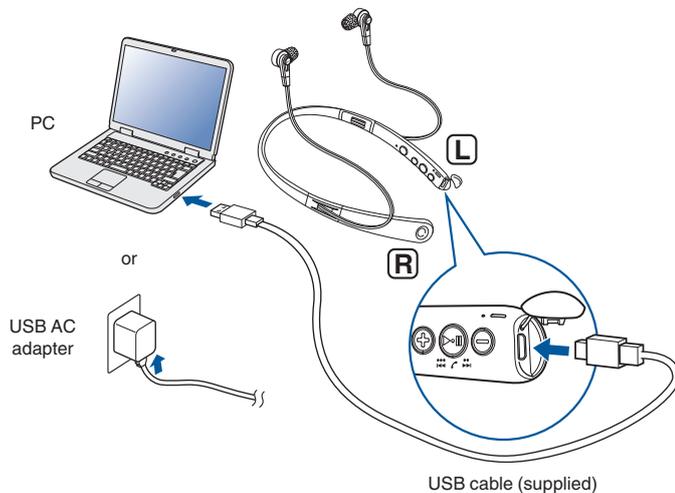
## 11 USB port cover



## Charging / Battery status

Connect the headphones to a computer or USB AC adapter (sold separately) using the supplied dedicated USB cable to charge the battery.

The charging status can be checked from the charging LED on headphones.



Charging status	Color of charging LED
Charging	
Fully charged	





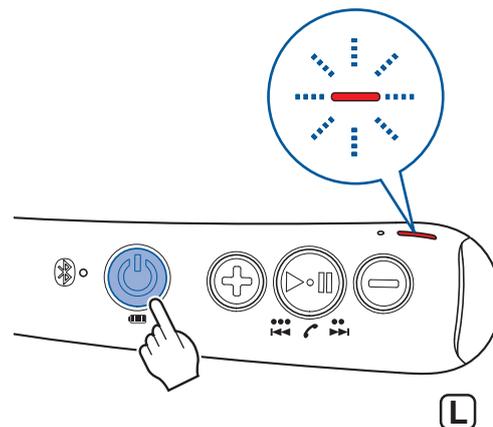
- When using the headphones for the first time after purchase or when the remaining power of the rechargeable battery is low, charge the battery.
- The headphones can be used for approximately 10 hours of music playback when fully charged.
- It takes approximately 2 hours to fully charge the rechargeable battery from the state of no remaining battery power.
- When the USB cable is connected to this device, the headphones disconnect from Bluetooth and enter charging mode. Reconnect to Bluetooth to start Bluetooth playback again. (🔗 p. 14)
- The usable time of the headphones differs depending on the temperature of the environment in which they are used and method of use.

#### NOTE

- When connecting the USB cable to the USB port, be sure to match the cable connector with the shape of the socket. Forcing the connector into the socket will cause damage.
- The rating of the charging output should be DC 5 V, 2.4 A or less.

## ■ Checking the remaining battery power

The remaining power of the rechargeable battery can be checked from the number of alert sounds or audio guidance. It can also be checked from the number of times the charging LED flashes. Press and hold the  button for approximately 2 seconds to turn the power on. If a call is not in progress, press and release the  button.



Number of alert sounds	Number of times the charging LED flashes	Remaining time of rechargeable battery
Four times	Four times	Approx. 10 hours
Three times	Three times	Approx. 5 hours
Twice	Twice	Approx. 3 hours
Once	Once	Less than 1 hours

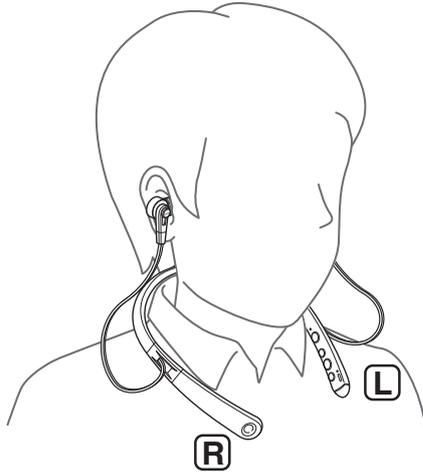




- When the remaining power of the rechargeable battery is running low, the charging LED flashes at approximately 3-second intervals together with an alert sound.
- You can also check the remaining power of the rechargeable battery on an iPhone. (\*)
  - \* The remaining power of the rechargeable battery can be displayed as a percentage (%) on an iPhone, but this number is an approximate value.

