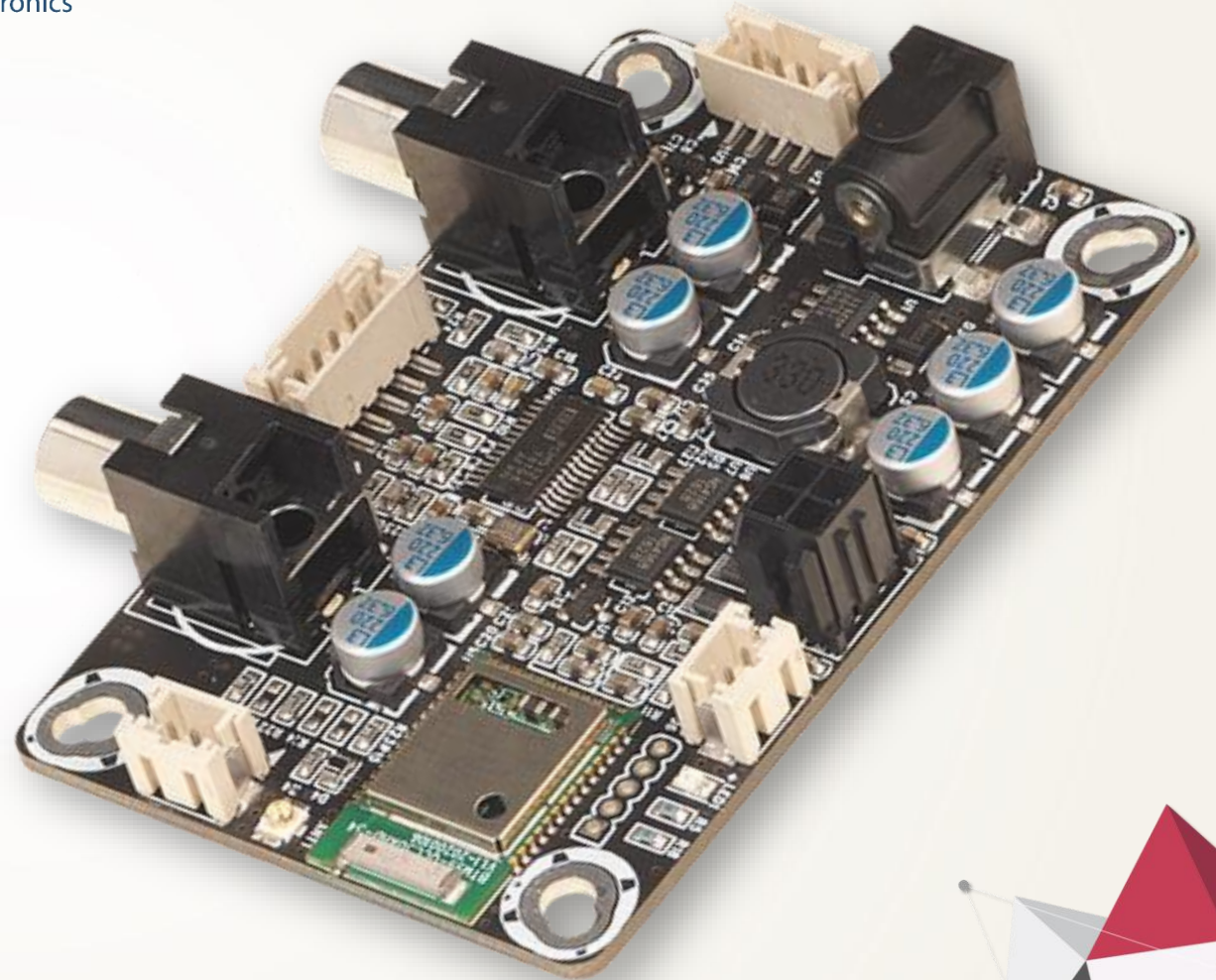


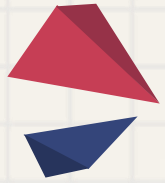


# WONDOM BRB3 Connection Guide

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BY SURE ELECTRONICS CO., LTD.





# What is BRB3?

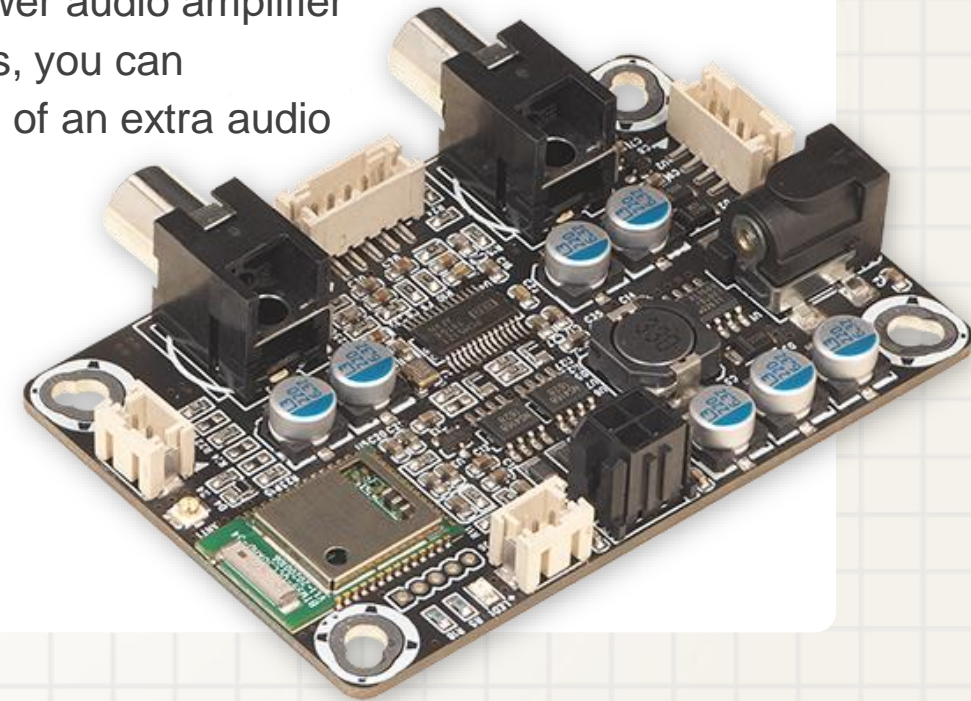
AA-AB41136 is a high performance Bluetooth Receiver Board employing Bluetooth Ver5.0 (aptX HD) module. It provides RCA output and line output for easy connection with audio amplifiers.

