

MODEL HP-BC50 WIRELESS BONE CONDUCTION HEADPHONES

OPERATION MANUAL

Thank you for purchasing this SHARP product. To obtain the best performance from this product, please read this manual carefully. It will guide you in operating your SHARP product.



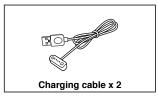
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Accessory

The following accessory is included.



Special Notes

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For details, please visit http://mp3licensing.com

MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson.

Special Notes (continued)

Getting started

1. Radio frequency exposure

Wireless Bone Conduction Headphones is a radio transmitter and receiver. When in operation it communicates with a Bluetooth[®] equipped mobile device by receiving and transmitting radio frequency (RF) electromagnetic fields (microwaves) in the frequency range 2.4 to 2.48 GHz. This product is designed to operate in compliance with the RF exposure guidelines and limits set by national authorities and international health agencies when using compatible mobile phone.

2. Battery information

- A rechargeable battery has a long service life if treated properly.
- A new battery or one that has not been used for a long period of time could have reduced capacity the first few times it is used. Do not expose the battery to extreme temperatures, never above 50°C (122°F) or below -10°C (14°F).
- For maximum battery capacity, use the battery at room temperature.
- If the battery is used in low temperatures, the battery capacity will be reduced. The battery can only be charged in temperatures between 5°C (41°F) and 40°C (104°F).
- RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.
- **3. Removal of waste batteries and accumulators** (Product with embedded battery ONLY)
- In case this product contains a battery incorporated within the product which cannot be readily removed by end users, SHARP recommends that only qualified professionals remove the battery, either for replacement or for recycling at the end of this product's working life. To prevent damage to the product, and

Special Notes (continued)

for their own safety, users should not attempt to remove the battery and should contact authorised independent service providers for advice.

CAUTION:

Internal lithium battery in the unit should not be replaced by end users due to danger of explosion if battery is incorrectly replaced and must be replaced with the exact type battery by authorised service providers.

Avoiding hearing damage

If volume on the headphones is too high, permanent hearing loss may occur. Please set the volume to a safe level. You can become habitual to hear at high volume that may sound normal but can damage your ears. If you experience ringing in your ears or muffled speech, stop listening and have your ears checked by the specialist doctor. The louder the volume, the more quickly the hearing can be damaged.

Hearing experts suggest how to protect your hearing

- Limit the amount of time you use the headphones at high volume.
- Avoid the habit of increasing the volume so that you do not hear the loud noises around you.
- Turn the volume down if you cannot hear people speaking around you.
 For setting the maximum volume limit of the connection device, refer to the instruction manual supplied with the connection device.
 Class B equipment (home-use broadcasting communication equipment):
 This equipment is intended for home-use (Class B) electromagnetic compatibility equipment and can be used in all areas.



High sound pressure.

Hearing damage risk.

Do not listen at high volume levels for long periods.

Precautions

The sound level at a given volume setting depends on speaker efficiency, location and various other factors. It is advisable to avoid exposure to high volume levels, which occurs while turning the unit on with the volume control setting up high, or while continually listening at high volumes. Excessive sound pressure from headphones can cause hearing loss. Adjust the volume to an appropriate level when using the unit.

- Do not cover the product with items, such as news papers, tablecloths, curtains, etc. while charging.
- Keep the unit away from strong magnetic fields, excessive dust, humidity and electronic/electrical equipment (home computers, facsimiles, etc.) which generate electrical noise.
- Do not expose the unit to temperatures higher than 40 °C (104°F) or to extremely low temperatures.
- Do not remove the outer cover. Refer internal service to your local SHARP service facility.
- No naked flame sources, such as lighted candles, should be placed on the apparatus.
- Attention should be drawn to the environmental aspects of battery disposal.
- This unit should only be used within the range of 0°C 40°C (32°F 104°F).
- SHARP is not responsible for damage due to improper use. Refer all servicing to a SHARP authorized service center.
- This product contains magnetic material. Consult your physician or whether this might affect your implantable medical device.
- Do not make unauthorized alterations to this product.

Precautions (continued)

- Use this product only with an agency approved power supply which meets local regulatory requirements (e.g., UL, CSA, VDE, CCC).
- The product rating is located at the inner side of the product.



