Panasonic®

Operating Instructions

Digital Wireless Stereo Headphones

Model No. RP-HD605N RP-HD505B



Unless otherwise indicated, illustrations in these operating instructions are of RP-HD605N.









Thank you for purchasing this product.

Please read these instructions carefully before using this product, and save this manual for future use.



Safety precautions

■ Unit

WARNING:

To reduce the risk of fire, electric shock or product damage,

- Do not expose this unit to rain, moisture, dripping or splashing.
- Do not place objects filled with liquids, such as vases, on this unit.
- Use the recommended accessories.
- Do not remove covers.
- Do not repair this unit by yourself. Refer servicing to qualified service personnel.
- · Avoid using or placing this unit near sources of heat.
- Do not listen with this unit at high volume in places where you need to hear sounds from the surrounding environment for safety, such as at railroad crossings, and construction sites.
- Wide band characteristic voltage equal or larger than 75 mV.
- Keep this unit away from something susceptible to the magnetism. Such devices as a clock may not operate correctly.
- When using this unit in an airplane, heed the instructions given by the airline company. Some airlines may forbid your using the unit. For further details, contact the airline you will be flying with.

■ Allergies

- Discontinue use if you experience discomfort with the ear pads or any other parts that directly contact your skin.
- · Continued use may cause rashes or other allergic reactions.

■ Precautions for listening with the Headphones

- Excessive sound pressure from earphones and headphones can cause hearing loss.
- Do not use your headphones at a high volume. Hearing experts advise against continuous extended play.
- If you experience a ringing in your ears, reduce volume or discontinue use.
- Do not use while operating a motorised vehicle. It may create a traffic hazard and is illegal in many areas.
- You should use extreme caution or temporarily discontinue use in potentially hazardous situations.

This unit may receive radio interference caused by mobile telephones during use. If such interference occurs, please increase separation between this unit and the mobile telephone.

Keep the airplane adaptor out of reach of children to prevent swallowing.

Use only the supplied USB charging cord when connecting to a computer.

About Bluetooth®

Panasonic bears no responsibility for data and/or information that is compromised during a wireless transmission.

■ Frequency band used

This unit uses the 2.4 GHz frequency band.

■ Certification of this unit

- This unit conforms to frequency restrictions and has received certification based on frequency laws. Thus, a wireless permit is not necessary.
- The actions below are punishable by law in some countries:
 - Taking apart/modifying this unit.
 - Removing specification indications.

■ Restrictions of use

- Wireless transmission and/or usage with all Bluetooth® equipped devices is not guaranteed.
- · All devices must conform to standards set by Bluetooth SIG, Inc.
- Depending on the specifications and settings of a device, it can fail to connect or some operations can be different.
- This unit supports Bluetooth® security features. But depending on the operating environment and/or settings, this security may not be sufficient. Transmit data wirelessly to this unit with caution.
- This unit cannot transmit data to a Bluetooth® device.

■ Range of use

Use this unit at a maximum range of 10 m (33 ft.).

The range can decrease depending on the environment, obstacles or interference.

■ Interference from other devices

- This unit may not function properly and troubles such as noise and sound jumps may arise due to radio wave interference if this unit is located too close to other Bluetooth® devices or the devices that use the 2.4 GHz band.
- This unit may not function properly if radio waves from a nearby broadcasting station, etc. is too strong.

■Intended usage

- This unit is for normal, general use only.
- Do not use this system near an equipment or in an environment that is sensitive to radio frequency interference (example: airports, hospitals, laboratories, etc).