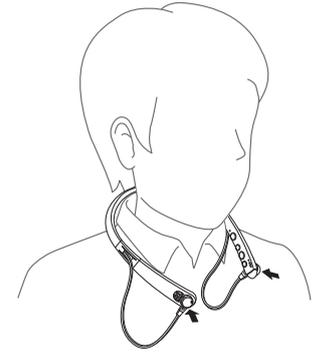
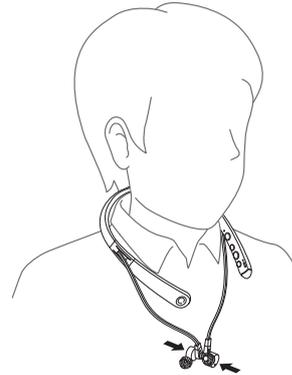


## Wearing



### ■ When you are not using the headphones

The housing and neckband of the headphones contain magnets. When you are not using the headphones, you can join the left and right earphones together as shown in the figure below, reducing the hassle caused by dangling cables.



## Switching Audio Guidance

You will be notified when an operation has been correctly completed via the audio guidance or an alert sound.  
You can switch to audio guidance in your preferred language or use only an alert sound for guidance.

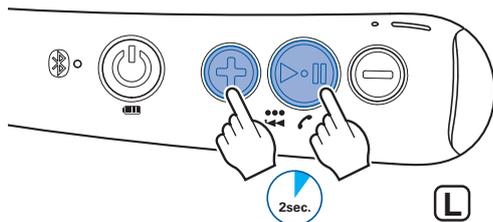
- 1 Connect the headphones and Bluetooth device using Bluetooth.** (🔌 p. 14)
- 2 Press and hold the ▶ || button and volume “+” button together for approximately 2 seconds.**

The options switch between the audio guidance languages or only alert sounds in the following order while the buttons are pressed.

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English / Japanese / German / French / Italian / Spanish / Chinese / Alert sounds (Default: English)

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- 3 Release the buttons when the options have switched to your desired setting.**

This commits the audio guidance setting.



## ■ Adjusting the audio guidance volume

The audio guidance volume can be adjusted between 3 levels.

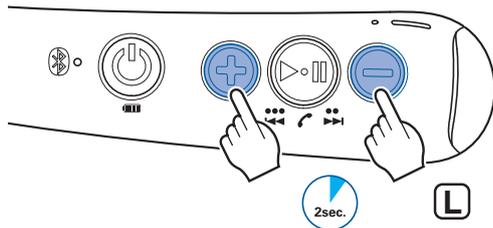
### 1 Press and hold the volume “+” button and volume “-” button together for approximately 2 seconds.

An alert sound is heard and the audio guidance volume changes in the following order. Repeat step 1 until the desired volume is selected.

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**Medium / High / Low**(Default: Medium)

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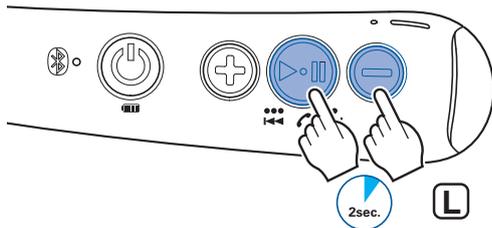
## Turning the vibration function on and off

The vibration function makes the neckband vibrate as an alert when some operations are performed correctly.

The vibration function can be turned on or off according to your preference.

- 1 Connect the headphones and Bluetooth device using Bluetooth.** (🔗 p. 14)
- 2 Press and hold the ▶ || button and volume “-” button together for approximately 2 seconds.**

An alert sound is heard and the vibration function turns off. Repeat step 2 to turn this function on.



Headphones operation/status	Vibration pattern
Power on	Vibrates once
Power off	Vibrates once
Entering pairing mode	Vibrates twice
Completion of Bluetooth connection	Vibrates three times
Turning vibration function on	Vibrates twice
Incoming call	Vibrates for approximately 1 second (repeatedly throughout the incoming call signal)



# Bluetooth operation

You can enjoy listening to music wirelessly by connecting the headphones to your Bluetooth device.

