ELECOM

For Bluetooth 2.1 + EDR class 2

Bluetooth headset with dual-microphone noise cancellation function

User's Manual V01

LBT-PCHS500/LBT-MPHS500A/LBT-MPHS500C series

Thank you for purchasing this quality Elecom product.
This manual describes the operating procedure and safety precautions for this Bluetooth headset.
Ensure that you have read this manual before using the product. After reading this manual, store it somewhere safe for future reference.

Product features

This product is a Bluetooth headset that supports Headset Profile (HSP) and Hands-Free Profile (HFP).
Equipped with 2 microphones and reduced ambient noise so that you can enjoy hands-free calling and voice chat on a mobile phone or PC with clear sound.
Supports "Bluetooth 2.1+EDR", making it easy to perform pairing operations with devices that support the same specifications.

- Designed for ultra-low power consumption; 1 charge provides approx. 4 hours of continuous conversation and over 100 hours of standby time.
- The dual microphone noise cancellation function reduces ambient noise to achieve conversation with clear sound.
- A USB type AC adapter for charging is included with the LBT-MPHS500A series. Even without a PC, charging can be done from a household outlet.
- A cigarette lighter charging device (12 V/24 V compatible) is included with the LBT-MPHS500C series. While driving, the headset can be charged from a car cigarette lighter socket even if the battery has run out.
- It is possible to maintain pairing information for up to 8 devices.Once paired, there is no need for troublesome pairing work the next time it is used, even after it has been turned off. *Can only connect to one device at a time.

* This product is specifically used for calls. It is not possible to listen to music on a mobile phone as Bluetooth audio profiles (A2DP) are not supported.

Necessary information when connecting:

■ Product device name when detected in a search from a mobile device:
→ **LBT-HS500**

■ Link Key
→ **0000 (Four zeros)**

Package Contents

The package for this product contains the following items. Please confirm the package contents before using this product.

☐ Headset x1
☐ USB charging cable x1
☐ Ear hook x1
☐ User's Manual - This document
☐ Easy Connection Guide x1
☐ USB AC adapter (LBT-MPHS500A series only)
☐ Cigarette lighter charger (LBT-MPHS500C series only)

* LBT-MPHS500 and LBT-MPHS500A described in this manual are not for sale in some countries.

Part Names

① Multi-function button	This button controls functions such as power ON/OFF, as well as the following:
Power ON/Pairing	■ When there is no paired device around the headset The headset will turn ON when the button is pressed and held for 3 seconds until the lamp lights up blue. If there is no paired device around the headset, it will be awaiting connection (the lamp will blink once approximately every 2 seconds), and if there is no connection the headset will automatically turn OFF after approx. 6 minutes. ■ When there is a paired device around the headset The headset will turn ON and attempt to connect with the paired device when the button is pressed and held for 3 seconds until the LED lamp lights blue. When connection has failed such as when the power for the paired device is off, the headset will be awaiting connection and will automatically turn OFF after approx. 6 minutes. ■ When the headset has been successfully connected with a mobile phone or other such device Lamp will blink blue in a loose pattern (-> blinks once or twice approximately every 3 seconds).
Power OFF	If the button is pressed and held for 4 seconds or longer when the power is ON, the LED lamp will blink red and the power will turn OFF.
② Sub microphone	Detects surrounding sound and reduces noise. Because of this, do not use your hands or a tool to tamper with the sub microphone.
③ LED lamp	A LED lamp that displays the state of the power or pairing. Read the explanation for the multi-function button for information regarding states for the lamp display and for this product.
④ Charging connector	When charging, insert the included USB charging cable.
⑤ Ear hook	Remove, adjust and reattach to optimize for left or right ears. Read "How to put on the ear hook" on the back of this page.
⑥ Volume button (+/-)	Press the + button when increasing the volume. Press the - button when decreasing the volume.
⑦ Earphone	Earphone is mounted on this product. This cannot be removed.
⑧ Microphone	A microphone for the purpose of sound input.

Handling precautions

■ For proper and safe use

In order to use this product properly and safely, the following important precautions must be observed.

⚠ Warning If the items listed here are ignored, there is risk of death or injury for the operator, or there is risk of property damage.

- **Do not operate while driving an automobile.**
  Never operate this product while driving, as it is very dangerous to do so. When operating this device, check the safety of the surrounding area while the car has been stopped.

- **Do not use while driving a car.**
  Do not use the headset while driving a car. Also, even when walking, cease use of this product and carefully check the surrounding conditions in places such as a train station platform, traffic crossing, or construction site.