Table of contents

Safety precautions	
Refore use	
Accessories	5 5
Preparation	
Charging Turning the power on/off Connecting a Bluetooth® device • Pairing (Registration) this unit with the Bluetooth® device for connection • Connecting a paired Bluetooth® device	7 8 8
Operation	
Listening to music • Remote controlling. Making a phone call [HD605N] Using noise cancelling. Useful functions. • [HD605N] Using the ambient sound enhancer • Activating a voice functions. • Making a multi-point connection • Using the detachable cord (supplied). • Resetting the unit • Auto power off • Battery level notification. • Guidance messages. Other	10 12 13 13 14 14 14 15
Storage of the unit	16
Restoring to the factory settings Copyright, etc. Troubleshooting • Sound and audio volume • Bluetooth® device connection • Phone Calls • General	17 18 18 18 18
Power supply and charging Specifications To remove the bottom when dispensing of this unit.	20

Expressions used in this document

- Pages to be referred to are indicated as "→ ○○".
- The product illustrations may differ from the actual product.

Marks denoting model names

Functionality differences between models are indicated with the model marks below.

- RP-HD605N : HD605N
- RP-HD505B : HD505B

Accessories

Please check and identify the supplied accessories.

1 x USB charging cord

1 x Detachable cord

HD605N 1 x Carrying case



HD505B 1 x Carrying pouch



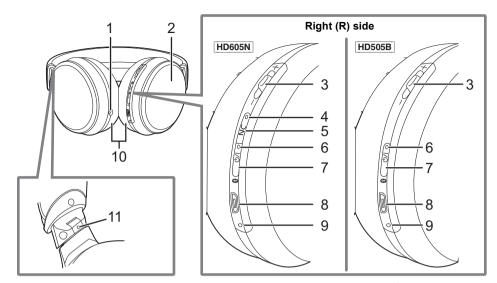
1 x Airplane adaptor

Maintenance

Clean this unit with a dry and soft cloth.

• Do not use solvents including benzine, thinner, alcohol, kitchen detergent, a chemical wiper, etc. This might cause the exterior case to be deformed or the coating to come off.

Part names



- 1 Audio input terminal
- 2 HD605N Ambient sound enhancer sensor panel
- 3 [Multiple functions button]
 - You can perform a wide variety of operations by pressing this button or moving it toward the "+" or "-" side. (→ 10, "Remote controlling")
- 4 **HD605N** Noise cancelling LED*1
- 5 HD605N [NC] button

- 6 Power/pairing LED*2
- 7 [也/I (**3**)] button*3
- 8 Charging terminal (DC IN)
 - Connect the USB charging cord (supplied) to this terminal when charging. (→ 7)
- 9 Microphone
- 10 Ear pads
- 11 Raised dot indicating the left side
- *1 HD605N Examples of lighting/blinking patterns

Lighting (green):	Noise cancelling is ON
-------------------	------------------------

*2 Examples of lighting/blinking patterns

Lighting (red):	Charging is in progress
Blinking alternately in blue and red:	Bluetooth [®] pairing (registration) standby
Blinking slowly (blue)*4:	Bluetooth [®] connection standby
Blinking twice about every 2 seconds (blue)*4:	A Bluetooth $^{\mbox{\scriptsize B}}$ pairing (registration) has been established or a call is in progress
Blinking (blue)*4:	A call is being received

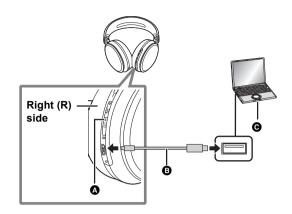
- *3 U/I: Standby/ON
- *4 The battery is low when it is blinking in red. (15, "Battery level notification")

Charging

The rechargeable battery (installed in the unit) is not charged initially. Charge the battery before using the unit.

Connect this unit to a computer using the USB charging cord.

- A: Power/pairing LED
- B: USB charging cord (supplied)
 - Check the direction of the terminals and plug in/out straight holding onto the plug. (It may result in malfunction by the deforming of the terminal if it is plugged in obliquely or in wrong direction.)
- G: Computer
 - Turn on the computer in advance.
- The power/pairing LED lights in red when charging is in progress. When charging is completed, the power/ pairing LED will go out.
- Charging will take approximately 4 hours from empty state to fully charged.



