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**BTR020N**  
**Bluetooth HD transmitter and receiver 2 in 1**  
**User's manual**  
**FCC ID: WAD-BTR020**



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Welcome to use this Bluetooth stereo transmitter and receiver, BTR020N. Please read this user's manual carefully before use.

## ■ Before use

### 1. About BTR020N

BTR020N is a Bluetooth stereo transmitter and receiver with optical in and optical output function. When it is used as a Bluetooth transmitter, it can be connected to your walkman or PC to wirelessly transmit the music to your Bluetooth stereo receiver. When it is used as a Bluetooth receiver, it can be connected to your common audio devices for wirelessly playing music.

### 2. System requirements

- a) When BTR020N is used as a Bluetooth transmitter, you need to prepare a 3.5mm audio-out jack or an optical output jack, a Bluetooth A2DP receiver, such as Bluetooth stereo headset, Bluetooth stereo speaker and so on.
- b) When BTR020N is used as a Bluetooth receiver, you need to prepare a 3.5mm audio-in jack or an optical output jack, a Bluetooth A2DP transmitter, such as Bluetooth cell phone, PC and so on.

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### 3. Overview






<b>1</b>	Optical mode indicator light	<b>7</b>	3.5mm AUX Audio Out jack
<b>2</b>	Bluetooth indicator light	<b>8</b>	Digital Optical Audio Out jack
<b>3</b>	NFC zone	<b>9</b>	Digital Optical Audio In jack
<b>4</b>	AUX: 3.5 mode indicator	<b>10</b>	3.5mm AUX Audio In jack
<b>5</b>	Multi-function button (MFB): Turning on/off, switching mode	<b>11</b>	TX\RX toggle switch
<b>6</b>	Micro USB charging jack		

## ■ Getting started

### 1. Turn on/turn off

BTR020N support Micro USB charge. Before use, connect one end of a power line to the Micro USB jack, the other port connect to USB power supply unit., such as home charger, TV etc.

Function	Operation	LED indicator
Turning on BTR020N	Switch the MFB button to on 	Bluetooth indicator light flashes
Turning off BTR020N	Switch the MFB button to off 	All indicator light are off
Entering pairing mode	Switch MFB button to  location for 2 seconds and release	Bluetooth indicator light quickly flash

## 2. TX mode

### 1) Selecting TX mode

a) **Selecting mode:** Please turn the TX/RX switch to TX mode

b) **Connection:** In TX mode, please connect 3.5 audio line and optical audio line to the corresponding audio in jack, reference the picture as below shown.

**Note:** In standby mode, if you switch TX/RX to TX mode, you need restart BTR020N. And it will be TX mode once turn on if you already selected TX mode in power off status.



## **2) Pairing with Bluetooth receiver**

### **Pairing with a Bluetooth receiver**

- a) Ensure it is in TX mode, otherwise reset it to TX mode.
- b) Keep BTR020N and the receiver within 1 meter when pairing, the closer the better
- c) Make both devices enter pairing mode.
- d) BTR020N will search for Bluetooth devices and finishing pairing automatically. After successful connecting, Bluetooth indicator light will be ON status constantly.

### **Pairing with two Bluetooth receivers**

- a) Pairing BTR020N with device one.
- b) Turn on BTR020N and make it enter pairing mode again, and pairing with device two.

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c) Restart device one and it will connect with BTR020N automatically. Then BTR020N has already connected with two devices at the same time.

**Remark:**

- ◆ The pairing mode will last 2 minutes. BTR020N will enter standby mode if no devices can be connected within 2 minutes.
- ◆ Every time BTR020N is turn on, it will automatically connect to the last device. It can't connect to two devices simultaneously. If you want to pair with two devices, please active the other device to connect.
- ◆ When BTR020N is in standby mode and not connect with device, toggle the MFB button to the right side once, it will connect to last connected devices automatically


### **3) Playing music**

#### **(1) 3.5 audio input mode**

After successfully connected with Bluetooth receiver, ensure 3.5mm AUX audio in jack has connected to media player. AUX red backlight is on. Otherwise, switch MFB button to \*location once time. Playing music in media player, then you can receive music from receiver.



## **(2) Optical audio input mode**

After successfully connected with Bluetooth receiver, ensure digital optical Audio in jack is connected to media player, and optical red backlight is on. Otherwise, switch MFB button to  location once time. Playing music in media player, then you can receive music from receiver.





### **(3) Switch input mode**

In the status of connected to a device, switch MFB button to the right side to changing-over from 3.5 audio input mode and optical audio input mode.

#### **Remark:**

- ◆ Please keep BTR020N input mode and media player mode the same.
- ◆ Only connected to a Bluetooth device, you can switch input mode.

## **3. RX Mode**

### **1) Selecting RX mode**

**a) Selecting mode:** Please turn the TX/RX switch to RX mode

**b) Connection:** In RX mode, please connect 3.5 audio line and optical audio line to the corresponding audio out jack, reference the picture as below shown.

