To keep the product in a best working condition and having a long service time, please operate it according to
the relevant steps. The warranty lapses if the product is damaged because of incorrect use and your
negligence.

Please read this manual carefully before you use the product and check if the product is a good one. DC12V
is recommended to be used to power the product for one hour. Never use this product in an extreme
condition.

**Warning:** Never immerse the product in the rain or any other humid environment to prevent the fire or
electric shock.

**Safety Precautions:**

1. In order to achieve a better sound quality, please use stable power supply since a bad
   or unstable power supply may worsen the sound quality or even cripple the amplifier
   board.

2. **Avoid metal objects**
   
   Protect this product well and move away metal objects from this product.
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NOTES:

Product Version :  Ver 1.0
Document Version  :  Ver 1.0
1.1 Overview

Welcome to use this self-made Bluetooth Audio Receiver starter version. This receiver could work well together with Bluetooth adapter in your Laptop or Desktop computer, or mobile phones with Bluetooth audio stream output support. It supports Bluetooth V2.1 +EDR, and support A2DP protocol; it has a built in 3.5mm audio jack as well as two RCA jacks for audio output. The distance from this unit and the Bluetooth transmitter could be up to 10meters but please notice that it may vary much based on the environment. Resistance and capacity components of high quality, including X7R ceramic capacitors and lower ESR electrolytic capacitors, are used to gain the perfect timber, finally realize high S/N ratio, low THD+N, wide frequency response range etc.

This product has whole EMI solution and power anti-reverse functions. The part of analog and digital audio are supported by two independent power chips, which eradicates interference of radio frequency and digital signals with audio at the extreme.

FIGURE 1-1 OVERVIEW
Overview

1.2 Features
- Single-end audio signal output
- LED status indicator
- Installation hole pre-designed
- High-quality audio operational amplifier.
- Power anti-reverse function

1.3 Applications
- Desktop Wireless Music Receiver
- Wireless audio source for amplifiers
- Wireless headphone driver (External HP amp needed with some headphones)

1.4 Benefits
- Complete electrical protection
- Several wiring methods facilitate connection: 3.5mm Socket and RCA Jacks
- Audio output distortion ≤0.5%

1.5 Quick Start
Suggested connection is shown in figure 1-2.

FIGURE 1-2 CONNECTION SCHEMATIC
**Note:** Please observe the following steps to complete verification so as to ensure the products are intact during transit.

1. Open the amplifier package and make sure the product is intact (No missing or damaged components and no deformation.

   Please observe the connection schematics when connecting the Bluetooth Audio Receiver. Use a nearby sound source, such as Bluetooth adapter, Mobile phone with Bluetooth to have a trial.

2. This Bluetooth Audio Receiver can be deemed as qualified if you can hear the sound corresponding to that sound source

3. This is a fully automatic Bluetooth receiver. It will stay in two operation mode:

   Either paired or ready to be paired.

   Check the manual of your Bluetooth transmitter device for more information of the Bluetooth operation.
Chapter 2. Hardware Detail

2.1 Power Connection

A high-performance power supply is important for a Bluetooth Audio Receiver to output high-quality sound and work stably. To power the Bluetooth Audio Receiver, please use a 5.5/2.1mm 12V (1A or above) power adapter. Pay attention to the polarity when connecting power supply.

2.2 Input Connection

You may use Bluetooth Adapter or mobile device with Bluetooth supported as audio signal input source. Remember that the quality of the source will determine the output quality directly. Check figure 1-2 for connection drawings.

2.3 Output Connection

Either 3.5mm jack or RCA jacks can be used. Check figure 1-2 for connection drawings.

2.4 LED Indicators

This Bluetooth Audio Receiver has one LED indicator which shows the current operation status. The LED light flickers when power on and the LED always lighting when the Bluetooth connected.
# Chapter 3. Electrical Characteristics

Following table lists all typical data of the Bluetooth Audio Receiver.

## TABLE 3-1 BASIC PARAMETERS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Condition</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply Voltage</td>
<td>-</td>
<td></td>
<td>12V</td>
<td></td>
</tr>
<tr>
<td>Degree Of Audio Output</td>
<td>-</td>
<td></td>
<td>≤0.5%</td>
<td></td>
</tr>
<tr>
<td>Distortion</td>
<td>VIN=12V</td>
<td>10mA</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Quiescent Current</td>
<td>-</td>
<td>0℃</td>
<td>20℃</td>
<td>50℃</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-</td>
<td>-20℃</td>
<td>20℃</td>
<td>105℃</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-</td>
<td>-</td>
<td>150℃</td>
<td>-</td>
</tr>
<tr>
<td>Thermal Shutdown</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:**

1. Stresses beyond the listed maximum power supply voltage may cause the permanent damage to components on board.
Chapter 4. Mechanical Drawing

FIGURE 4-1 MECHANICAL DRAWING
Chapter 5. Contact Us

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