## Pairing

Pairing (registration) is an operation that is required in order to connect a Bluetooth device to the headphones. When using Bluetooth for the first time, you need to pair the headphones and your Bluetooth device so they can communicate with each other. Once a Bluetooth device has been paired with your headphones, pairing does not need to be performed again for future Bluetooth connections with that device.



- Pairing needs to be done again in the following cases.
  - When 9 or more devices have been paired with the headphones  
These headphones can store pairing information from a maximum of 8 devices. When 9 or more devices are paired, the new pairing information overwrites the oldest pairing information in order from the oldest information onwards.
- Multiple Bluetooth devices cannot be played back at the same time.

## Connecting

There are two methods for connecting with Bluetooth devices:

- 1 Connecting to the headphones for the first time (👉 p. 15)
- 2 Reconnecting paired devices (👉 p. 17)



## 1: Connecting to the headphones for the first time

Check that the headphones are not connected to any Bluetooth device before pairing.

### 1 Turn on the Bluetooth function of your mobile device.

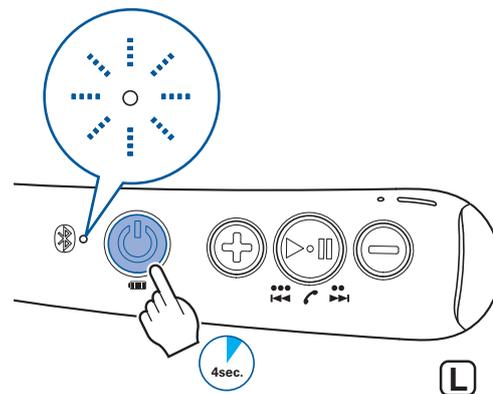
- For details, see the Owner's Manual of the Bluetooth device that you want to connect.



### 2 Press and hold the $\Phi$ button for approximately 4 seconds while the headphones are powered off.

The Bluetooth LED lights and then blinks in approximately 1-second intervals as the headphones enter pairing mode.

- If the vibration function is on, the neckband vibrates twice when the headphones enter pairing mode. (🔗 p. 13)



- The power of the headphones turns on after pressing and holding the  $\Phi$  button for approximately 2 seconds. Continue pressing the button.
- If the Bluetooth LED does not light even when the  $\Phi$  button is pressed, the rechargeable battery has no power remaining. Charge the battery. (🔗 p. 7)



### 3 Select “DENON AH-C820W” from the list of devices displayed on the screen of your Bluetooth device.

When pairing is completed and the Bluetooth connection is established, the Bluetooth LED lights for approximately 2.5 seconds.

- If the vibration function is on, the neckband vibrates three times when the Bluetooth connection is established. (👉 p. 13)



### 4 Playing back music on the Bluetooth device.

Music played back on the connected Bluetooth device is output from the headphones.



- If the power is on, press and hold the  $\Phi$  button for approximately 4 seconds to turn the power off before pairing.
- The headphones pairing mode is canceled if pairing is not completed within 3 minutes. In this case, press and hold the  $\Phi$  button for approximately 4 seconds to turn the power off and then pair the devices again.
- If you are requested to enter a PIN code (pass key), enter “0000” (four zeros).



## 2: Reconnecting paired devices

Check that the headphones are not connected to any Bluetooth device before connecting.

### 1 Turn on the Bluetooth function of your mobile device.

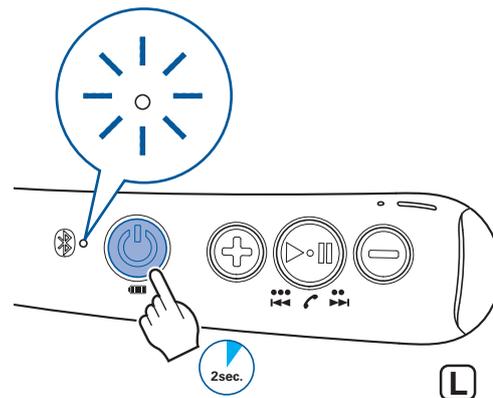
- For details, see the Owner's Manual of the Bluetooth device that you want to connect.



### 2 Press and hold the $\Phi$ button for approximately 2 seconds while the headphones are powered off.

The Bluetooth LED flashes for approximately 1.5 seconds and the headphones power on before automatically connecting to the Bluetooth device.