- **If an abnormality is found:**
  When an unusual smell or smoke has been emitted from this product, immediately cease use and turn off the power. If it is being charged, remove the included USB charging cable from the outlet. After doing this, stop using this product and contact the retailer.

- **Do not leave under high temperatures.**
  This product is a precision electronic device. Avoid using or storing this product in high temperature or humid areas, or in areas that are exposed to direct sunlight for long periods of time. Also, when there are sudden changes in the ambient temperature, malfunction may occur as a result of internal condensation.

- **Never leave this product inside a car.**
  If this product is left for a long period of time inside a car under high temperatures, there is considerable risk that this will result in rupture of the internal battery, fire, or breakdown.

- **For charging, do not use anything other than the included charging device.**
  A lithium polymer battery is used for the internal power source of this product. If the battery is handled incorrectly, it may ignite. When charging this product, do not use anything other than the included charging device or USB charging cable.

- **Always remove the charging cable once charging has finished. Also, even if the required charging time has ended and if it has not finished charging, remove the charging cables as soon as charging has ended.**
  If charged beyond the fixed charging time, there is risk that the internal battery will become heated, ignite, or rupture. This may also affect the life span of the battery.

- **Exercise caution when setting the ringtone volume.**
  When using this product after pairing it with a mobile phone, the sound of the ringtone may surprise you and cause an accident, affecting your heart.

- **Do not disassemble.**
  Not including operations that are performed in accordance with the directions of this document, do not repair, modify, or disassemble this product yourself. Doing so may cause electric shock, fire, or burns.

- **Do not damage the cord used for connection.**
  Doing so may cause fire or disconnection.

- **Do not use in a hospital or on an airplane.**
  Never use this product in areas that require a high level of safety. This product may cause the malfunction of metres and gauges for designated medical facilities or airplanes.

⚠ Caution If the items listed here are ignored, it may cause injury or property damage.

- **Do not use or leave in areas that contain a large amount of moisture.**
  If liquid enters the inside of this product, it may cause breakdown, fire, or electric shock.

- **Do not leave in areas that are reachable by small children.**
  This may lead to an unexpected incident where this product is accidentally ingested.

- **As the main unit is a precision electronic device, avoid using or storing it in areas where impact or vibration will occur, in areas where strong magnetism is produced, or in areas where static electricity is produced.**

- **Do not use this product if it creates radio wave interference with in-car devices.**
  Depending on the model of car that is used, radio wave interference may occur between this product and in-car devices. When something like this occurs, cease use of this product.

- **Do not place anything around this product or the USB charging cable when charging.**
  Doing so may result in heating, ignition, fire, or burns.

- **When using this product, follow the directions given by the instruction manual for the connection device.**
  This product can be used through wireless communication with a PC, mobile phone or other such device but the setting method or items of caution will differ depending on the device that it connects to. When using this product, carefully read the instruction manual for these devices and follow their items of caution.

- **Charge regularly.**
  Even if this product is not used for a long period of time, charging should be performed once a month on average.

■Disposal

A lithium polymer battery is used for the internal battery of this product. Lithium polymer batteries are a resource that can be recycled.

■Other: Please also pay attention to the following items.

- Do not use or store this product in an area where impact or vibration occurs, in an area of high temperature or high humidity, or in an area that is exposed to direct sunlight for a long period of time.
- This product is a precision device.Do not drop or cause strong impact with the product.
- Do not place this product in an area of high temperature or humidity (such as the dashboard of a car or near heating equipment), in an area that is exposed to direct sunlight for a long period of time, in an area where static electricity is easily generated, or in dusty area.
- When this product has become dirty, wipe it with a soft cloth that contains a small amount of water or mild detergent. Using benzene or thinner will cause deformation or discoloration.
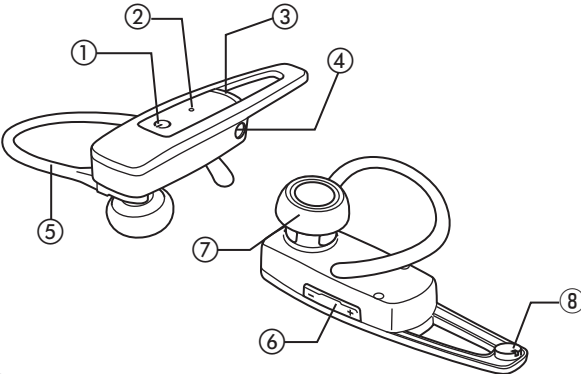
■Precautions regarding radio waves

The band of frequencies used by this device are used to operate local wireless base stations (wireless stations that require a license) and designated low-power wireless stations (wireless stations that do not require a license) for the detection of moving objects on factory production lines in addition to microwave ovens and other industrial/scientific/medical devices.