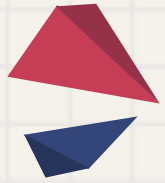
Besides power supply, BRB3 supports battery power, which ensures its portability and long playback time, making it perfectly suitable for **portable speakers, hotel audio, bookshelf audio, DIY audio, garden audio** and so on.

In addition to Bluetooth receiver board, BRB3 can work as a stereo low power audio amplifier which delivers 3W output power per channel into a 4Ohm load. That means, you can directly use the BRB3 to drive speakers for playing music without any need of an extra audio amplifier. The two kinds of output can be used at the same time.

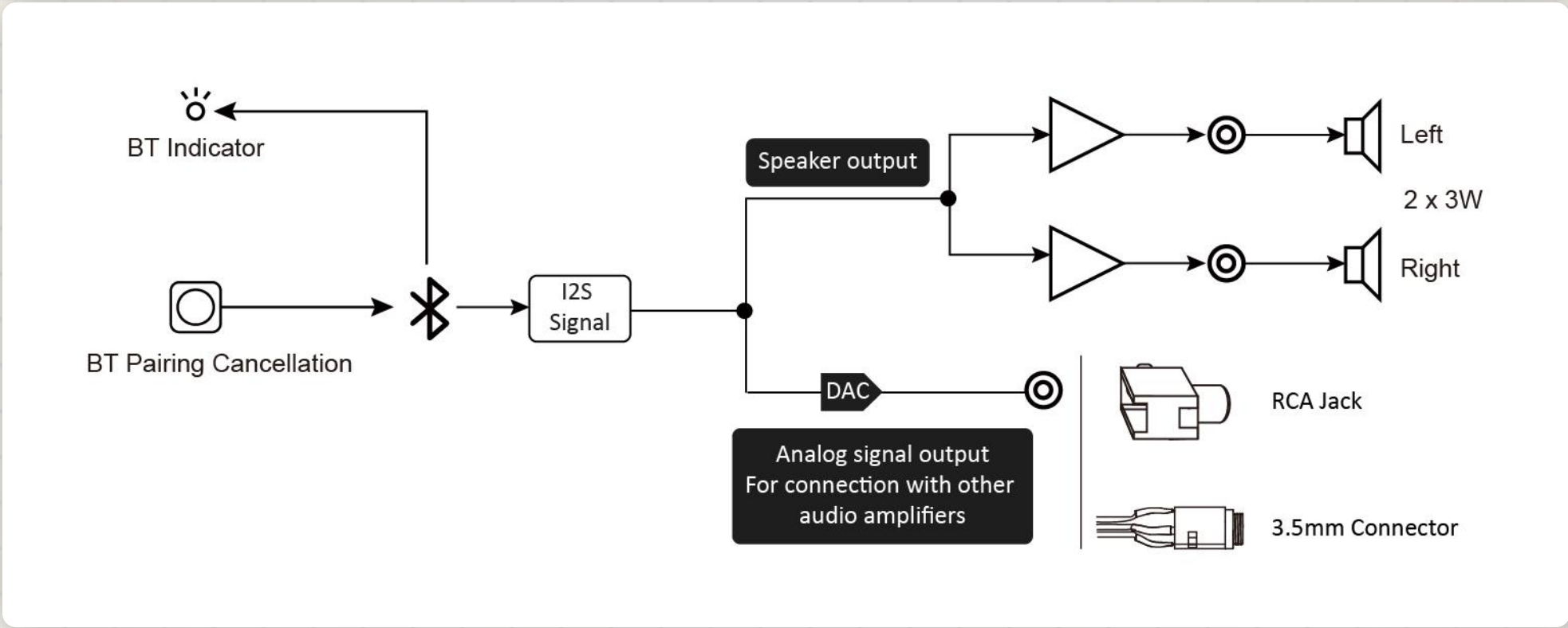
## Key Features

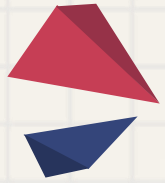
- Bluetooth Ver5.0 (aptX HD)
- Bluetooth Pairing Cancellation
- Supporting 2 x 3W Speaker Output
- Supporting Wide Power Supply Range
- Single-end Audio Signal Output
- Bluetooth LED Indicator
- Supporting Battery Power