- When the Bluetooth connection is established, the Bluetooth LED lights for approximately 2.5 seconds.
- If the vibration function is on, the neckband vibrates once when the power turns on and three times when the Bluetooth connection is established. (🔗 p. 13)



- If the Bluetooth connection is not made automatically, select "DENON AH-C820W" from the list of devices displayed on the screen of your Bluetooth device.

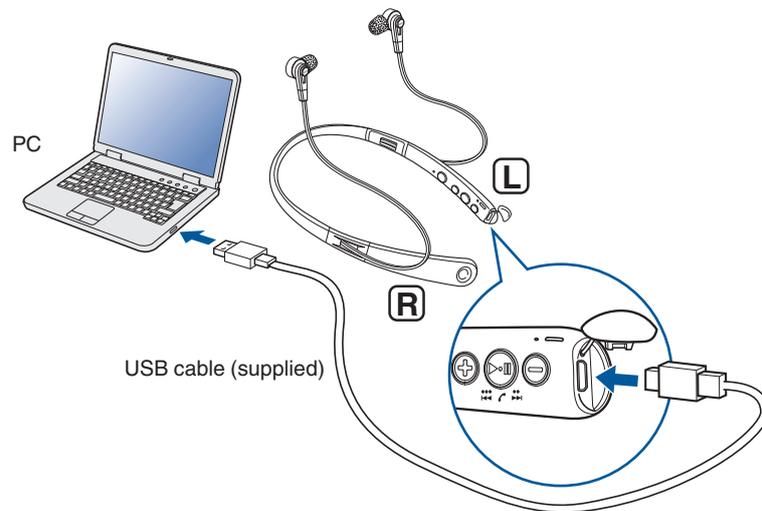


### 3 Playing back music on the Bluetooth device.

Music played back on the connected Bluetooth device is output from the headphones.

## Connecting to a computer via USB

Audio data on a computer can be played through the headphones by inserting the USB cable (supplied) in the USB port of the headphones and connecting them to the computer. (🔗 p. 20)



- The headphones automatically start charging when they are connected to a computer.



# Listening to music

## Listening to music using a Bluetooth device

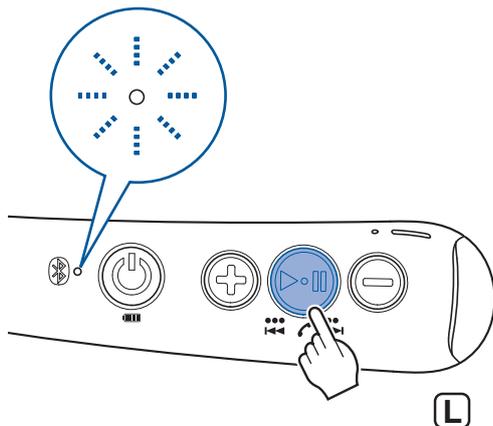
First check that the headphones and Bluetooth device are connected via Bluetooth. (🔗 p. 14)

Playback operations can be performed from both the Bluetooth device and headphones. Here we will explain the operations using the buttons on the headphones.

### Playback/pause

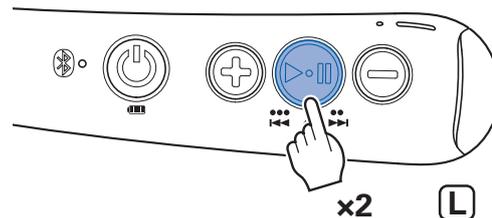
Press the ▶ || button once.

- The Bluetooth LED flashes in 5-second intervals during playback.

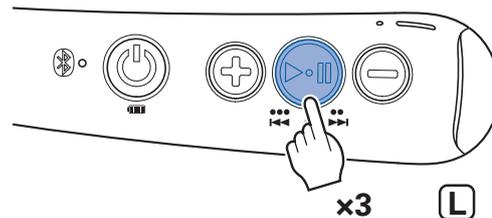


### Select track

Next track: Press the ▶ || button twice.



Previous track: Press the ▶ || button 3 times.

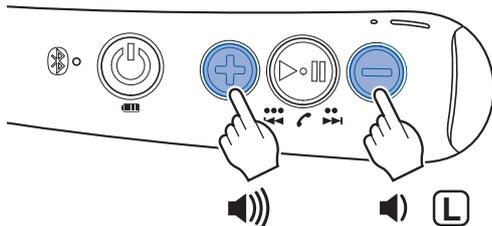


### Volume adjustment

Increase volume: Press the volume “+” button.