- Before using this device, make sure that local wireless base station and designated low-power wireless stations for the detection of moving objects are not being operated.
- If this device has created radio wave interference for a local wireless base station for moving object detection, quickly change the frequency that is used or after stopping the emission of radio waves, contact Elecom technical support, and inquire about measures for avoiding interference (such as setting up a partition).
- In other situations where some sort of problem has occurred such as when this device causes an incident where radio wave interference is produced for a designated low-power wireless station for moving object detection, contact Elecom technical support.

Used frequency band	: 2.4 GHz
Modulation method	: FHSS (Frequency Hopping Spread Spectrum)
Estimated interference distance	: Approx. 10 m (when there are no obstructions)
Ability to change frequencies	: Uses all bands and it is possible to avoid bands for "local wireless base stations" or "designated low-power wireless stations"

Part Names

STEP 1 Charging

This product must be charged before use.
Use the included USB cable to charge.
With the model that includes a USB AC adapter or the model that includes a cigarette lighter charger, it is also possible to charge from a household power outlet or from a car cigarette lighter socket by connecting to these supplied accessories.

* The USB AC adapter is only included with the LBT-MPHS500A series.
* The cigarette lighter charger for charging is only included with the LBT-MPHS500C series.

⚠ After opening this product, charging this product for the first time will take about 4 hours. Guidelines for the charging time for the second time and all subsequent charges is as follows.
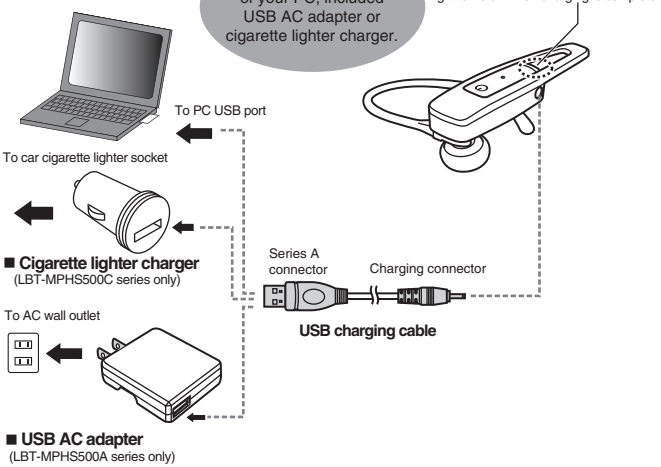
○ Using the USB cable : Approx. 2 hours*
○ Using the USB AC adapter or the cigarette lighter charger : Approx. 1 hour 30 minutes

Remove the charging cable after charging is complete.
When the state of the LED shows that charging is complete, remove the charging cable. For safety reasons, it is recommended to avoid passing an electric current after charging. Also, do not use the product while it is charging.

* The charging time varies depending on how much power is output from the USB port.

■ PC

To PC USB port

To car cigarette lighter socket

■ Cigarette lighter charger
(LBT-MPHS500C series only)

To AC wall outlet

■ USB AC adapter
(LBT-MPHS500A series only)

Charge via the USB port of your PC, included USB AC adapter or cigarette lighter charger.

Lights red when charging.
Light turns off when charging is complete.

Series A connector   Charging connector

USB charging cable

1 Connect the charging connector of the included USB charging cable to the charging connector of this product.

2 Connect the series A connector of the USB cable to the USB port of your PC, etc.
* With the model that includes a USB AC adapter or the model that includes a cigarette lighter charger, by connecting to their USB sockets, it is also possible to charge from a household outlet or cigarette lighter socket. For information on the included accessories, check the contents of the package.
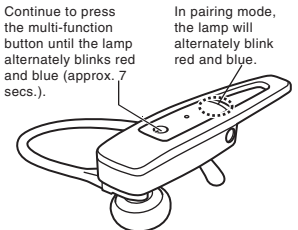
3 The LED lamp lights up red and charging begins. LED lamp turns off when charging is complete.

STEP 2 Pairing (Registering with the device)

To use this product, it is required to perform pairing (registering the device for the first time) with the device with which you want to use. Please refer to the manual of your device for information regarding the operation of the device.