# What is BRB3?

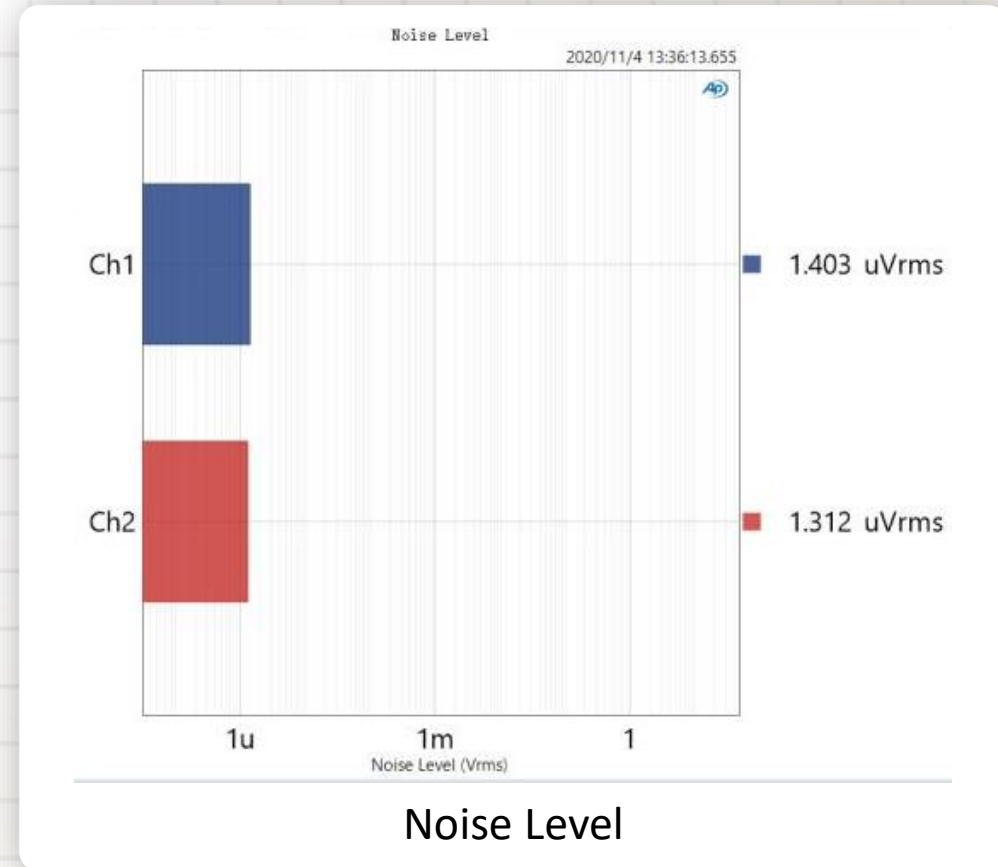
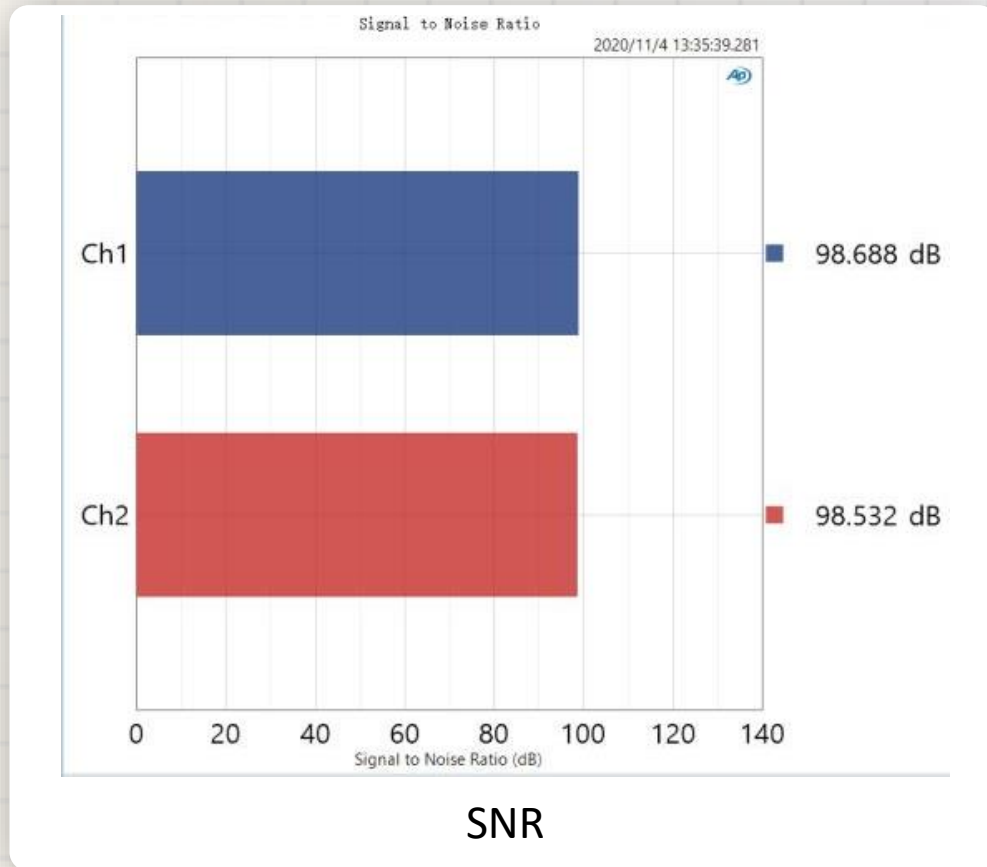


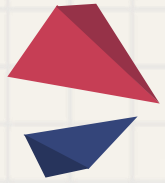


# Performance Graphs

DAC Output

Testing condition: DC12V (Powered by battery board )

