

## 1.Important Notice

For “no lip sync delay” when watching TV, movie or playing games.

Make sure you use a Bluetooth device supporting aptX Low Latency (aptX LL), since most audio receiver devices (Bluetooth headphone, Bluetooth speaker) don't support this technology.

If your Bluetooth headphone / Bluetooth speaker supports aptX Low Latency (aptX LL), you can enjoy better experience which is synchronized between the sound and video screen. If your Bluetooth headphone / Bluetooth speaker doesn't support aptX Low Latency (aptX LL), you may feel the lip sync delay between the sound and video screen.

aptX Low Latency (aptX LL) certified products:

<https://www.aptx.com/zh-hans/products?>

Codec of one connected device		
Your Headphone supports	the final transmission Codec will be	The audio delay will be
aptX Low Latency	aptX Low Latency	<~40ms
aptX	aptX	<~130ms
SBC	SBC	<~220ms

Codec of two connected devices			
Your First Headphone supports	Your Second Headphone supports	The final transmission Codec will be	The audio delay will be
aptX Low Latency	aptX Low Latency	aptX Low Latency	<~40ms
aptX	aptX	aptX	<~130ms
aptX Low Latency / aptX /SBC	SBC	SBC	<~220ms
aptX Low Latency	aptX	SBC	<~220ms

Codec of two connected devices			
Your First Headphone supports	Your Second Headphone supports	the final transmission Codec will be	The audio delay will be
aptX Low Latency	aptX Low Latency	aptX	<~40ms
aptX	aptX	aptX	<~70ms
aptX /SBC	aptX Low Latency	SBC	<~220ms
aptX Low Latency/ SBC	aptX	SBC	<~220ms
aptX Low Latency/ aptX	SBC	SBC	<~220ms

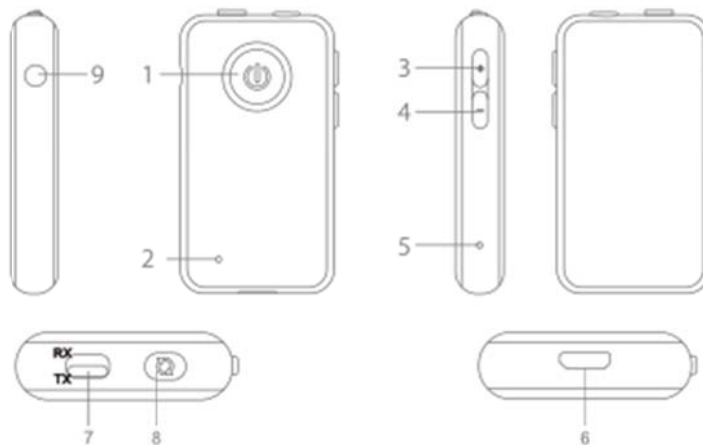
## 2.About aptX/ aptX Low Latency

**aptX** can give you consistent, high-quality audio over Bluetooth device.

**aptX Low Latency** ensures your Bluetooth wireless enabled device can deliver sound in sync with

visual media. With aptX Low Latency you can enjoy the freedom of wireless for applications such as gaming and watching videos.

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## Diagram

1. Power ON / OFF ; multi-function button: Pause / play, Answer / Hang up
2. Indicator Light
3. Next track / Volume Up
4. Previous track / Volume Down
5. Microphone
6. USB Charging port
7. TX / RX : Bluetooth Receiver mode ( RX ) / Bluetooth Transmitter mode ( TX ) Switch
8. Bluetooth Pairing button

## 9. Audio Input / Output port

4.

### Specifications

Product name: BH045

Connection technology: Bluetooth

Frequency range: 2.402 GHz ~ 2.480 GHz

Bluetooth protocol: HFP / HSP / A2DP / AVRCP

Battery capacity: 180 mAh

Working current: ≈15 mA


Charging voltage: DC 5.0 V

Temperature range: 0-45°C / 32- 113°F

### 5.Charging

BH045 has a built-in battery, which can be charged with a 5 V standard charger. If a non-standard charger is used to charge, BH045 will trigger self-protection and won't charge battery. When a 5 V standard charger is used again, BH045 will resume charging. When charging, the red indicator light will remain on; When fully charged, the red indicator light will go off automatically.

