Page: 1 of 4





**BVS25** 

2x5W Bluetooth v5.0 Audio Amplifier Board with TWS Mode

The BVS25 is a compact audio amplifier board that is capable of delivering stereo sound with a total output power of 2  $\times$  5 watts.

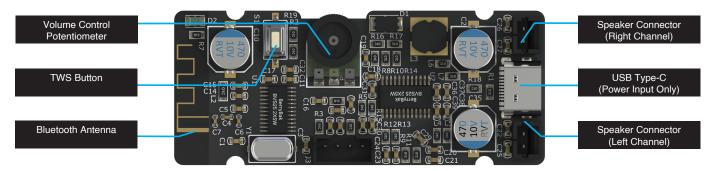
## Features:

- Compact size with multiple functions.
- Integrated with Bluetooth v5.0.
- Supporting TWS mode.

Parameters:	
Bluetooth Version	v5.0
Bluetooth Name	BVS25
Supply Voltage	USB Type-C 5V
Audio Input Source	Bluetooth

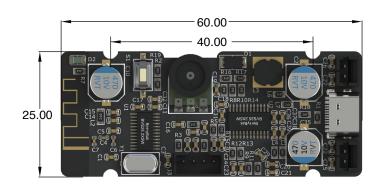
Parameters:	
Output Channel	2.0CH
Output Power	5W per Channel
Product Size	60 (w) x 25 (d) x 10 (h) mm
Weight	8.9g

#### **Port Introduction**



### **Mechanical Drawing**

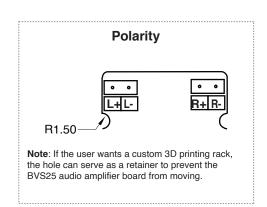
(Nominal Dimensions, mm)



Top View



Side View



**Back View** 



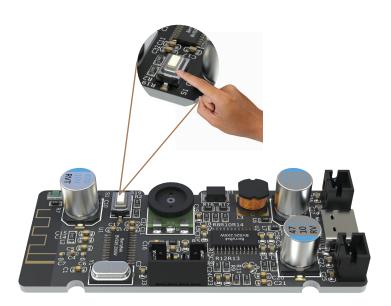
Front View

## BVS25 User Manual









When the TWS function is utilized, it will be in stereo. The first BVS25 audio amplifier board will be the left channel, while the second BVS25 audio amplifier will be the right channel.

#### How to utilize the TWS Function

- 1. Obtain two BVS25 audio amplifier boards.
- 2. Turn on both amplifier boards. The LED blue light on each board will blink, and you'll hear a sound indicating successful power-on.
- 3. Simultaneously press the TWS button on both BVS25 boards until you hear a distinct sound.
- 4. Release your finger from the TWS button after hearing the sound to activate the TWS mode.
- Observe the BVS25 boards to ensure accuracy. One board's blue LED light will blink, while the other will remain illuminated.
- On your mobile phone, open the Bluetooth settings and connect to one of the BVS25 boards. Play any kind of music file that supports stereo audio (for example: https://www.youtube.com/watch?v=hTvJoYnpeR-Q&t=91s).
- Pay close attention to the music. You should hear the sound from the left channel on the left side of the BVS25 board and the sound from the right channel on the right side of the BVS25 board.



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BVS25 User Manual





# **Suggested Speaker**









## **Audio and Electrical Performance**

**BVS25 Electrical Performance Parameters** 

Parameters	Conditions	Min.	Тур.	Max.	Unit
Power Supply	It is recommended to use a Type-C adapter with a current rating exceeding 1A, as a PC Type-A port may not supply sufficient current.	4.5	5	5.5	VCD
Maximum Current	The BVS25 audio amplifier board excels with a maximum current output of 2x6W at 4 ohms, ensuring a powerful and clear audio experience.	-	2.82	-	А
Minimum Load Impedence	-	4	4	12	Ω
Switching Frequency	-	-	12	-	kHz

#### **BVS25 Audio Performance Parameters**

Parameters	Conditions	Conditions		Тур.	Max.	Units
Output Noise Level BT & NO BT Connected @	Left	-	4	-	uV	
	A-weighting	Right	-	4	-	uV
SNR	-	-		-	-	dB
THD + N	-	-		-	-	%
DC Offset	-	-		5	-	mV

# **Audio Source Device(s)**

• Smartphone, personal computer, laptop and etc.







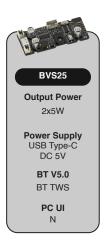


Page: 4 of 4



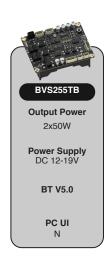


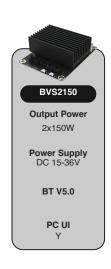
## **BVS Series Product Overview**

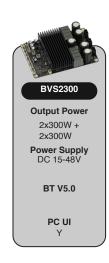












#### **BVS Series Product Accessories**

Product accessories can be downloaded on our website. We provide STL files for the purpose of 3D printing. If you have a 3D printer, you can continue to print them on your own. Alternatively, if you don't have a printer, you can send the STL file we provided to a store that offers 3D printing services.











# **Warranty Terms and Product Usage Restrictions**

Berrybak products come with a one-year warranty starting from the date of purchase. Customers are responsible for the cost of returning the goods to the seller, and by making a purchase, you agree to this condition. Due to the nature of DIY products, visible damage or use on screw holes or tinning of solder pads directly invalidates the warranty. Damage caused by the use of incorrect power sources, such as exceeding the specified voltage range or reverse polarity, is not covered under warranty. All Berrybak products undergo thorough testing before shipment. We do not accept bulk returns after a bulk purchase. If you are unsure of the quantity you need, please purchase the appropriate quantity as needed. All Berrybak products are intended for DIY use only and do not support any industrial applications. The rated operating temperature range is 0-40°C. Please refrain from using Berrybak products in industrial or any special industrial environments. If you require products tested for industrial operating temperature ranges, we recommend seeking products clearly labeled to support operating ranges such as -20-65°C or -40-85°C.

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To view our products and purchase, please check the Taobao or Aliexpress website by searching for the product name (example: BVS25).

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For purchases that meet the minimum quantity of 100 units, you can find the bundled price for 100 units of the product on Taobao and AliExpress platforms. We do not provide any form of modification to existing products or additional price discounts for quantities below 500 units. The bundled price for quantities of 100 units may vary.

For purchases that meet the minimum quantity of 500 units, you can send an email to our contact mailbox to customize the PCB color and silk screen for products with enclosures, and have your brand logo placed on the PCB or enclosure. Berrybak does not provide any other form of customization services such as changing PCB dimensions or adding/removing ports. There is a standard price list for purchases of 500 units or more, which can be requested from our contact mailbox. You can sell at a price you deem appropriate, but there is not a significant difference between the bulk price and the bundled price based on 100 units.

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