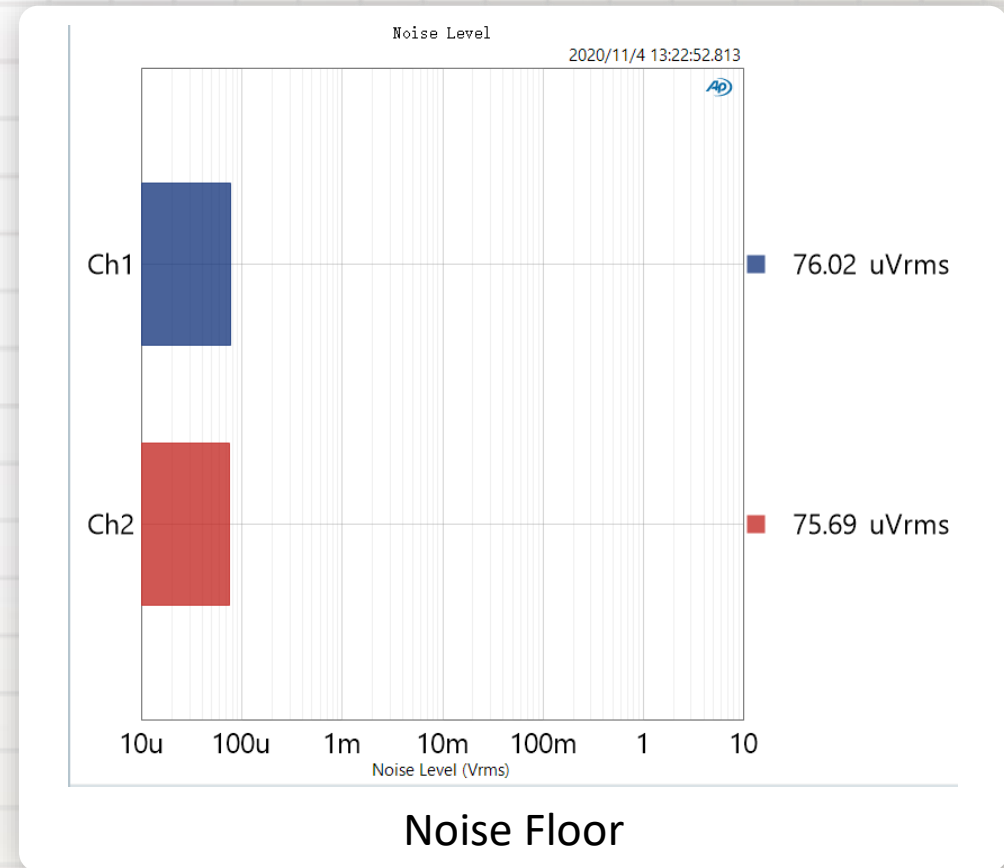
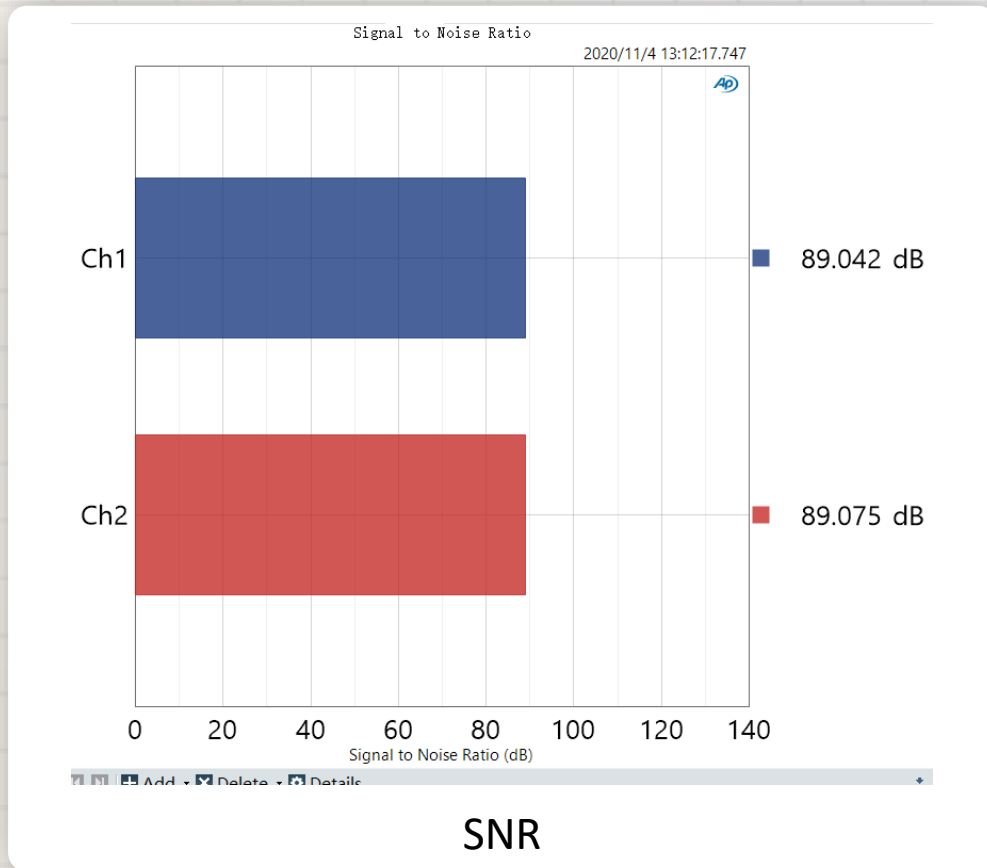