Note

- The Bluetooth® feature cannot be used when this unit is connected to a computer using the USB charging cord.
- Charge in a room temperature between 10 °C and 35 °C (50 °F and 95 °F).
- The power cannot be turned on while charging.
- Do not use any other USB charging cords except the supplied one. Doing so may cause malfunction.
- Charging may not be performed or may stop if the computer is in or switched to standby or sleep mode.

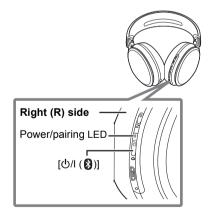
Turning the power on/off

In the power-off state, press and hold [①/I (③)] of this unit for approx. 3 seconds until the power/pairing LED (blue) blinks.

 A guidance message will be heard, and the power/pairing LED (blue) will blink slowly.

■ To turn the power off

Press and hold [0/I ())] for approximately 3 seconds. A guidance message will be heard, the power will be turned off.



Note

• If the unit is not connected to a Bluetooth[®] device, a guidance message will be heard and turn off the unit automatically approximately 5 minutes after you have stopped using it. (HD605N) Except for when noise cancelling is turned ON.) (→ 15, "Auto power off")

Connecting a Bluetooth® device

Preparation

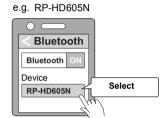
- Place the Bluetooth[®] device within approx. 1 m (3.3 ft.) from the unit.
- Check the device operation using its operation instructions as required.

Pairing (Registration) this unit with the Bluetooth® device for connection

1 In the power-off state, press and hold [也/I (い)] of this unit until the power/pairing LED blinks.

When pairing a device for the first time: approx. 3 seconds
When pairing a second or subsequent devices: approx. 5 seconds

- The unit starts to search for the Bluetooth[®] device for connection, and the power/pairing LED will blink in blue and red alternately.
- 2 Turn on the power of the Bluetooth® device, and enable the Bluetooth® function.
- 3 Select "RP-HD605N" or "RP-HD505B" from the Bluetooth[®] device's menu.
 - A MAC address (an alphanumeric character string that is displayed by and unique to the device) may be displayed before "RP-HD605N" or "RP-HD505B" is displayed.
 - If prompted for a passkey, input the passkey "0000 (four zeros)" of this unit.



- 4 Check the connection with the Bluetooth® device on the unit.
 - The power/pairing LED will blink in blue and red alternately until the connection with the device is completed.
 When the power/pairing LED (blue) blinks twice every approx. 2 seconds, pairing (registration) is completed.
 (Connection established)

Note

- If connection to a device is not established within approximately 5 minutes, the unit will be turned off. Perform pairing again. ([HD605N] Except for when noise cancelling is turned ON.)
- You can pair up to 8 Bluetooth[®] devices with this unit. If a 9th device is paired, the device with the oldest connection will be replaced. To use it, perform pairing again.

Connecting a paired Bluetooth® device

1 Turn on this unit.

- Press and hold [🖰/I (🚯)] of this unit for approx. 3 seconds until the power/pairing LED (blue) blinks.
- A guidance message will be heard, and the power/pairing LED (blue) will blink slowly.

Perform steps 2 and 3 of "Pairing (Registration) this unit with the Bluetooth[®] device for connection". (→ 8)

• When the power/pairing LED (blue) blinks twice every approx. 2 seconds, pairing (registration) is completed. (Connection established)

Note

- This unit remembers the device lastly connected. Connection may be automatically established after step 1 (see above).
- If connection to a device is not established within approximately 5 minutes, the unit will be turned off. Turn on the unit again. ([HD605N] Except for when noise cancelling is turned ON.)

Listening to music

If the Bluetooth[®] compatible device supports the "A2DP" and "AVRCP" Bluetooth[®] profiles, music can be played back with remote control operations on the unit.

