

WBT210 (Receiver w/ Mic)

# User Manual

Version 1.1



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## Bluetooth Introduction

Bluetooth is a global wireless standard for enabling short-range wireless connections. It is a simple and instant radio solution that allows different devices to talk to one another. Bluetooth eliminates the need for cables/wires/cords between devices such as mobile phones and headphones. Bluetooth facilitates fast and secure transmissions of both voice and data between devices even if they are not in line-of-sight. Most Bluetooth devices are described as 'Class 2'. These are very low power and have a range of about 10 meters. Some devices are Class 1. These have range comparable to that of Wi-Fi and have a range up to 100 meters.

A limited, but growing number of devices use Bluetooth at present. Devices that are starting to have Bluetooth connectivity built in include:

- Headsets
- Headphone
- Cell Phones
- PDAs
- Laptops
- Digital cameras and camcorders
- Printers
- Scanners
- Keyboards and Mice
- In-car handsfree kits
- GPS navigation receivers
- Home appliances (microwaves, washers, driers, refrigerators)

In addition, add on Bluetooth adapters are available for computers (i.e. with a USB interface) and for PDAs.

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## Package List

The following checked items should be in the package.

| Items   | Quantity |
|---|----------|
| <input checked="" type="checkbox"/> Bluetooth Receiver (RX) | 1        |
| <input checked="" type="checkbox"/> Charging Cable          | 1        |
| <input checked="" type="checkbox"/> headphone               | 1        |
|   |          |

## WANSTONIC Stereo Devices

Thank you for choosing WANSTONIC Stereo Devices. The package includes a Bluetooth receiver & headphone. It is unique and different from most Bluetooth products in the market for its good integration of Advanced Audio Distribution Profile (A2DP), Headset and Handfree Profiles. It is a multifunctional device that provides users with dual capability for listening to music in a wireless mode as well as answering the cell phone. While the phone rings, the conversation can be transferred back and forth between the receiver and the Bluetooth enabled cell phone, even when the music is being streamed.

The music source for this receiver can be any consumer device such as a Portable MP3 Player, a Mobile Phone, a PC, a Music System, or an In-car Entertainment System that is compliant with the Bluetooth specification version 1.1 or 1.2 and is supporting the Advanced Audio Distribution Profile (A2DP).

The receiver can also be used with cell phones that are compliant with the Bluetooth specification version 1.1 or 1.2 and it is supporting either the Headset (HS) or Handsfree (HF) profiles.

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## **Bluetooth Receiver Features**

- Superior audio quality - Delivers 44.1 kHz and 48 kHz, 16 bit stereo music (near CD quality audio).
- Accept / end phone calls – Accept / end phone calls with the button on the receiver.
- Listen to music and respond to phone calls – Enable switching between music and calls made to your Bluetooth enabled cell phone.
- Wireless mobility – It is very convenient without being restricted by cables.
- No “Line-of-sight” restriction - Unlike infrared devices, it offers you a wide transmission range (up to 10 meters).
- Long battery life – The self-contained battery of can be easily charged and long battery life ensures hassle free music experience.
- Supported profiles - Supports A2DP, AVRCP Headset and Handsfree profiles of the Bluetooth specification, version 1.1.
- Good compatibility with Bluetooth transmitter (TX) / HCI Dual Mode Dongle