# Performance Graphs

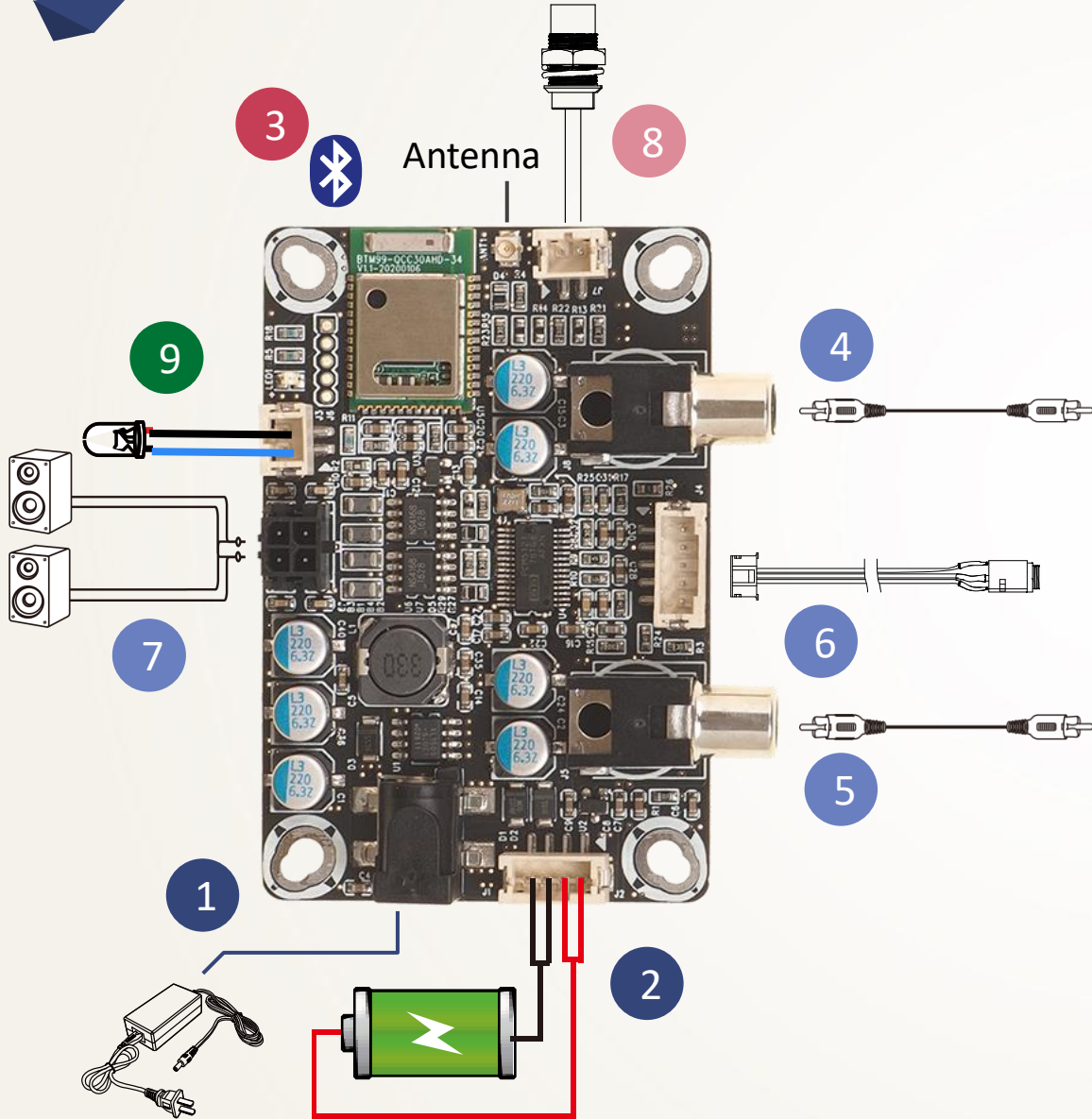
## Speaker Output

Testing condition: DC12V @ 40hm ( Powered by battery board )





# Connection Diagram



## Power Supply

- 1 5V-32V power supply
- 2 WONDOM BCPB Series

## Audio Input

- 3 Bluetooth 5.0 module

## Audio Output

- 4 Analog Signal Output – Right Channel (RCA)
- 5 Analog Signal Output – Left Channel (RCA)
- 6 Analog Signal Output (3.5mm Line Output Connector)
- 7 2 x 3W Speaker Output

## Control

- 7 Bluetooth Pairing Cancellation

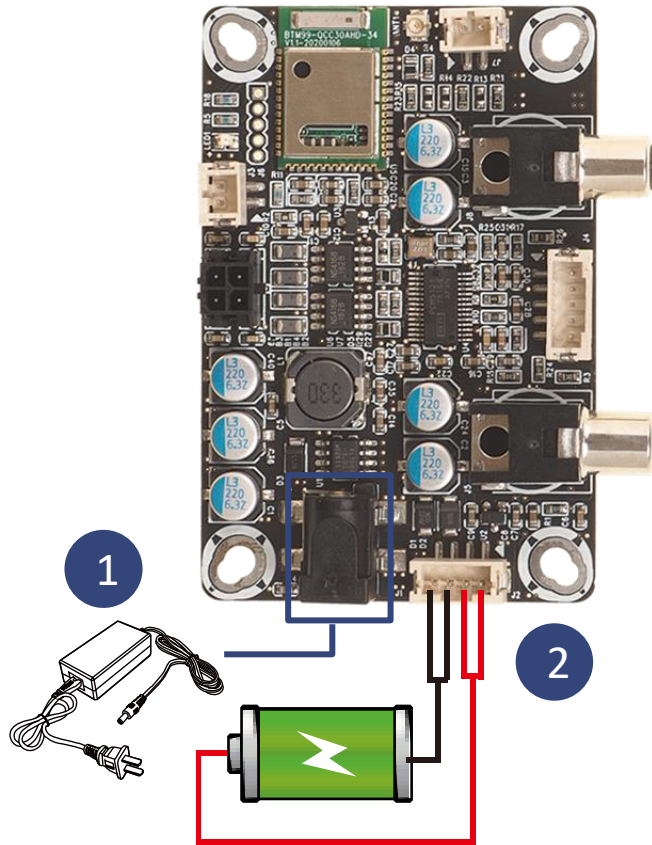
## LED Indicator

- 9 External Bluetooth LED Indicator



# Power Supply

Power adapter & Battery board



The suggested power supply range of BRB3 is DC5-32V.