- A2DP (Advanced Audio Distribution Profile): Transmits audio to the unit.
- · AVRCP (Audio/Video Remote Control Profile): Allows remote control of the device using the unit.

1 Connect the Bluetooth[®] device and the unit. (→ 8, "Connecting a Bluetooth[®] device")

2 Select and play the music on the Bluetooth[®] device.

- The unit's headphones will output the music or the audio of the video being played back.
- Operating time: (It may become shorter depending on the usage conditions.)
 <u>HD605N</u> The maximum playback time is approximately 20 hours.

 HD505B The maximum playback time is approximately 35 hours.

■ Attention

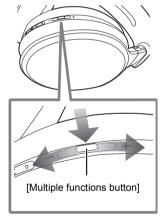
- The unit might leak sound depending on the volume level.
- When the volume is increased to near maximum level, music may sound distorted. Decrease the volume until the distortion is cleared.

Remote controlling

You can control the Bluetooth® device using [Multiple functions button] on the unit.

• Depending on the Bluetooth[®] device or the app, even if you press [Multiple functions button] on the unit, some functions may not respond or may operate differently from the descriptions below.

(Operation example of [Multiple functions button])



Function	Operation
Play / Pause	Press [Multiple functions button].
Increase the volume	Slide the [Multiple functions button] towards "+". • Sliding and holding towards "+" allows you to continuously raise the volume.
Decrease the volume	Slide the [Multiple functions button] towards "-". • Sliding and holding towards "-" allows you to continuously lower the volume.
Forward to the start of next track	Press [Multiple functions button] twice quickly.
Return to the start of current track	Press [Multiple functions button] three times quickly.
Fast forward	Press the [Multiple functions button] twice quickly; hold the second press.
Fast rewind	Press the [Multiple functions button] three times quickly; hold the third press.

Note

• The volume can be adjusted in 31 levels (16 levels during calls). When the maximum or minimum volume is reached, a beep will sound.

Making a phone call

With Bluetooth[®] enabled phones (cell phones or smartphones) that support the "HSP" or "HFP" Bluetooth[®] profile, you can use the unit for phone calls.

- · HSP (Headset Profile):
- This profile can be used to receive monaural sounds and establish two-way communication using the microphone on the unit.
- HFP (Hands-Free Profile):
- In addition to the HSP functions, this profile has the incoming and outgoing calls function.

 (This unit does not have a function that allows you to make phone calls independently of a Bluetooth®
- (This unit does not have a function that allows you to make phone calls independently of a Bluetooth® enabled phone.)
- 1 Connect the Bluetooth[®] device and the unit. (→ 8, "Connecting a Bluetooth[®] device")
- 2 Press [Multiple functions button] on the unit and answer the incoming call.
 - During an incoming call, ringtone will sound from the unit and the power/pairing LED will blink.
 - \bullet (HFP only) To reject the incoming call, press [Multiple functions button] twice quickly.
- 3 Start talking.
 - The power/pairing LED will repeatedly blink 2 times during a call.
 - The volume can be adjusted during a phone call. For setting instructions, see page 10.
- 4 Press [Multiple functions button] to end the phone call.
 - · A beep will sound.

Note

- There may be instances when hands free setting needs to be done on the Bluetooth[®] enabled phone.
- Depending on the Bluetooth[®] enabled phone, you may hear incoming and outgoing call ringtones of the phone from the unit.
- (HFP only) It may be difficult to hear phone conversations when the unit is used in locations with loud ambient noise or in outdoor or other locations exposed to powerful winds. In that case, change the calling location or switch the calling device to the Bluetooth® enabled phone to continue the call. (Press [Multiple functions button] on the unit twice quickly to switch.)
- You can have the Bluetooth[®] enabled phone make phone calls by using the microphone of the unit and an app of the Bluetooth[®] enabled phone. (→ 13, "Activating a voice functions")

HD605N Using noise cancelling

Setting noise cancelling to ON changes the volume and sound quality. The sound quality is set so that it is optimised for each mode.