CAUTION: Risk of explosion if the battery is replaced by an incorrect type

- high or low extreme temperatures that a battery can be subjected to during use, storage or transportation; and
- low air pressure at high altitude.
- replacement of a battery with an incorrect type that can defeat a safeguard (for example, in the case of some lithium battery types);
- disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, that can result in an explosion;
- leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas;
- a battery subjected to extremely low air pressure that may result in an explosion or the leakage of flammable liquid or gas.

Overview

Thank you for choosing our product. Our HP-BC50 WIRELESS BONE CONDUCTION HEADPHONES are designed with fashionable looks, powerful features and high compatibility, providing you with hands-free convenience in making calls and listening to music. Best choice for office using, traveling and driving.

Bluetooth Wireless Technology

With this technology, you can connect the unit to its compatible Bluetooth devices without using cables. The Bluetooth wireless connection allows you to use a cell phone without holding it to your ear, but the maximum distance between both devices cannot exceed 10 meters (about 30 feet). The Bluetooth wireless connection may be interfered by obstacles (such as walls) or other electronic devices nearby.

In some areas, the use of Bluetooth wireless technology may be subjected to some constraints. Please consult your local authority or service provider for details.

Getting started

Fully charge the unit before using. For details, refer "Charging operation" on page 14.

Meanwhile, choose a smartphone or other Bluetooth device that is compatible with this product.

Note :

 Keep the unit away from your credit cards or other magnetic storage media; otherwise, the stored information may be lost due to demagnetization.

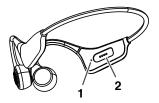
Product features and functions

- Integrated Bluetooth headphones to meet various needs such as music listening and phone answering.
- Stereo sound effect to enjoy perfect music.
- Small and light, for comfortable and stable wearing.
- Two usage modes and multiple application scenarios for selection.
- Built in internal storage of 2GB for music storage and playback.

Notes :

- DO NOT wear the headphones when sleeping, otherwise it may be damaged or cause injuries to you.
- When driving, you are advised to use the Bluetooth connected headphones to ensure your driving safety. It is dangerous to directly use smartphones when driving.
- Keep the headphones away from kids. Small components of the headphones may cause suffocation or other injuries to kids.

Controls and indicators



- 1. LED indicator
- 2. Magnetic charge terminal
- **3. Right button -** Power on/off, Play, Pause, Next track, Volume Up.
- 4. Microphone
- Left button Previous track, Volume Down, Voice Assistant, Answer/Reject call.



General control

Power on

When the unit is off, press and hold the RIGHT button for 3 seconds. The blue indicator will light up for 1 second. "Power on" voice prompt will be heard.

Power off

When the unit is on, press and hold the RIGHT button for more than 5 seconds. The red indicator will light up for 1 second and then the unit will be turned off. "Power off" voice prompt will be heard.

Auto power off

This unit will automatically power off if it is not paired with a source device after 5 minutes.

The red indicator will light up for 1 second and then the unit will be turned off. "Power off" voice prompt will be heard.

Volume control

In music and call mode,

Volume Up : Press the RIGHT button once.

Volume Down : Press the LEFT button once.

Wearing instruction

Hang the unit behind the neck and attach the speakers to the cheekbones in front of the ears.



Bluetooth connection

Bluetooth pairing

Notes:

- The operation range between this unit and a Bluetooth device is approximately 10 meters (without any object between the Bluetooth device and the unit).
- Before you connect a Bluetooth device to this unit, ensure you know the device's capabilities.
- Compatibility with all Bluetooth devices is not guaranteed.
- Any obstacle between this unit and a Bluetooth device can reduce the operation range.
- If the signal strength is weak, your Bluetooth receiver may disconnect, but it will re-enter pairing mode automatically.
- Bluetooth pairing from your device to this unit can be done during stand by and power on mode. However, Bluetooth playback from the source device is applicable at Bluetooth function only.

- Press and hold the RIGHT button for about 3 seconds to power on and it will auto reconnect to the Bluetooth enabled device that was last connected. If there is no paired record, it will automatically enter pairing mode after power on.
- **2.** Turn on your Bluetooth device and search for "HP-BC50 SHARP".
- **3.** Begin playing music from the connected Bluetooth source device.

To disconnect the Bluetooth function, you can:

 Disable the Bluetooth function on your device. The device is successfully disconnected from the unit when the blue and red indicator blinks alternately.