### 6.Power ON / OFF

ON: Long press  button for 3 seconds to turn on BH045. In RX mode, Blue indicator light will flash quickly. In TX mode, Green indicator light will flash quickly if without pairing information; and will flash slowly for 30 seconds and then flash quickly if with pairing information.

OFF: Long press  button for 3 seconds.

### 7.Choose a Bluetooth Mode

TX: Turn the switch to "TX" to enter Bluetooth transmitter mode.

RX: Turn the switch to "RX" to enter Bluetooth receiver mode.

### 8.Instructions on Bluetooth Receiver / Transmitter mode

#### 8.1 Can I hear the video sound from the Non-Bluetooth TV via the Bluetooth headphone?

Yes, you can. BH045 Bluetooth TX mode supports. Turn the switch to "TX" side to enter Bluetooth Transmitter mode.

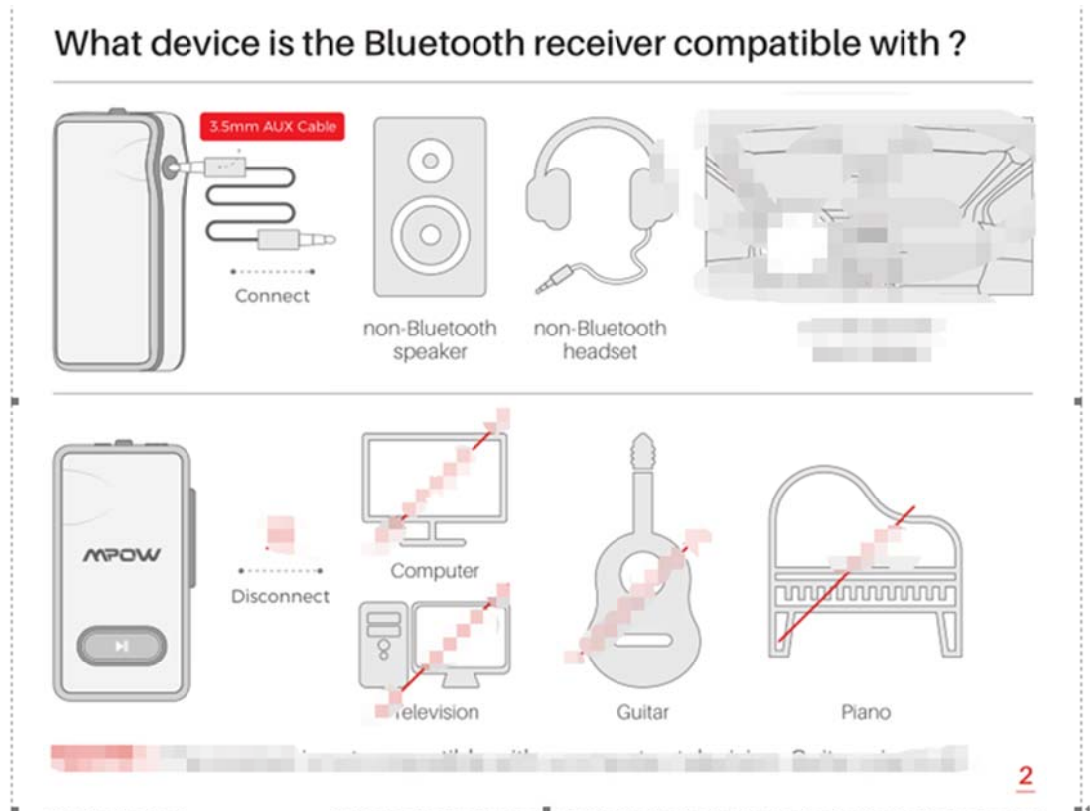
Connect BH045 to a Non-Bluetooth TV (computer) with a cable. Then, pair BH045 to a Bluetooth headphone (Bluetooth speaker) via Bluetooth. Then, you can hear the audio from the Non-Bluetooth TV (computer) via a Bluetooth headphone (Bluetooth speaker).

For more details, refer to the following instructions in 9.