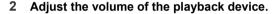
■ About noise cancelling mode

You can select one of the following modes to suit your preference.

- The default mode setting is "Noise cancelling 3".
 - Noise cancelling 3: High
 - Noise cancelling 2: Medium
 - Noise cancelling 1: Low

1 Press [NC].

- You can switch to one of three modes, 1, 2, or 3, each time you press [NC].
 - "Noise cancelling 3" ---- "Noise cancelling 2"
 - ^____"Noise cancelling 1"←—
- When noise cancelling is set to ON, the noise cancelling LED lights in green.



■ To switch between ON and OFF

Press and hold [NC] button for at least 2 seconds.

• When you switch the unit from Standby mode to ON or set noise cancelling from OFF to ON, the last-selected noise cancelling mode will be set.

Note

• While using the noise cancelling function, a very small amount of noise which is generated from the circuit that reduces noise may be heard, but this is normal and not indicative of any trouble. (This very-low-level noise may be heard in quiet places or in the blank parts between tracks.)



Useful functions

HD605N Using the ambient sound enhancer

This makes it easier to listen to sounds around you, such as announcements on trains, when you want to, without taking the unit off.

Place your hand over the ambient sound enhancer sensor panel (R side) so that its entire surface is covered.

- This makes it easier to listen to sounds around you.
- Noise cancelling will turn OFF temporarily and the volume of the playback sound will be lowered.

The noise cancelling mode and the volume return to their original settings when your hand is removed

■ To switch this function between enabled and disabled Slide and hold the [Multiple functions button] towards "+" and at the same time press and hold [NC] for at least 5 seconds.

• When the status is changed to enabled, the power/pairing LED (blue) will light for approx. 2 seconds.

When the status is changed to disabled, the power/pairing LED (red) will light for approx. 2 seconds.

■ To set this function to always-on mode

Press [NC] button twice quickly.

• To deactivate always-on mode, press the [NC] button or place your hand over the ambient sound enhancer sensor panel (R side) so that its entire surface is covered.

Note

• The ambient sound enhancer works only while the unit is turned on.

Activating a voice functions

You can activate Siri or other voice functions with a button on the unit.

- 1 Connect the Bluetooth[®] device and the unit. (→ 8, "Connecting a Bluetooth[®] device")
- 2 Press and hold [Multiple functions button] of this unit for approx. 3 seconds.
 - The voice function on the Bluetooth® device will be activated.

Note

- For details about voice function commands, refer to the operating instructions for the Bluetooth® device.
- The voice function may not work depending on the smartphone specifications and the app version.

Making a multi-point connection

The unit can connect to two Bluetooth® devices at the same time.

For example, by setting up devices as below, you can connect the first Bluetooth $^{\circledR}$ device for calls and music playback and the second Bluetooth $^{\circledR}$ for calls at the same time.

For information about the connection and registration of Bluetooth[®] devices and the unit (→ 8, "Connecting a Bluetooth[®] device")

- 1 Register the unit to both the first Bluetooth® device and the second Bluetooth® device.
- 2 Connect the first Bluetooth[®] device, which will be used for music playback, and the unit.
- 3 Connect the second Bluetooth® device, which will be used for calls, and the unit.

Note

- For more details, including more specific setup instructions, refer to the operating instructions for the Bluetooth[®] devices.
- Only one Bluetooth[®] device can be connected for music playback.
- When playing back music on an iOS device, be sure to connect the unit and that Bluetooth® device first.
- When connecting a device, such as one running an AndroidTM OS, exclusively for calls, disable the "A2DP" setting. (Depending on the Bluetooth[®] device, this setting may not be available).

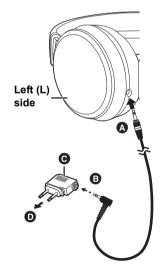
Using the detachable cord (supplied)

While the unit is turned off, it can be used as normal headphones by connecting the detachable cord (supplied).