**Note:** In standby mode, if you want to switch TX/RX to RX mode, you need restart BTR020N. And it will be RX mode once turn on if you already selected TX mode in power off status



## 2) Pairing with Bluetooth transmitter

### Pairing with a Bluetooth cell phone

- a) Ensure it is in RX mode; otherwise reset it to RX mode.
- b) Keep BTR020N and Bluetooth cellphone within 1 meter when pairing, the closer the better
- c) Make BTR020N enter pairing mode.
- d) Active Bluetooth function of call phone, search Bluetooth device, selects "BTR020N". After successful connecting, Bluetooth indicator light will be ON status constantly.

### Remark:

- ◆ The pairing mode will last 2 minutes. BTR020N will enter standby mode if no devices can be connected within 2 minutes.
- ◆ Every time BTR020N is turn on, it will automatically connect to the last device.
- ◆ When BTR020N is in standby mode and not connect with any device,

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switch the MEB button to the right side once time, it will connect to the last connected devices automatically

◆ **Pairing with a Bluetooth cell phone via NFC.**

If your cell phone support near field communication (NFC), please active NFC function in your cell phone and turn on BTR020N. Use the BTR020N NFC zone to touch the cell phone NFC zone for few seconds. BTR020N will pair with your cell phone automatically


**Remark:**

- ◆ It can not connect via NFC if your cell phone is on dormant status.
- ◆ In the first time connecting via NFC ,keep cell phone and product touch several seconds till them into pairing, quick apart may fail connecting.
- ◆ In connecting model, will break off connecting if NFC touch again

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### 3) Playing music

#### (1) 3.5 audio input mode

After successfully connected with Bluetooth cell phone, ensure 3.5mm AUX audio out jack has connected to other speaker devices. AUX red backlight is ON. Otherwise, switch MFB button to  location once time. Playing music in cell phone, then you can receive music from speaker.



#### (2) Optical audio input mode

After successfully connected with Bluetooth transmitter, ensure digital optical Audio out jack is connected to other speaker devices. Optical blue backlight is ON. Otherwise, switch MFB button to  location once time. Playing music in cell phone, then you can receive music from speaker.



### (3) Switch input mode

In connecting status, switch MFB button to \* location once time can changing-over from 3.5 audio mode and optical audio mode.

**Remark:**

- ◆ Please keep BTR020N output mode and audio devices mode in the same.
- ◆ Only connected to a Bluetooth device, you can switch input mode.

### 4. Factory reset

In the status of power on, switch MFB button to \* location for 6 seconds and release it until three LED are ON.

**Remark:**

- ◆ In the process of factory reset, firstly Bluetooth Led flash quickly, then three Led on, finally Bluetooth indicator flash quickly (enter pairing

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mode).

- ◆ After factory reset, Bluetooth pairing list will be deleted, you need repairing in next time. Cleaning pairing list in any mode, another mode of pairing list will also be deleted.

## ■ Care and maintenance

Before using BTR020N, please read the following recommendations, it will help you to enjoy the product for many years.

- ◆ Do not expose the product to liquid, moisture or humidity to avoid the product's internal circuit being affected.
- ◆ Do not expose the product to extremely high or low temperature as this will shorten the life of electronic devices, destroy the battery or distort certain plastic parts.
- ◆ Don't use abrasive cleaning solvents to clean the product.
- ◆ Don't dispose of the product in a fire as it will result in an explosion.
- ◆ Don't expose the product to contact with sharp objects as this will cause scratches and damage.
- ◆ Don't let the product fall down onto the floor. The internal circuit might get damaged.
- ◆ Optical cable and optical plug are fragile. Don't folding optical cable. Please use a protective jacket entangle optical plug to avoid damage when not using it.

In case the headset doesn't function properly, send it to the store you bought it. The staff will help you to solve the problem.

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## ■ FAQs

### **1. Why BTR020N can't pair and connect to a Bluetooth device?**

Make sure the audio mode is right. In TX mode, it can only pair with Bluetooth receiver. In RX mode, it can only pair with Bluetooth transmitter. And both should be in available range.

### **2. In TX mode, why Bluetooth receiver can't receive any sounds?**

- 1) Make sure the media player is connected to Audio in jack, not audio out jack.
- 2) Ensure the current audio mode is correct. When AUX LED indicator light is on, connect to 3.55 AUX audio in jack. When optical indicator light is on, connect to digital optical audio in jack.

### **3. In RX mode, why can't hear playing music?**

- 1) Make sure the media player is connected to Audio out jack, not audio in jack.
- 2) Ensure the current audio mode is correct. When AUX LED indicator is on, connect to 3.55 AUX audio out jack. When optical LED indicator is on, connect to digital optical audio out jack.

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## ■ Specifications

<b>Bluetooth specification</b>	Bluetooth V4.1
<b>Bluetooth profiles</b>	A2DP, AVRCP
<b>Frequency range</b>	2042MHz–2480MHz
<b>Operating distance</b>	Up to 10 meters
<b>Charging input voltage</b>	DC 5V
<b>Dimensions</b>	99.6*23.6*23.6mm
<b>Weight</b>	About 25g

## FCC Statements:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection

against harmful interference in a residential installation. This equipment generates, uses and can radiate

radio frequency energy and, if not installed and used in accordance with the instructions, may cause

harmful interference to radio communications. However, there is no guarantee that interference will not

occur in a particular installation. If this equipment does cause harmful interference to radio or television

reception, which can be determined by turning the equipment off and on, the user is encouraged to try to

correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.



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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.

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.