## 1, Power supply – J1

DC 5-32V power supply

Please remember to use the power supply whose voltage is within the suggested range.

## 2, Battery Power – J2

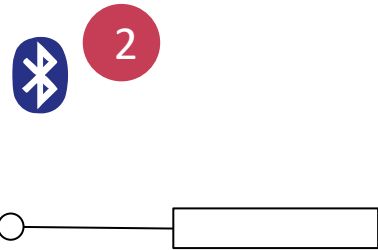
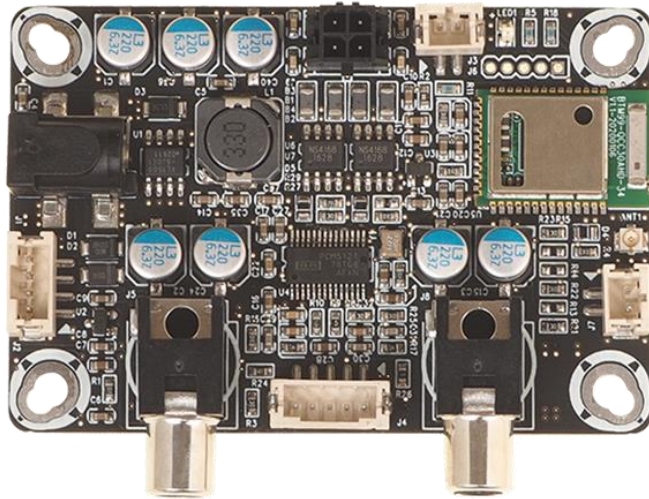
BRB3 supports battery power.

It is recommended to use WONDOM BCPB2 to power BRB3 as BRB3 is not equipped with charging circuit.

# Audio Input

Bluetooth Ver5.0

BRB3 employs Bluetooth Ver5.0 (aptX HD) module for audio input.



PAIRED DEVICES



WONDOM aptX HD  
Connected for media audio

## 2, Bluetooth input

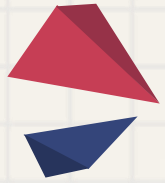
Bluetooth 5.0 Module, Supporting aptX HD

There is an antenna integrated in the Bluetooth module for stable connection.

We also provide a connector for the external Bluetooth antenna. You can install it when the BRB3 is integrated in a cabinet.

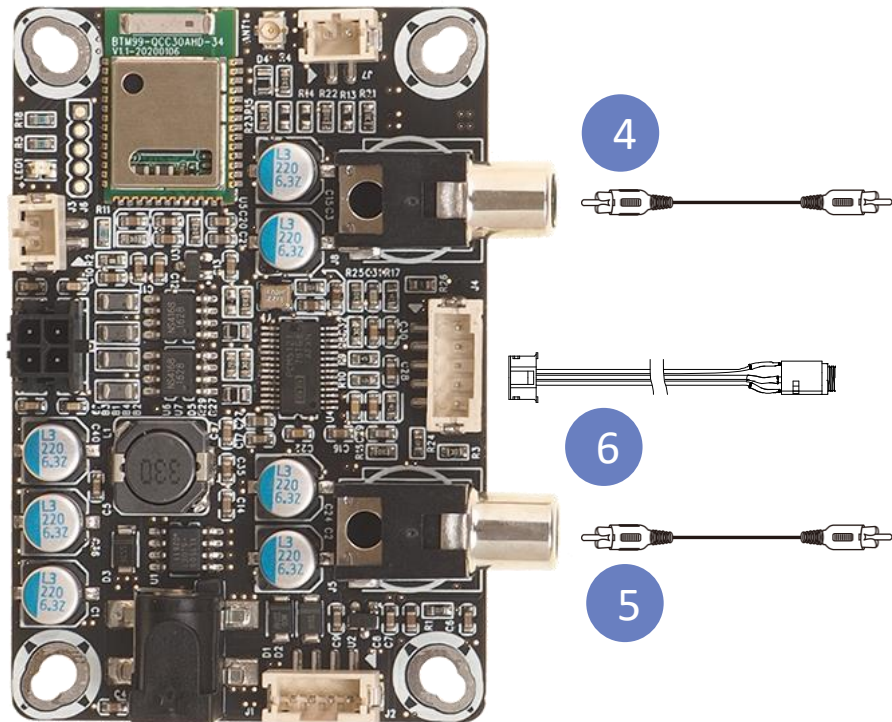
The external Bluetooth antenna is in the Functional Cables Kit for BRB3 (AA-AA11435).





# Audio Output

Analog Signal Output



BRB3 provides analog signal output for connection with other audio amplifier boards.

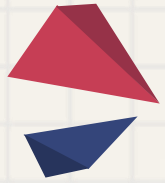
4&5, RCA Output - J8, J5

J8, right channel; J5, left channel

6, Line Output – J4

Besides RCA jacks, BRB3 supports line output.