- Before connecting the detachable cord (supplied), lower the volume on the connected device.
- If you connect the detachable cord (supplied) when connected via Bluetooth[®], the Bluetooth[®] connection will be lost. ([HD505B] The unit turns off.)
- The [Multiple functions button] does not work even while the unit is turned on.
- Noise may occur due to dirt on the plug. Clean the plug with a soft dry cloth if this occurs.
- Do not use any other detachable cords except the supplied one.

■ To connect to an airplane audio system

- 1 Connect the unit and the detachable cord (supplied). (A)
- 2 Connect the input plug (3) of the detachable cord (supplied) to the airplane adaptor (supplied) (6).
- 3 Connect the airplane adaptor to the in-airplane audio system. (6)



Note

• The airplane adaptor may not fit the jacks in some in-airplane audio systems.

Resetting the unit

This unit can be reset when all operations are rejected. To reset the unit, connect the unit to a computer using the USB charging cord. All the previous operations will be cancelled. (The pairing device information will not be deleted.)

Auto power off

If the unit is not connected to a Bluetooth[®] device, a guidance message will be heard and turn off automatically approximately 5 minutes after you have stopped using it.

- HD605N Auto power off does not work when noise cancelling is turned ON.
- Auto power off does not work when the detachable cord (supplied) is connected. (HD505B The unit turns off.)

Battery level notification

When the battery starts running low during use of the unit, the blinking power/pairing LED will turn from blue to red. A beep will sound every 1 minute.* When the battery runs out, the power will turn off.

* If you press [心// (いる)] twice quickly, a guidance message will be heard and you can check the battery level.

Guidance messages

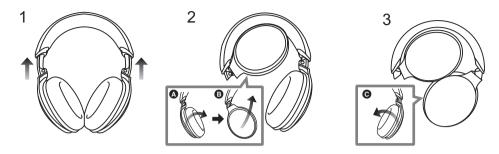
The unit is equipped with an a function that provides an audio notification when you turn on/off the unit, connect a Bluetooth® device or change a setting, for example.

- The audio guidance function cannot be disabled.
- The audio guidance volume cannot be adjusted.
- Switching the audio guidance language to Japanese or English Slide and hold the [Multiple functions button] towards "–" and at the same time press and hold [₺/l (₺)] for at least 5 seconds.

Storage of the unit

Fold the unit as shown below when storing it in the HD605N carrying case/HD505B carrying pouch.

• If the USB charging cord or the detachable cord (supplied) is connected, disconnect it from the unit.



- 1 Store the sliders.
- 2 Rotate the housing on either side by approx. 90 $^{\circ}$ (\bullet) to fold it toward the headband side (\bullet).
- 3 Rotate the other housing by approx. 90 $^{\circ}$ (\bigcirc).
- 4 Store the unit in the HD605N carrying case/HD505B carrying pouch.

Restoring to the factory settings

When you want to delete all pairing device information, etc., you can restore the unit to the factory settings (original settings upon purchase). Charge the battery before restoring the unit.

- 1 While the unit is turned off, press and hold [🖰/l (🍪)] for at least 5 seconds until the power/pairing LED starts blinking alternately in blue and red.
- 2 While the power/pairing LED is blinking alternately in blue and red, slide and hold the [Multiple functions button] towards "+" and at the same time press and hold [₺/I (❸)] for at least 5 seconds.
 - · The default settings will be restored after the power/pairing LED (blue) blinks fast and the unit turns off.

■ Attention

• When pairing a device again, delete the registering information (Device: "RP-HD605N" or "RP-HD505B") from the Bluetooth® device's menu, and register this unit with the Bluetooth® device again. (→ 8)

Copyright, etc.

The Bluetooth® word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. and any use of such marks by Panasonic Corporation is under license.

Other trademarks and trade names are those of their respective owners.

Siri is a trademark of Apple Inc., registered in the U.S. and other countries.