- You can register and save up to 8 paired devices in memory. If more than 8 paired devices are registered, the chronologically oldest paired device will automatically be deleted. Pairing must be performed again to use a device that has been deleted from memory.
- This product is designed exclusively for phone conversation. Cannot be used for music or One Seg listening/viewing.
- If pairing cannot be completed due to problems such as a setting on the connection device, turn off the power once, and try again.
- This product conforms to Bluetooth 2.1 + EDR standards. It may be possible to bypass link key entry when connecting to another Bluetooth 2.1 device.

Continue to press the multi-function button until the lamp alternately blinks red and blue (approx. 7 secs.).

In pairing mode, the lamp will alternately blink red and blue.

1 While this product is OFF, continue to press the multi-function button for approx. 7 seconds. The lamp will alternately blink red and blue.
- When the headset has been connected to an unintended device, turn the power for this device OFF and try again.
- If the paired devices are close by, you can remove your finger from the button as soon as power turns ON. When the device-side automatic reconnection function or the trust settings are enabled, that device will automatically reconnect.
- Depending on the device that you wish to perform pairing with, an "operation that allows communication from the LBT-HS500" is necessary in advance on the device side.

2 Perform a search for this product from the pairing device (mobile phone, PC, etc.)
- Search method varies depending on the device you are using. Refer to the manual of your device.

3 When this product is found from the mobile phone or PC, the device name will be displayed as [LBT-HS500] in the search screen. Select and search.
- Depending on the device, you may be prompted for a link key. In this case, enter [0000] (4 zeros).

4 Once pairing is complete, the LED lamp will blink in a loose pattern (a blue LED blinks approx. twice every 3 secs.). The registeration process is now complete.

→ Continue in the background

Power ON/OFF

Power ON
Press and hold the multi-function button of this product until the LED lamp lights (approx. 3 to 4sec.). The headset will automatically connect to any devices in range on which pairing has already been performed.Once connection is complete, the LED lamp will blink in a loose pattern (a blue LED blinks approx. twice every 3 secs.), and it will be possible to use the device. If a paired device cannot be found, the LED lamp will blink approx. once every 2 seconds.

You may need to approve or authenticate the headset connection (device name LBT-HS500) or perform a [Connection] procedure from the mobile device.

Power OFF
Press and hold the multi-function button of this product for 4 seconds or more. The LED lamp blinks red and turns off, indicating the power is now OFF.

■ Auto-power OFF feature

If you power off your mobile device, or if there is an interruption in the transmission from the connected device, or if no pairing device is detected after turning the power ON, the power will automatically turn OFF after approx. 6 minutes.
* While the power is ON, the LED lamp will blink approx. once every 2 seconds.

Adjusting the volume

During phone conversation, press the volume button on this product to adjust the volume.

Talking on a mobile phone

(!) Depending on the specifications of the mobile phone, the action of the mobile phone may differ in regard to the operation of this product that is explained on the right.

Basic Specifications

Article No.	LBT-PCHS500 series / LBT-MPHS500A series LBT-MPHS500C series		
Device name	LBT-HS500		
Carrier Signal	2.4 GHz band		
Bluetooth Specifications	Bluetooth 2.1 + EDR		
Frequency diffusion method	FHSS (Frequency Hopping Spread Spectrum)		
Transmit range	Class 2 Max. radius 10 m (if unobstructed) *		
Supported Profiles	HSP (Headset Profile), HFP (Heads-free Profile)		
Continuous standby time Continuous conversation time	Max. 100 hours ** Max. 4 hours **		
Environment conditions	When operating	Temperature	0 - 35 °C
		Relative humidity	20 - 80% (No condensation)
	When storing	Temperature	-10 - +50 °C
		Relative humidity	10 - 90% (No condensation)
Input voltage	5 VDC (supplied by USB charging cable)		
Battery type	Lithium polymer battery		
External dimensions (W x H x D)	15.6 x 10 x 64.2 mm (Excl. protrusions and ear hook)		
Weight	Approx. 7.8 g (Excl. ear hook)		

*   Theoretical value. Transmit range is also affected by the Bluetooth capability of the target device and the conditions of the surrounding environment.

** When there is a long distance between this unit and Bluetooth device, the power consumption for each will increase resulting in shorter available time.

(!) ● Due to interference, it may sometimes not be possible to use in combination with a 2.4 GHz band wireless LAN (IEEE802.11g/b/n).
● It is not guaranteed that all Bluetooth devices will work with this product.

Receiving a call
If you hear a ringtone in your earphone, press the multi-function button.

There may be models that are unable to set a ringtone to the Bluetooth headset due to the specifications of the mobile phone.

Hanging up the call
When in conversation, press the multi-function button once.

Redialing (Most recent number)
Press the multi-function button twice.