A 3.5mm output connector cable is provided Functional Cables Kit for BRB3 (AA-AA11435).



# Audio Output

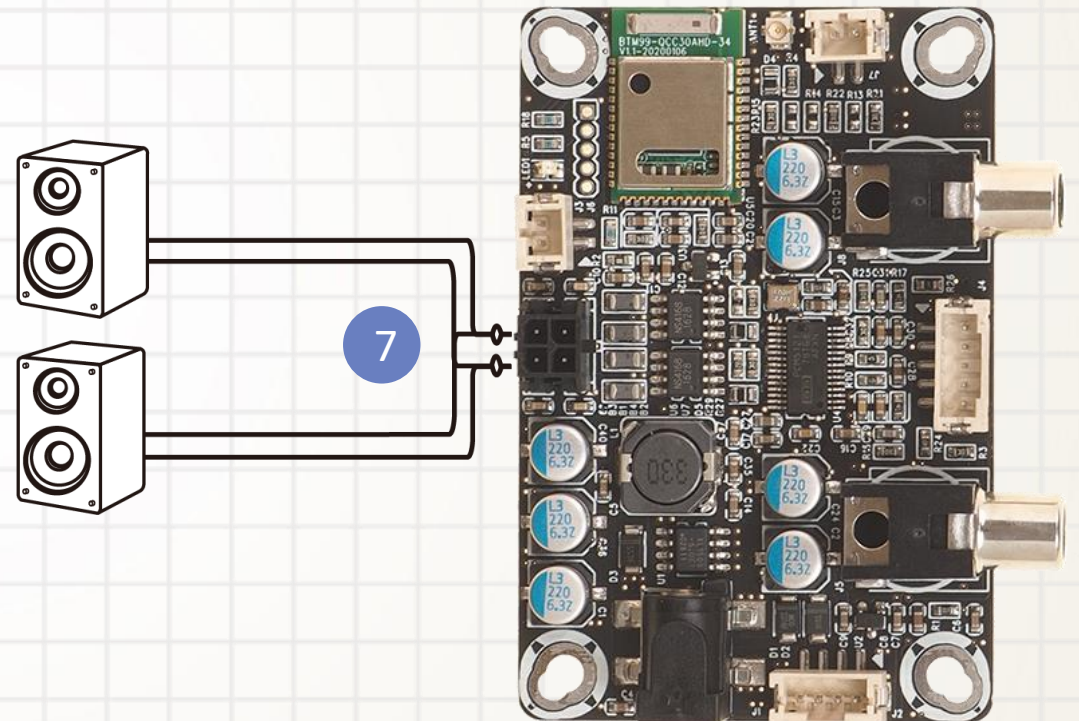
Speaker Output

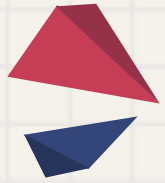
## 7, Speaker Output – J9

In addition to analog signal output, BRB3 can work as a low power audio amplifier, which is capable of delivering 3W output power per channel into a 40hm load.

That means, you can directly use the BRB3 to drive speakers for playing music without any need of an extra audio amplifier.

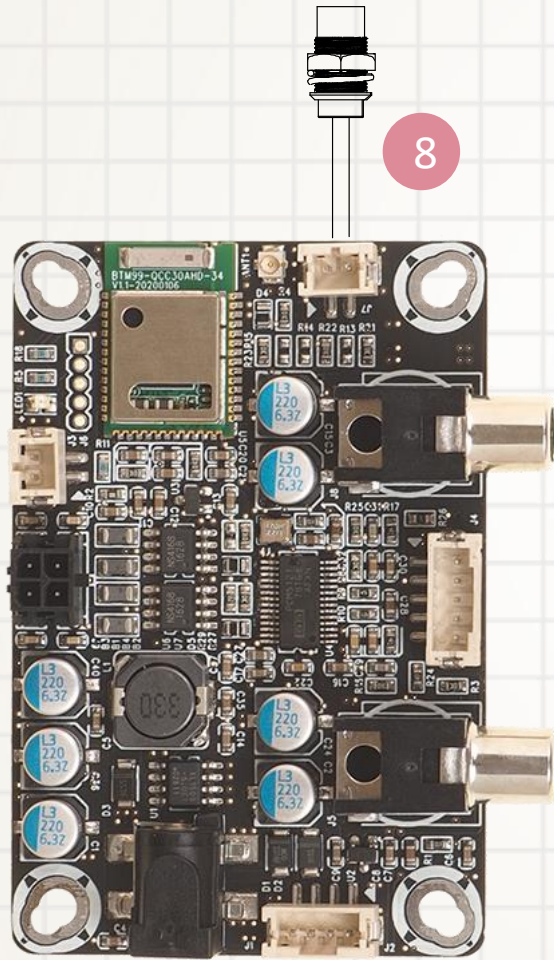
The two kinds of output can be used at the same time





# Control

## Bluetooth Pairing Cancellation

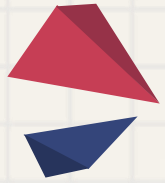


### 8, Bluetooth Pairing Cancellation Port – J7

To provide customers an easy control of the system, we integrate Bluetooth pairing cancellation function in the BRB3.