Decrease volume: Press the volume “-” button.

- An alert sound is heard when the maximum or minimum volume is reached.



## Listening to music on a computer via USB

First check that the headphones and computer are connected via USB.  
(☞ p. 18)

### ■ For Windows OS

- 1 Click “Start” on the computer screen and then click “Control Panel”.**  
This displays the Control Panel settings list.
- 2 Click “Sound”.**  
This displays the Sound menu screen.
- 3 In the “Playback” tab, make sure that “Default Device” is checked for “AH-C820W”.**
  - If it is checked for another device, select “AH-C820W” and click “Set Default”.
- 4 Play the music in the player software on your computer.**  
The music being played is output through the headphones.



## ■ For Mac OS

### 1 Move the cursor to “Go” on the computer screen and click “Utilities”.

This displays the Utilities list.

### 2 Double click “Audio MIDI Setup”.

This displays the “Audio Devices” screen.

### 3 In “AH-C820W”, make sure that “Use this device for sound output” is checked.

- If it is checked for another device, secondary click “AH-C820W” and select “Use this device for sound output”.

### 4 Play the music in the player software on your computer.

The music being played is output through the headphones.



- The buttons on the headphones can be used to control playback in addition to the controls on the computer.

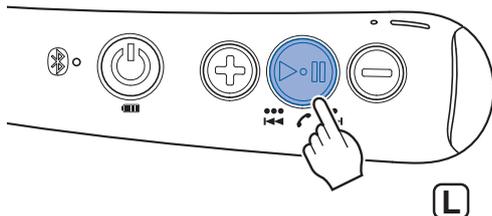
<b>Playback/pause</b>	Press the ►    button once
<b>Next track</b>	Press the ►    button twice
<b>Previous track</b>	Press the ►    button three times
<b>Increase volume</b>	Press the volume “+” button
<b>Decrease volume</b>	Press the volume “-” button

- \* It may not be possible to use the buttons of the headphones to control the playback with some computers or player software.



## Conducting phone calls

Calls can be made while you are wearing the headphones. You can hear the caller's voice through the headphones, and your voice is picked up by the built-in microphone in the headphones. The Bluetooth compatible mobile phone connected via Bluetooth is controlled using the ► || button.



### Making a call

Dial the number with the mobile phone connected via Bluetooth. Audio playback is paused and the call is connected.

### Answering an incoming call

When an incoming call is received, audio playback is paused and the ring tone is heard.

Press the ► || button once to start the call.



- The neckband vibrates repeatedly for approximately 1 second when receiving incoming calls. (🔗 p. 13)

### Ending a call

Press the ► || button once during the call.

When a call is ended, playback of the paused track is restarted.



## Using the call waiting function

If you receive a call while another call is already in progress, you can place the current call (call A) on hold and switch to the new call (call B).



- Some of mobile phones may not be compatible with these functions.

### 1 Press the ► || button once during the call.

- This places the current call (call A) on hold and switches to the new call (call B).
- When the new call (call B) ends, the headphones return to the call that is on hold (call A).

## ■ To return to the call that is on hold (call A)

### 1 Press the ► || button 3 times during the call (call B).

- This places the current call (call B) on hold and switches to the call that is on hold (call A).

## Ignoring an incoming call

Press and hold the ► || button for approximately 2 seconds when an incoming call is received.

## Switching a call from the headphones to a mobile phone

Switch the current call to the mobile phone.

Press the ► || button three times.



## Other operations

<b>Incoming call detected</b>	<b>Answer</b>	Press the ►    button once
<b>In standby mode/ During audio playback</b>	<b>Voice dial/ Voice activated call</b>	Press and hold the ►    button for approximately 1 second
<b>Call in progress</b>	<b>End call</b>	Press the ►    button once
	<b>Mute on/off</b>	Press the ►    button twice



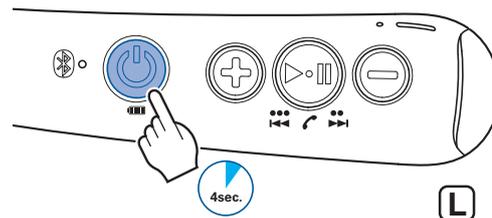
- Press the volume buttons (+/-) to adjust the volume of the caller's voice.