## 8.2 Can I play music via a Non-Bluetooth in-car speaker from a smartphone?

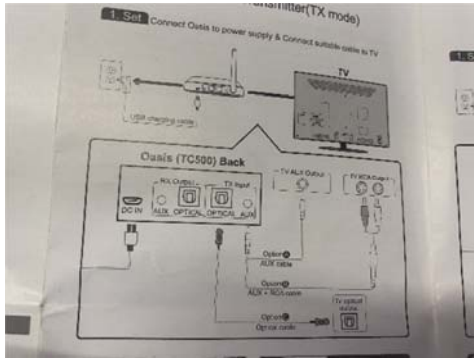
BH045 Bluetooth RX mode supports. Turn the switch to “RX” side to enter Bluetooth RX mode. Connect BH045 to the Non-Bluetooth in-car speaker (an old-style Non-Bluetooth speaker or headphone) with a cable. Pair BH045 to a smartphone (iPad) via Bluetooth. Then, you can listen to music from the smartphone (iPad) via the Non-Bluetooth in-car speaker (Non-Bluetooth old-style speaker or headphone).

For more details, refer to the following instructions in 10.



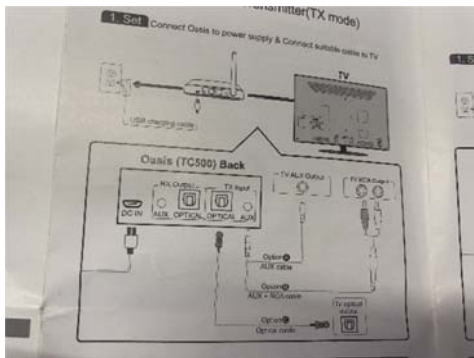
## 9. Bluetooth TX Mode

Connect BH045 to a Non-Bluetooth multimedia audio device (such as TV, PC) with a 3.5 mm audio cable, optical cable or RCA cable. Then, pair BH045 to a Bluetooth headphone / Bluetooth speaker. In this way, BH045 can transmit music from a Non-Bluetooth multimedia audio device (such as TV, PC) to a Bluetooth headphone / Bluetooth speaker etc..





### 9.1 Pair with One Bluetooth Headphone

Step 1: Connect BH045 to the Audio output port of a Non-Bluetooth multimedia audio device (such as TV, PC) with a 3.5 mm audio cable or RCA cable.



Step 2: Select a mode: turn the switch to "TX" to enter Bluetooth TX mode.

Step 3: Power on BH045 by long pressing  button for 3 seconds with Green indicator light flashing quickly.

Step 4: Pair. When the Green indicator light flashes quickly, BH045 will enter Bluetooth pairing mode (Short press  button to enter pairing mode).

Step 5: Enable Bluetooth on Bluetooth headphone / Bluetooth speaker. Get it close to BH045 within 1 meter. It takes 5-30 seconds to complete the automatic connection to the Bluetooth headphone / Bluetooth speaker.

After the successful pairing, BH045 Green indicator light will remain on. And the codecs of BH045 will change according to the Bluetooth headphone as below.

Codec of only one connected device		
Your Headphone supports	The final transmission Codec will be	The audio delay will be
aptX Low Latency	aptX Low Latency	< ~40ms
aptX	aptX	< ~130ms
SBC	SBC	< ~220ms

Step 6: Play music / video on your computer or television. Then, you can enjoy your time.

### 9.2 Connect with Two Bluetooth Headphones

Step 1: Complete the connection to the first Bluetooth headphone / Bluetooth speaker.

Step 2: Short press  button to enter Bluetooth pairing mode with Green indicator light flashing quickly.

Step 3: Enable Bluetooth on the second Bluetooth headphone or Bluetooth speaker etc. Get it close to BH045 within 1 meter. It takes about 5-30 seconds to complete the automatic connection to BH045.

After the successful connection, Green indicator light remains on. The codecs of BH045 will change according to the two Bluetooth headphones as below.

<b>Codec of Two Connected Devices</b>			
<b>Your First Headphone supports</b>	<b>Your Second Headphone supports</b>	<b>The final transmission Codec will be</b>	<b>The audio delay will be</b>
aptX Low Latency	aptX Low Latency	aptX	< ~40 ms
aptX	aptX	aptX	< ~70 ms
aptX / SBC	aptX Low Latency	SBC	< ~220 ms
aptX Low Latency / SBC	aptX	SBC	< ~220ms
aptX Low Latency / aptX	SBC	SBC	< ~220ms

### 9.3 Play Music

Play / Mute: Short press  button.

Volume up: Long press or short press “+” button (MAX volume without a sound prompt).


Volume down: Long press or short press “-” button (MIN volume without a sound prompt).