Android is a trademark of Google Inc.

LDAC and LDAC logo are trademarks of Sony Corporation.

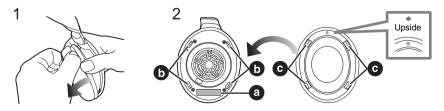
Qualcomm aptX is a product of Qualcomm Technologies International, Ltd.

Qualcomm is a trademark of Qualcomm Incorporated, registered in the United States and other countries, used with permission. aptX is a trademark of Qualcomm Technologies International, Ltd., registered in the United States and other countries, used with permission.

Other system names and product names appearing in this document are in general the registered trademarks or trademarks of the respective developer companies.

Note that the [™] mark and ® mark do not appear in this document.

Certification information (ⓐ) can be found on the right side of the headphones. Remove the right ear pad to see it.(1) To attach the ear pad, align the four tabs (ⓑ), ⓒ), and push the ear pad in until a clicking sound is heard to lock it into place. (2)



Troubleshooting

Before requesting service, make the following checks. If you are in doubt about some of the check points, or if the remedies indicated do not solve the problem, consult your dealer for instructions.

Sound and audio volume

No sound.

- Make sure that the unit and the Bluetooth[®] device are connected correctly. (→ 8)
- Check if music is playing on the Bluetooth® device.
- Make sure that the unit is turned on and the volume is not set too low.
- Pair and connect the Bluetooth[®] device and the unit again. (→ 8)
- Check if the Bluetooth[®] compatible device supports "A2DP" profile. For details on profiles, see "Listening to music"
 (→ 10). Also refer to the operating manual for the Bluetooth[®] compatible device.

Cannot adjust the volume.

• HD605N Is the ambient sound enhancer operating? Turn off the ambient sound enhancer. (→ 13)

Low volume.

- HD605N Is the ambient sound enhancer operating? Turn off the ambient sound enhancer. (→ 13)
- Increase the volume of the unit. (→ 10)
- Increase the volume on the Bluetooth® device.

Sound from the device is cut off. / Too much noise. / Sound quality is bad.

- Sound may be disrupted if signals are blocked. Do not fully cover this unit with the palm of your hand, etc.
- The device may be out of the 10 m (33 ft.) communication range. Move the device closer to this unit.
- · Remove any obstacle between this unit and the device.
- · Switch off any wireless LAN device when not in use.
- A communication problem may arise if the battery is not fully charged. Charge the unit. (→ 7)
- If the unit and the Bluetooth[®] device are connected via LDAC, the problem may be solved by changing the sound quality mode on the Bluetooth[®] device to give priority to connection. For details, refer to the operating instructions for the Bluetooth[®] device.

Bluetooth® device connection

The device cannot be connected.

• Delete the pairing information for this unit from the Bluetooth® device, then pair them again. (→ 8)

Phone Calls

You cannot hear the other person.

- Make sure that the unit and the Bluetooth® enabled phone are turned on.
- Check if the unit and the Bluetooth® enabled phone are connected. (→ 8)
- Check the audio settings of the Bluetooth[®] enabled phone. Switch the calling device to the unit if it is set to the Bluetooth[®] enabled phone. (→ 8)
- If the volume of the other person's voice is too low, increase the volume of both the unit and the Bluetooth® enabled phone.

Cannot make a phone call.

• Check if the Bluetooth[®] compatible device supports "HSP" or "HFP" profile. For details on profiles, see "Listening to music" (→ 10) and "Making a phone call" (→ 11). Also refer to the operating manual for the Bluetooth[®] enabled phone.

General

The unit does not respond.

 This unit can be reset when all operations are rejected. To reset the unit, connect the unit to a computer using the USB charging cord. (→ 14)

Power supply and charging

Cannot charge the unit. /The power/pairing LED blinks during charging.