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## **WBT210 Outline**

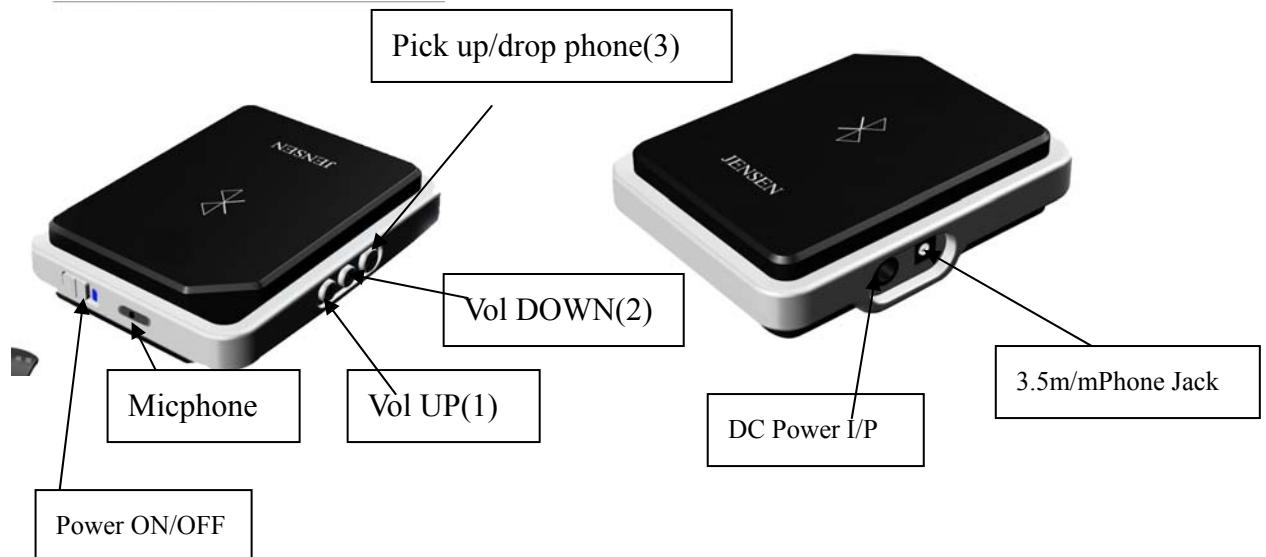


Figure 1 – Bluetooth Receiver

### Function Keys

| Function Mode | Button 1  | Button 2    | Button 3            |
|---------------|-----------|-------------|---------------------|
| Phone Mode    | Volume Up | Volume Down | Accept / Drop Calls |

### LED Indicators

| LED Status   |                  | Function   |
|--------------|------------------|--|
| Status LED   | Lights up steady | Pairing mode   |
|              | Flashes          | Standby / Linked   |
| Charging LED | Flashes slowly   | Low battery output   |
|              | Lights up steady | Charging (Indicator turns off when charging is completed.) |

Figure 2 – Bluetooth Receiver Functions / LED Indicators

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## How to Use

BluePacket Receiver performs well with the Bluetooth TX Dongle and can be used to demonstrate the following usage scenarios:

- Responding to cell phone  
Pick up / drop calls made to the receiver from Bluetooth enabled cell phones. Unlike the mono headsets, the Bluetooth receiver can transfer ring/voice to both your ears with two channels. In this scenario, the ability of the receiver to stream music is not utilized.
- Enjoying the superior music quality  
Connect the Bluetooth TX Dongle with an audio source and play music. Let the music be streamed to the Bluetooth receiver. Users can also use another Bluetooth enabled device that minimally supports the A2DP profile of the Bluetooth specification, version 1.1 to play music. In this scenario the ability of the Bluetooth receiver to pick up / drop phone calls is not utilized.
- Switching between music and phone calls  
The Bluetooth receiver can switch between listening to music and answering calls made to your Bluetooth enabled cell phone. In this scenario, the complete functionalities of the Bluetooth receiver are demonstrated.

## Before You Use

- Bluetooth Receiver

Please make sure the battery power of the receiver is sufficient. If the power is low, the charging LED indicator of the receiver will start to flash.

Please charge the receiver when you see the low power signal. When you are charging the battery, the charging LED indicator will constantly on. When the battery is full, the charging light of the receiver will shut off automatically.

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## **Responding to Cell Phone**

### **1. Setting Up**

Before you turn on the receiver, please use the charging cable to charge them.

### **2. Pairing**

- (1) Turn on the Bluetooth enabled cell phone.
- (2) Turn on the receiver.
- (3) Operate the Bluetooth enabled cell phone to search the receiver.