## 10. Bluetooth Receiver Mode

### 10.1 Connect with One Smartphone

Step 1: Connect BH045 to a Non-Bluetooth in-car speaker, speaker or headphone with a 3.5 mm audio cable or RCA cable.

Step 2: Select a mode. Turn the switch to “RX” side to enter Bluetooth receiver mode.

Step 3: Power on. Long press  button for 3 seconds to power on with Blue indicator light flashing quickly.


Step 4: Pair. When the Blue indicator light flashes quickly, BH045 will enter pairing mode (Short press  button to enter pairing mode).

Step 5: Enable Bluetooth on your smartphone. Search “BH045” and click to connect. If needed, input the password “0000”.

After the connection, Blue indicator light will remain on. The codecs will be shown according to the smartphone. If the smartphone codec is “APT-X”, the codec of BH045 is “APT-X”.

Step 6: Play music on your smartphone and begin to listen to music.

### 10.2 Connect with Two Smartphones

Step 1: After the connection to the first smartphone, short press  button to enter Bluetooth pairing state with Blue indicator light flashing quickly.


Step 2: Enable Bluetooth on the second smartphone. Search “BH045” and click to connect. If needed, input the password “0000”.


Step 3: After the connection, the Blue indicator light remains on. Then, two smartphones will connect to BH045 simultaneously. The codec will be same as that of the smartphone playing


music. If the smartphone playing music is of APTX mode, the codec of BH045 will be "APTX".


### 10.3 Handsfree Call Function


Answer a Call: Short press  button.

Hang up a Call: Short press  button.


Reject a Call: Long press  button for 1 second.

Redial a Call: 1.Double press  button to redial the last phone number dialed on the first smartphone.

2.Double press  button to redial the last phone number dialed on the second smartphone.


Switch the Call: During the call, long press  button for 1 second to change the device between the smartphone and BH045.

A call is incoming during the call:

1.Short press  button to hang up the current call and answer an incoming call.


2.Long press  button to answer an incoming call and put the current call on hold.

Between the Two Calls:

1.Short press  button to hang up the current call and switch to the other call.

2.Long press  button to switch between two smartphones.

### 10.4 Voice dialing

Long press  button for about 1 second, and release the button when you hear the sound prompt to enable or disable voice dialing function.

### 10.5 Play Music

Play / Pause: Short press  button.


Next track: Short press "+" button.


Previous track: Short press "-" button.

Volume up: Long press "+" button (MAX volume with a sound prompt).

Volume down: Long press "-" button (MIN volume with a sound prompt).

## 11.Enter Pairing mode

1.If only one Bluetooth device is connected to BH045, short press  button to enter pairing mode (RX or TX indicator light will flash quickly).

2.Long press  button for 3 seconds to disconnect from the current devices. Blue indicator light (RX) or Green indicator light (TX) will flash quickly to enter pairing mode.

## 12.Reconnection

### 1.RX Mode Reconnection

Reconnection after power on: Enable Bluetooth on your smartphone. Then, turn on BH045 with Blue indicator light flashing quickly. Then, BH045 will reconnect to the last connected Bluetooth device. The reconnection lasts 30 seconds. If the device fails to reconnect within 30 seconds. Click "BH045" on your smartphone manually to connect.

Exceeding Bluetooth distance: If the device exceeds Bluetooth distance, the Bluetooth will be disconnected. And BH045 will reconnect with Blue indicator light flashing slowly. If no device is connected in 20 minutes, BH045 will power off automatically.


### 2.TX Mode Reconnection

Reconnection after power on: With your Bluetooth headphone powering on first, turn on BH045

and its Green indicator light will flash slowly. Then, BH045 will reconnect to the last connected device. The reconnection lasts 30 s. After 30 seconds, it enters pairing mode with Green indicator light flashes quickly.

Exceeding Bluetooth distance: If the device exceeds the Bluetooth distance, the Bluetooth will be disconnected. And BH045 will reconnect automatically with Green indicator light flashing slowly. If no device is connected in 10 minutes, BH045 will power off automatically.

### **13.Erase Bluetooth Pairing Information**

Step 1: In power-on state, long press  button for 8 seconds until the Red indicator light comes out twice. BH045 will erase the paired devices and enter Bluetooth pairing mode. Blue or Green indicator light will flash quickly.

Step 2: Please erase the Bluetooth pairing information simultaneously (Please refer to the instructions on how to erase pairing information on your smartphone or Bluetooth headphone).