You cannot redial an received call.

Making a calll
Make a call using the mobile phone. After calling, you may still need to operate the mobile phone directly in order to switch audio output to the headset.
<Basic operation>
- For docomo: After the call, press and hold the Talk button.
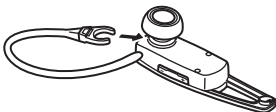- For au: After the call, press the "EZ" button.
     * The method for switching audio will differ according to the mobile phone carrier or the OS used by the mobile phone. For details, refer to the manual of your mobile phone.

Voice chat on a PC

When performing voice chat on a PC, control conversation start/finish from the PC side. Voice chat start/stop operation and setup varies depending on the OS being used. Refer to your software or OS user's manual or online help.
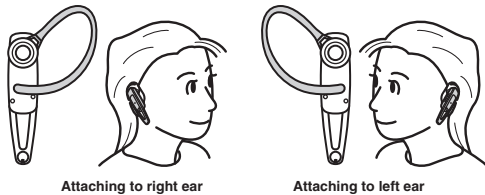
Changing the way in which the headset is worn on the ear

The included ear hook can be removed from the main unit. The earphone can be inserted into the ear and used without using the ear hook.

How to put on the ear hook

With the ear hook rotated to a desired position, you can adjust where to place them, or orient them oppositely to attach them to the left and right ears. The angle of the ear hook can be adjusted. It is also possible to easily adjust the orientation of the ear hook so that it can be work on either the left or right ear.

Attaching to right ear   **Attaching to left ear**

■ Function list

Function/Status	Operation	LED display
Power ON	Continue to press the multi-function button for approx. 3-4 seconds	●When reconnecting with a paired device, it will blink approx. 2 times every 3 seconds ●When a paired device cannot be found, it will blink approx. once every 2 seconds
Power OFF	Continue to press the multi-function button for approx. 3-4 seconds	Blinks red then turns off
Charging	-	Lights red
Charging complete	-	Unlit
Not enough battery charge remaining	-	Blinks red
Pairing mode	Continue to press the multi-function button for approx. 7 seconds.	Alternately blinking blue and red
Answer call	Press the multi-function button once when receiving a call.	-
Hang up phone	Press the multi-function button once during a call.	-
Redial	Press the multi-function button twice.	-
Switch the audio for talking (headset -> mobile phone)	Press and hold the Vol+ button for 2 seconds or more during a call	-

* Some functions may not work, depending on the device being used. Also, some operations of this product may be assigned to different functions.

■ No voice heard during phone conversation
With some mobile phones, if there continues to be no voice for approx. 20 seconds or more during a call, the phone may automatically go into power save mode, making it impossible to hear audio even during a call.
If this occurs, press the multi-function button on this product to take the phone out of power saving mode.

■ This product does not have any power.
Always ensure that the battery for this product is fully charged.
If the battery is not fully charged, charge it.

■ Line noise or echoes can be heard.
• Check to see that the sub microphone that is used to detect noise is not blocked.
• According to the specifications, when changing the ambient noise level, the effect of noise cancellation may be reduced.
Also, audio quality may lower depending on the distance between the connected device. Test this by doing things like adjusting the distance between the connected device or adjusting the volume.

■ When a call is received on the mobile phone, even when the multi-function button is pressed it does not answer the call.
With some mobiles phones, it may be necessary to press the multi-function button several times before the conversation will start. If the phone will not answer after pressing the multi-function button once, try pressing it several times. If the microphone input is turned OFF, your conversation partner will not be able to hear your voice spoken from the headset microphone.

■ Your conversation partner cannot hear your voice.
With some mobile phones it is necessary to manually set the microphone input settings to ON.

■ The phone immediately goes to voice mail when an incoming call is received.
If the phone is set to go to voicemail after a short time, the voicemail will kick in before the call is forwarded to this product. If this occurs, set your phone to wait for a longer time before a call goes to voicemail service.

■ Cannot perform pairing with a Bluetooth device.
○ Please ensure that the device's Bluetooth functions can be used. If pairing mode cuts off due to time out, it is necessary to perform the settings again.
○ Confirm that the device supports the profiles used by this product.

■ Cannot adjust the volume when using with a PC.
With some applications, the volume is set on the PC side.
Check the volume settings on the PC.

■ Cannot hear ringtone or incoming ringer
It may be impossible to use the ringtone that has been set to your mobile phone. Or, depending on the functions of the mobile phone, the Bluetooth "hands-free incoming call ringtone" may have to be set (as well as individual ringtones for different callers, etc.)