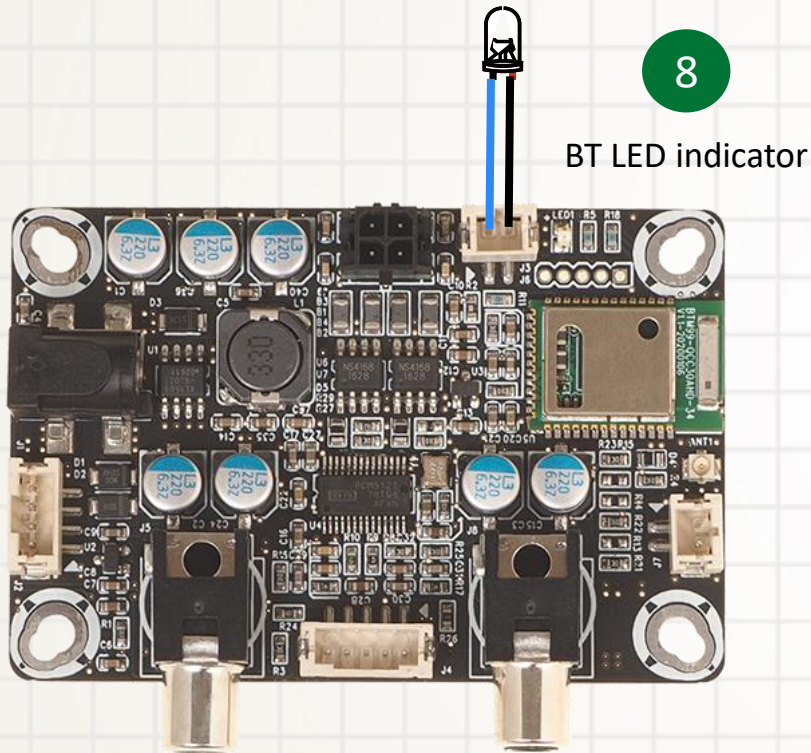
The pairing cancellation cable along with a button is offered in the Functional Cables Kit for BRB3 (AA-AA11435).

Short press the button to cancel Bluetooth pairing.



# LED Indicator

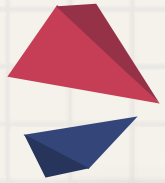
Bluetooth connection status



## 8, Bluetooth LED indicator – J3

When Bluetooth is paired, the LED will be ON;  
When Bluetooth is searching, the LED will BLINK.

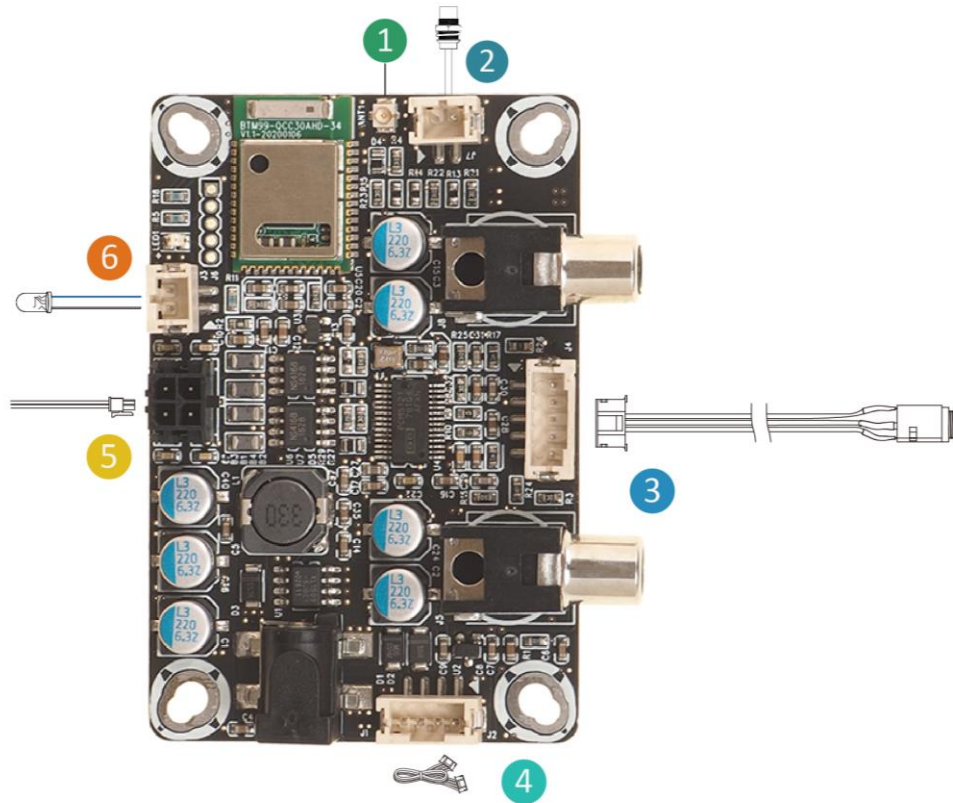
The external Bluetooth LED Indicator cable is provided  
in the Functional Cables Kit for BRB3 (AA-AA11435).



# Functional Cables Kit for BRB3

Cables

To offer customers with easy connection and simple operation, Sure Electronics has released a Functional cables kit for BRB3V300 (AA-AA11435), which includes all the cables you need for use.



Name	Picture	Note	Function
1 Bluetooth Antenna		<b>Functional Cables Kit for BRB3 (AA-AA11435)</b>	External Antenna
2 Bluetooth Pairing Cancellation Cable			Short press to cancel Bluetooth pairing (J7)
3 3.5mm Line Output Cable			Analog signal output for connection with other audio amplifiers (J4)
4 PH-4pin cable (Pin to Pin)			Powering BRB3 with BCPB board (J2)
5 Speaker Output Cable			2 x 3W Speaker output (J9)
6 Bluetooth LED Indicator (Black & Blue Cable)			External Bluetooth LED Indicator (J3)

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