*\*Note: Users need to keep the two devices between 2 meters in case of connection failure. The status LED indicator of the receiver will be constantly on during search.*

- (4) Enter PIN code “0000” when the pop-up screen is shown on the cell phone.
- (5) Pairing is done while the status LED indicator start flashing.

### **3. Connecting**

- (1) “Pairing” creates a link between Bluetooth enabled cell phone and Bluetooth receiver. It allows the phone to remember the receiver’s unique Bluetooth ID. You could add it to a list of “Paired Device” in the phone.
- (2) The receiver only needs to be paired ONE time with the phone before use.
- (3) Once the receiver is paired, it can be easily connected to the phone.
- (4) If the pairing information or log were deleted from the phone, the receiver must be paired with the phone again.
- (5) Start to use the Bluetooth receiver to pick up / drop calls in a wireless mode.

*\*Note:*

1. *Some cell phones require that an explicit connection be established with the receiver. For example, Nokia 3650 requires a Bluetooth connection to the receiver be initiated and stay connected before proceeding further. Other phones may initiate a Bluetooth connection only when a call is received. Please refer to the user manual of the cell phone being used and fully understand its behavior.*

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2. Some cell phones send the ring indication to the receiver while others do not. If your cell phone supports this feature, you should hear the ring tone of your cell phone on the receiver. Phones that do not support ring indication will automatically accept the call.

#### **4. Re-connecting**

When the receiver loses connection to Bluetooth enabled cell phone, you need to repeat step 3 to re-connect it.

#### **5. Turning Off**

Turn off the receiver by setting the power switch to “off”.

### **Enjoying the Superior Music Quality**

Before using the receiver to listen to music, you should make a music connection as follows:

#### **1. Setting Up Music Source**

Set the Bluetooth TX/HCI dongle to TX mode. Then link it to the audio source. The status LED indicator on TX/HCI dongle will flash quickly and search for the receiver.

#### **2. Connecting the Receiver with TX / HCI dongle**

- (1) Turn on the receiver. Meanwhile, you can hear the opening sound from the receiver.
- (2) Pair your receiver with TX dongle. The receiver can be automatically paired.
- (3) When the pairing is done, the status LED indicator on the receiver will start flashing.
- (4) The status LED indicator on the TX dongle will flash slowly.
- (5) Play music. You can hear music from the receiver.

*\*Note:*

1. *It may take you a few seconds in paring receiver with the TX/HCI dongle for the first time. It will be quicker in searching after that.*
2. *If you turn on TX dongle but it cannot find any device to pair with after 3 minutes, it will turn off automatically to save power.*

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## **Switching Between Music and Phone Calls**

### **1. Setting Up / Prerequisite**

Please confirm the receiver has been added to a list of “Paired Device” in the Bluetooth enabled cell phone. Set the Bluetooth TX/HCI dongle to TX mode.

*\*Note:*

*If you haven’t paired the receiver with the Bluetooth enabled cell phone before, you need to refer to the section “Responding to Cell Phone”.*

### **2. Making the Switch**

- (1) Repeat the procedure “Enjoying the Superior Music Quality” and play music.
- (2) Use the cell phone and find the receiver on the “Paired Device” list. Then, operate the cell phone to connect to the receiver.
- (3) When the connection is set up, the music will pause and you can switch to the cell phone mode automatically. You can start to make an outgoing call and are able to converse over the phone.
- (4) When your conversation is done and you stop using the cell phone, the streaming of music will resume immediately and automatically.
- (5) If someone calls you, the music will pause and you can answer the phone.
- (6) After the phone call ends, the music will resume again.
- (7) You can repeat this scenario and switch freely between cell phone and music mode.

### **3. Turning Off**

If you don’t want to use the receiver, turn it off by the power switch. If you don’t want to use TX dongle, turn it off too.