## Turning the power off

### 1 Press and hold the ⏻ button for approximately 4 seconds.

The Bluetooth LED turns off and the power is turned off.

- If the vibration function is on, the neckband vibrates once when the headphones are powered off. (👉 p. 13)



- A small amount of power is consumed even when the power is off.

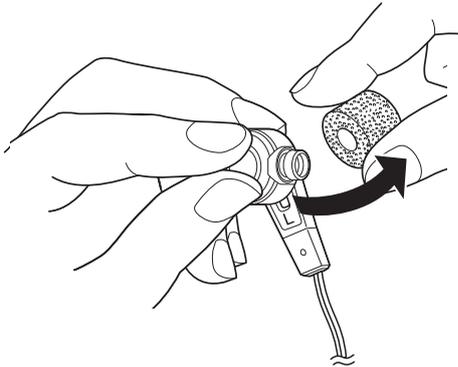


## Information

### Replacing the ear tips

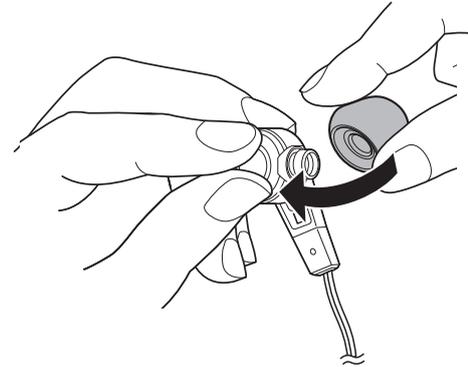
#### Removing

Hold the ear tip and pull while tilting it.



#### Attaching

Align the nozzle with the ear tip attachment part and push it all the way in using a small amount of force.



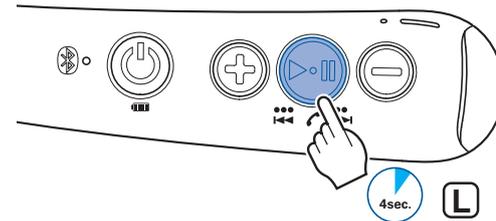
## Audio Playback and Phone Calls on a Bluetooth Device

- These headphones are compatible with SCMS-T content security standards. You can use these headphones with SCMS-T compatible mobile phones or devices.
  - In order to listen to music via a Bluetooth connection, the connected Bluetooth device needs to be A2DP (Advanced Audio Distribution Profile) compatible. (\*)
  - In order to control playback of the Bluetooth device using the headphones, the connected Bluetooth device needs to be AVRCP (Audio Video Remote Control Profile) compatible. (\*)
  - The connected Bluetooth device needs to be compatible with either HSP (Headset Profile) or HFP (Hands-free Profile) in order to use the headphones for conducting phone calls. (\*)
  - The Bluetooth device needs to be compatible with either HFP or HSP and A2DP in order to conduct calls during audio playback. (\*)
- \* For details on profiles that the Bluetooth device is compatible with, see the Bluetooth device Owner's Manual.

## Deleting pairing information

Delete pairing information if you have made a mistake entering pairing information or when re-pairing a device.

- 1 Press and hold the ►|| button for approximately 4 seconds in pairing mode.



- To make a Bluetooth connection after clearing the pairing information, follow the instructions on "1: Connecting to the headphones for the first time" (📖 p. 15).



# Troubleshooting

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First, check the following.

1. Are all of the connections correct?
2. Were the instructions in the manual followed correctly?
3. Is the connected device being operated correctly?

If the headphones do not operate properly, check the corresponding issue here.

If the issue is not covered here, there may be a malfunction. Contact the store where you purchased the headphones. If the staff at the store where you purchased the headphones also do not know how to resolve the issue, contact the Denon Customer Service Center or your nearest Repairs Center.

## Power does not turn on

### Power does not turn on.

- When the rechargeable battery has no power remaining, connect the headphones to an AC adapter or computer using the supplied USB cable to charge the battery. (🔗 p. 7)

## The device cannot be charged

### The headphones cannot be charged.

- Check whether the power plug is correctly inserted into the power outlet. (🔗 p. 7)
- Make sure the supplied USB cable is inserted correctly into the headphones. (🔗 p. 7)
- If the headphones are connected to the computer via the USB port, check that the computer is powered on.