- Make sure the computer is turned on and is not on standby or sleep mode.
- Is the USB port you are currently using working properly? If your computer has other USB ports, unplug the connector from its current port and plug it into one of the other ports.
- If the measures mentioned above are not applicable, unplug the USB charging cord and plug it in again.
- If the charge time and operating time become shortened, the battery may have run down. (Number of charging times of the installed battery: Approximately 300)

The power/pairing LED does not light during charging. / Charging takes longer.

- Is the USB charging cord connected firmly to the USB terminal of the computer? (→ 7)
- Make sure to charge in a room temperature between 10 °C and 35 °C (50 °F and 95 °F).

The power does not turn on.

• Is the unit being charged? The power cannot be turned ON during charging. (→ 7)

Specifications

■ General

Power supply	DC 5 V, 500 mA (Internal battery: 3.7 V (Li-polymer 800 mAh))
Operating time ^{*1}	HD605N Approx. 20 hours (Noise cancelling: ON, SBC) HD505B Approx. 35 hours (SBC)
Charging time*2 (25 °C (77 °F))	Approx. 4 hours
Charging temperature range	10 °C to 35 °C (50 °F to 95 °F)
Operating temperature range	0 °C to 40 °C (32 °F to 104 °F)
Operating humidity range	35%RH to 80%RH (no condensation)
Mass	HD605N Approx. 268 g (9.5 oz) (without cord) HD505B Approx. 266 g (9.4 oz) (without cord)

^{*1} It may be shorter depending on the operating conditions.

■ Bluetooth® section

Bluetooth [®] system specification	Ver. 4.2
Wireless equipment classification	Class 2 (2.5 mW)
Frequency band	2402 MHz to 2480 MHz
Supported profiles	A2DP, AVRCP, HSP, HFP
Supported codec	SBC, AAC, Qualcomm [®] aptX TM , Qualcomm [®] aptX TM HD, LDAC
Operating distance	Up to 10 m (33 ft.)

■ Headphone section

Frequency response	4 Hz to 40000 Hz (with cord)
--------------------	------------------------------

■ Speaker section

Driver units	Ø 40 mm (1 - 9/16 inch)
--------------	-------------------------

■ Terminal section

DC IN	Micro USB (B Type)
-------	--------------------

■ Microphone section

pe	Mono
----	------

■ Accessory section

USB charging cord	Approx. 0.5 m (1.6 ft.)
Detachable cord	Approx. 1.2 m (3.9 ft.)
HD605N Carrying case	
HD505B Carrying pouch	
Airplane adaptor	

[•] Specifications are subject to change without notice.

^{*2} Time taken to recharge from empty to full.

To remove the battery when disposing of this unit

The following instructions are not intended for repairing purposes but for the disposal of this unit. This unit is not restorable once disassembled.

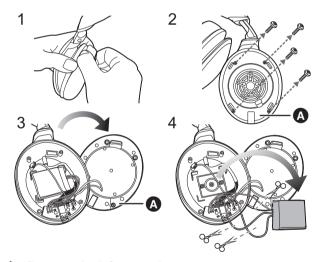
- · When disposing of this unit, take out the battery installed in this unit and recycle it.
- · Disassemble after the battery runs out.
- · Keep disassembled parts out of reach of children.

Regarding the handling of used batteries

- Insulate the terminals with adhesive tape or similar material.
- Do not disassemble.

■ Batteries

- Do not heat or expose to flame.
- Do not leave the battery(ies) in a car exposed to direct sunlight for a long period of time with doors and windows closed.
- Battery mishandling can cause electrolyte leakage which can damage items the leaked fluid comes into contact with. If electrolyte leaks from the battery, consult your dealer. Wash thoroughly with water if electrolyte comes in contact with any part of your body.
- When disposing of the batteries, please contact your local authorities or dealer and ask for the correct method of disposal.



- Remove the left ear pad.
- 2 Remove the 4 screws.
- 3 Remove the part (A) in step 2.
- 4 Remove the battery, and cut off the wires one by one with scissors.