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## Specification – Bluetooth Receiver

|                       |  |
|-----------------------|--|
| Product Name          | BluePacket Bluetooth Receiver  |
| Standard              | Bluetooth 1.2 compliant  |
| Power Class           | Class 2  |
| Frequency Band        | 2.402~2.480 GHZ unlicensed ISM band  |
| Profile Supported     | AV, Headset and Hand Free Profiles   |
| Audio Format          | SBC  |
| Memory                | 8M flash external memory   |
| Rx Sensitivity        | < 0.1% BER at -86 dBm  |
| RF Output Power       | -6dBm to 4 dBm   |
| Sampling Rate         | 48 KHz   |
| Antenna               | embedded antenna   |
| Working Distance      | up to 10 meters (in open space)<br><i>Note: The maximum operating range depends on the paired phone model, battery power, and environmental factors.</i> |
| Power Consumption     | Music Streaming: 75 mA (Typical),  |
| Power Supply          | 500mA Lithium Ion Battery  |
| Operating Temperature | -10 °C ~ +55 °C  |

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## FAQ

**1. Q : How do I know that the battery of the receiver have insufficient power?**

A : The battery power is almost exhausted when one or more following scenarios happen:

- (1) The receiver starts to reset automatically.
- (2) You can constantly hear breaks on the audio link, or
- (3) You cannot connect the receiver to the TX dongle after several tries.

Please charge the battery to avoid these problems above.

**2. Q : Why cannot I create a connection to the receiver?**

A :

- (1) Verify that the battery power of receiver is not running low.
- (2) Check if the receiver is powered on and the LED indicator is steadily light on.
- (3) Verify that the receiver is within the specified range of 10 meters from the audio source.
- (4) Check if any other Bluetooth device has connected to the receiver. If the receiver is connected with other devices, the status LED indicator on the receiver is flashing.
- (5) Turn both the receiver and the TX dongle device off. Power on the receiver and then power on the TX dongle and try connecting again.

**3. Q : Why do I hear beep from the receiver?**

A: The beep means the receiver is in the low power status. The receiver will beep every 20 seconds to remind you to charge it. Meanwhile, the charging LED indicator is flashing.

## Technical Support

If you have further questions, please contact our Technical Support Department. Thank you!

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## Appendix – Supported Phone List

Supported Cell Phones by BluePacket Bluetooth Receiver

| Brand | Nokia       | Moto             | Sony Ericsson | Siemens    | Panasonic  | Dopod      |
|-------|-------------|------------------|---------------|------------|------------|------------|
|       | <b>3650</b> | <b>v600</b>      | <b>T610</b>   | <b>U15</b> | <b>X70</b> | <b>575</b> |
|       | <b>3660</b> | <b>v500</b>      | <b>T630</b>   |            |            |            |
|       | <b>6230</b> | <b>v525</b>      | <b>T68i</b>   |            |            |            |
|       | <b>6820</b> | <b>v80</b>       | <b>Z600</b>   |            |            |            |
|       | <b>7610</b> | <b>A630</b>      | <b>K700i*</b> |            |            |            |
|       |             | <b>V620</b>      | <b>P900</b>   |            |            |            |
|       |             | <b>E398</b>      | <b>S700</b>   |            |            |            |
|       |             | <b>E550</b>      |               |            |            |            |
|       |             | <b>V535</b>      |               |            |            |            |
|       |             | <b>V545</b>      |               |            |            |            |
|       |             | <b>V550</b>      |               |            |            |            |
|       |             | <b>V600i</b>     |               |            |            |            |
|       |             | <b>V710 CDMA</b> |               |            |            |            |
|       |             | <b>A768i</b>     |               |            |            |            |
|       |             | <b>A768</b>      |               |            |            |            |
|       |             | <b>V3</b>        |               |            |            |            |

- The list is subject to change.
- Cell phone with a “ \* ” mark is conditionally supported.

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## **Federal Communications Commission (FCC) Statement**

### **15.21**

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

### **15.105(b)**

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.

### **Operation is subject to the following two conditions:**

- 1) this device may not cause interference and
- 2) this device must accept any interference, including interference that may cause undesired operation of the device.

### **FCC RF Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.