### **14.Low Battery Warning**

When the battery is below 3.3 V, BH045 will alarm automatically. The Red indicator light will flash quickly every two minutes. With battery used up, BH045 will power off automatically.

### **15.Auto-Shut Off**

1.If there is no Bluetooth device connected after BH045 powers on, it will power off automatically after 10 minutes.

2.If the connected device exceeds the effective Bluetooth distance for about 20 minutes, BH045 will power off automatically if no Bluetooth device is connected (In Bluetooth TX mode, BH045 will power off after 10 minutes).

### **Warning**

The product contains battery. During the operation, please pay attention to the following information:

- 1.Acceptable operating temperature range: 0-45°C/ 32- 113°F.
- 2.Please avoid using or charging it in high temperature, low temperature or static environment (such as cars exposed to direct sunshine in hot weather, fire, surface with high temperature or extreme cold environment). Otherwise, it may influence the performance or lifespan of the battery.
- 3.Charge it via a STANDARD 5 V charger.
4. Put it in a shade when not in use.

Any issues during usage, please contact [support@xmpow.com](mailto:support@xmpow.com) to get professional services.

### **Troubleshooting**

#### **Why BH045 can't be charged?**

Step 1: Check whether you are using a standard 5 V charger.

Step 2: Check whether two ends of the USB charging cable have been connected firmly.

Step 3: Try another power outlet or USB charging cable.

BH045 无法开机？



### **Why can't BH045 be turned on?**


Step 1: Check whether BH045 has power. Ensure that BH045 has power, try charging again and power on again.

Step 2: Check whether BH045 has been turned on (Long press  button for 3 seconds).


### **Why can't BH045 be paired?**

Step 1: Please ensure that BH045 has been turned on.

Step 2: Please check whether you've selected a proper Bluetooth mode. Turn the switch to "TX" side and the Green indicator light flashes quickly; Turn the switch to "RX" side and the Blue indicator light flashes quickly.

Step 3: Check whether BH045 is in pairing mode (Green or Blue indicator light flashes quickly). Short press  button to enter pairing mode.

Step 4: In RX mode, check whether your smartphone can search the Bluetooth name. If not, disable and enable Bluetooth on your smartphone. In TX mode, check whether your Bluetooth headphone is in pairing mode. If not, set the Bluetooth headphone to pairing mode according to its instructions.

Step 5: Long press  for 8 seconds to clear the pairing information on BH045 and try pairing again.

Clear the Bluetooth pairing list on the smartphone and Bluetooth headphone by the instructions of the smartphone or Bluetooth headphone.

Take Bose QC 35 II for example, turn the switch to the Bluetooth icon. Long press for 10 s until you hear "Bluetooth device list cleared" (Bluetooth pairing list have been erased) and the Bluetooth indicator light flashes in blue.

### **Why is the music quality poor?**

Step 1. Ensure two ends of the 3.5 mm cable are firmly connected.

Step 2. Check whether the AUX cable is fully plugged in.

Step 3. Change a 3.5 mm audio cable.

Step 4. Try another Non-Bluetooth device.

### **Why is the connection short-distanced and intermittent?**

Bluetooth is a short-distanced wireless technology. When too much obstructions are nearby, such as Bluetooth devices, wireless signals, walls, they will disturb the transmission.

Step 1: Maybe the device exceeds the Bluetooth distance. Come back to the effective distance. Maybe it's obstructed by the wall, please use BH045 in a spare place.

Step 2: The wireless signal will disturb the Bluetooth connection. Please use the BH045 in an environment without strong obstruction.

### **Why is the volume so low when listening to music?**

Step 1: Confirm whether two ends of the audio cable are firmly connected.

Step 2: Increase the volume on BH045, smartphone and speaker etc.

Step 3: Change another compatible device.

### **Why there is no sound after the successful connection?**

Step 1: Check whether the volume of your computer, TV, or Bluetooth headphone and BH045 is high enough.

Step 2: Check whether the cable is firmly connected.

Step 3: Check whether the audio cable is complete.

Step 4: In TX mode, check whether the TV has sound with a wired headphone. If not, adjust the audio output to "headphone" for the television.

Step 5: Change an audio cable and check whether it has sound.

**Why can't BH045 be connected to my television in Bluetooth TX mode?**

Confirm whether your television has an audio output. Connect the audio cable or RCA cable to the audio output port of the television.

**FCC Warning**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.