## No sound comes out

### No sound comes out.

- Check that the headphones and the connected device are powered on.
- Adjust the volume of the headphones and the connected device to a suitable level. (👉 p. 20)
- Pair the headphones with the Bluetooth device. (👉 p. 15)
- If you are trying to play music on a computer via USB, check that the supplied USB cable is fully connected. (👉 p. 18)

## Sound is distorted, noisy, or cuts in and out

### Sound is distorted, noisy, or cuts in and out.

- Adjust the volume of the headphones and the connected device to a suitable level. (👉 p. 20)
- The Bluetooth device is out of range. Bring the Bluetooth device closer to the headphones.
- The Bluetooth connection is experiencing wireless interference. Move the headphones away from appliances such as microwave ovens and other wireless devices.
- Power cycle the device and try again.



## Cannot play media using Bluetooth

### Cannot connect using Bluetooth.

- Check that the power of the Bluetooth device is on and the Bluetooth function is enabled.
- Check whether the Bluetooth device is in sleep status.
- Bring the headphones and the Bluetooth device closer together.
- Turn the Bluetooth device off and back on and try again.
- Pair the devices again. (👉 p. 15)
- Select A2DP as the Bluetooth connection profile on the transmitting Bluetooth device. For details, see the Owner's Manual of the Bluetooth device.
- If the USB cable is connected, remove it.

### Sound is not output from the headphones when connected using Bluetooth.

- Check that audio is being played back on the Bluetooth device.
- Increase the volume. Increase the volume on the Bluetooth device if it is necessary to adjust the volume on the Bluetooth device. (👉 p. 20)



## Cannot make a phone call

### Cannot make a phone call.

- Some smartphones and phone apps do not support hands-free calls.

### Cannot hear the caller's voice.

- If the call came while you were listening to music with the headphones, press the ► || button to switch to call mode. (👉 p. 22)
- Check that the power of the Bluetooth device is on and the Bluetooth function is enabled.
- Select HSP or HFP as the Bluetooth connection profile on the transmitting Bluetooth device. For details, see the Owner's Manual of the Bluetooth device.
- Check that the Bluetooth device is set to handle calls through the headphones. For details, see the Owner's Manual of the Bluetooth device.
- Increase the incoming call volume. (👉 p. 24)



## Precautions for Use

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- Be sure to read the Owner's Manual of the device that you want to connect.
- Check the volume settings when using the headphones on public transport or in public places and make sure you do not disturb people around you.
- These headphones are not guaranteed to work with all combinations of Bluetooth devices/mobile phones.
- These headphones do not support connection with all Bluetooth devices/mobile phones.
- Bluetooth wireless technology can communicate over a distance of approximately 10 m. However, obstructions (people, metallic objects, walls, etc.) and radio wave conditions affect the range in which communication is possible.
- The Bluetooth device that you want to connect must support the same profile as these headphones in order to use the Bluetooth function. For details on profiles that the Bluetooth device is compatible with, see the Bluetooth device Owner's Manual.
- Due to features of Bluetooth wireless technology, playback of audio on the headphones is slightly delayed compared to the voice/audio playback on the transmitting device.



## Disposal of these headphones

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The rechargeable battery built into these headphones can be recycled. Contact the Denon Customer Service Center for details on disposing of these headphones.

## Trademark information

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# Specifications

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## ■ Headphone section

Type:	Dynamic type
Drive units:	$\phi$ 11.5 mm x 2
Playback frequency:	4 – 22,000 Hz
Maximum output acoustic pressure level:	100 dBA

## ■ Bluetooth section

Compatible standards:	Bluetooth Ver. 5.0
Transmission power class:	Class1
Compatible profiles:	A2DP/AVRCP/HSP/HFP
A2DP codec support:	aptX/aptX Low Latency/AAC/SBC
Continuous playback time:	Approx. 10 hours
Charging time:	Approx. 2 hours



## ■ USB audio component

**Supported format:**

PCM 16-bit / Sampling frequencies: 48, 44.1, 32 kHz

**Supported device class:**

Audio device class ver.1.0, HID class ver.1.11

## ■ General

**Operating temperature range:**

5 °C - 40 °C

**Power supply:**

DC 3.7 V (internal lithium polymer rechargeable battery)

**Weight:**

72 g

\* For purposes of improvement, specifications and design are subject to change without notice.



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