Internal memory

Playing music from the internal memory

Notes:

- The default mode when the unit is turned on for the first time is Bluetooth mode.
- The Bluetooth connection will stay connected even when the unit is switched to Internal Memory mode.
- When there is an incoming call during Internal Memory mode, the unit will switch to phone call mode automatically.
- 1. When in the Bluetooth mode, triple click the RIGHT button to switch to Internal Memory mode. A beep sound will be heard 3 times.
- 1. Music will be played back automatically from the internal memory.
- To switch back to Bluetooth mode, triple click the RIGHT button again. A beep sound will be heard 2 times.

Adding songs to the internal memory

- 1. Turn the power on.
- **2.** Connect the unit to PC's USB terminal by using the provided charging cable.
- **3.** A new drive with the name "USB Drive" will appear in PC after connecting successfully.
- Copy the desired MP3 music files into this drive to playback through HP-BC50.
- 5. Triple click the RIGHT button to switch to Internal Memory mode. The music will be played back automatically.

Music mode

Various music functions

Function	Button	Operation
Play / Pause	RIGHT	Press for 2 seconds to play or pause.
Skip up	RIGHT	Double click to skip to next song.
Skip down	LEFT	Double click to skip to previous song.
Voice assistant	LEFT	Triple click to activate voice assistant (in Bluetooth mode only).
Playback from Internal Memory	RIGHT	Triple click to switch to Internal Memory mode.

Phone call mode

Various phone call functions

Function	Button	Operation
Answer a call	LEFT	Press once to answer a call.
Reject or end a call	LEFT	Press for 2 seconds to reject or end a call.

Charging operation

Charging the unit

- 1. Place the cable with charging head at the end to the charging terminal on the unit as shown.
- 2. The unit's red indicator lights up to indicate under charging.
- 3. The unit's blue indicator lights up to indicate fully charged.



Before using any adapter with the charging cable, check whether the specifications of the adapter meets the requirements.

The recommended output voltage of the adapter is DC5V+/-0.25V, and the recommended output current is 0.5A. An over-high charging voltage may damage the charging cable and unit.

Warning :

Use the recommended adapter whenever possible. Use of other types of adapters may violate the warranty terms of the equipment and is hazardous. Use the provided charging cable to connect with a certified adapter or computer to charge the unit.

Troubleshooting chart

Many potential problems can be resolved by the owner without calling a service technician. If something is wrong with this product, check the following before calling your authorised dealer or service centre.

Problem Description	Cause	Solution
The unit	The unit is out of power.	Charge the unit.
cannot be powered on	The RIGHT button is not pressed and held for sufficient time.	Press and hold the RIGHT button for more than 3 seconds.
The unit cannot be charged	The unit's metal contacts are not well connected to the charging cable head.	Clean the unit's metal contact. Ensure that the metal contacts are well connected to the charging case pins.
The unit cannot be powered off.	The unit's program is in error due to an incorrect operation.	Reset the unit. Refer page 16.

Troubleshooting chart (continued)

Problem Description	Cause	Solution
The unit cannot be searched or pairing fails.	The unit did not enter the pairing state.	During power on, press LEFT and RIGHT button simultaneously for 5 seconds to enter pairing mode.
	The Bluetooth application of the smartphone is in error.	Turn off the smartphone and start again to pair with the unit.

Note:

Do not use chemical/oil to clean the charging terminal point.

Factory reset, clearing all memory

To reset the unit, press LEFT and RIGHT button simultaneously for 5 seconds. Red and blue indicators light up alternately and the unit will enter pairing mode.

Specification

As part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual unit.

General

Rated input voltage	DC 5 V, 500 mA
Output power	RMS: Total 900 mW (450 mW + 450 mW)
Frequency response	20 Hz - 20 kHz
Music playback time	(*1) Approx. 5 hours
Battery charging time	(*1) Approx. 2.5 hours
Internal memory storage	2 GB
Weight	34 g (0.075 lbs)
Dimensions	Width: 105 mm (4 - 2/16") Height: 44.5 mm (1 - 5/64") Depth: 142 mm (5 - 19/32")

(*1)

The time may vary depending on the ambient temperature and the conditions used.

Specification (continued)

Bluetooth

Version	V 5.0 (HFP / A2DP / AVRCP)
Maximum power transmitted	< 20 dbm
Frequency bands	2.402 GHz - 2.480 GHz
Compatible Bluetooth Profile	A2DP 1.3, HFP 1.7, AVRCP 1.6 Bluetooth 2.1 + EDR



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