

YWBL-WH YWBL-WHkbrvhoyc8i

YWBL-WH DC 0-10V 10mA Signal Generator Module User Manual

Model: YWBL-WHkbrvhoyc8i

1. INTRODUCTION

This manual provides detailed instructions for the YWBL-WH DC 0-10V 10mA Signal Generator Module. This module is designed to convert an input power supply into an adjustable 0-10V analog voltage output. It is suitable for use with most analog interfaces for PLCs, MCUs, and industrial automation systems.

Important Note: This module functions solely as an analog voltage output generator and cannot be used as a power supply module.

2. SAFETY INFORMATION

- Ensure all connections are correct before applying power to prevent damage to the module or connected equipment.
- The input power supply voltage must be at least 2V higher than the desired analog output voltage.
- Do not exceed a maximum input power supply of 30V.
- The maximum output current is approximately 10mA. Do not attempt to draw more current than specified.
- Handle the module with care to avoid electrostatic discharge.
- If you are unsure about any connection or operation, consult a qualified technician.

3. PRODUCT OVERVIEW

The YWBL-WH Signal Generator Module consists of a main circuit board enclosed in a protective casing and an external potentiometer for voltage adjustment.

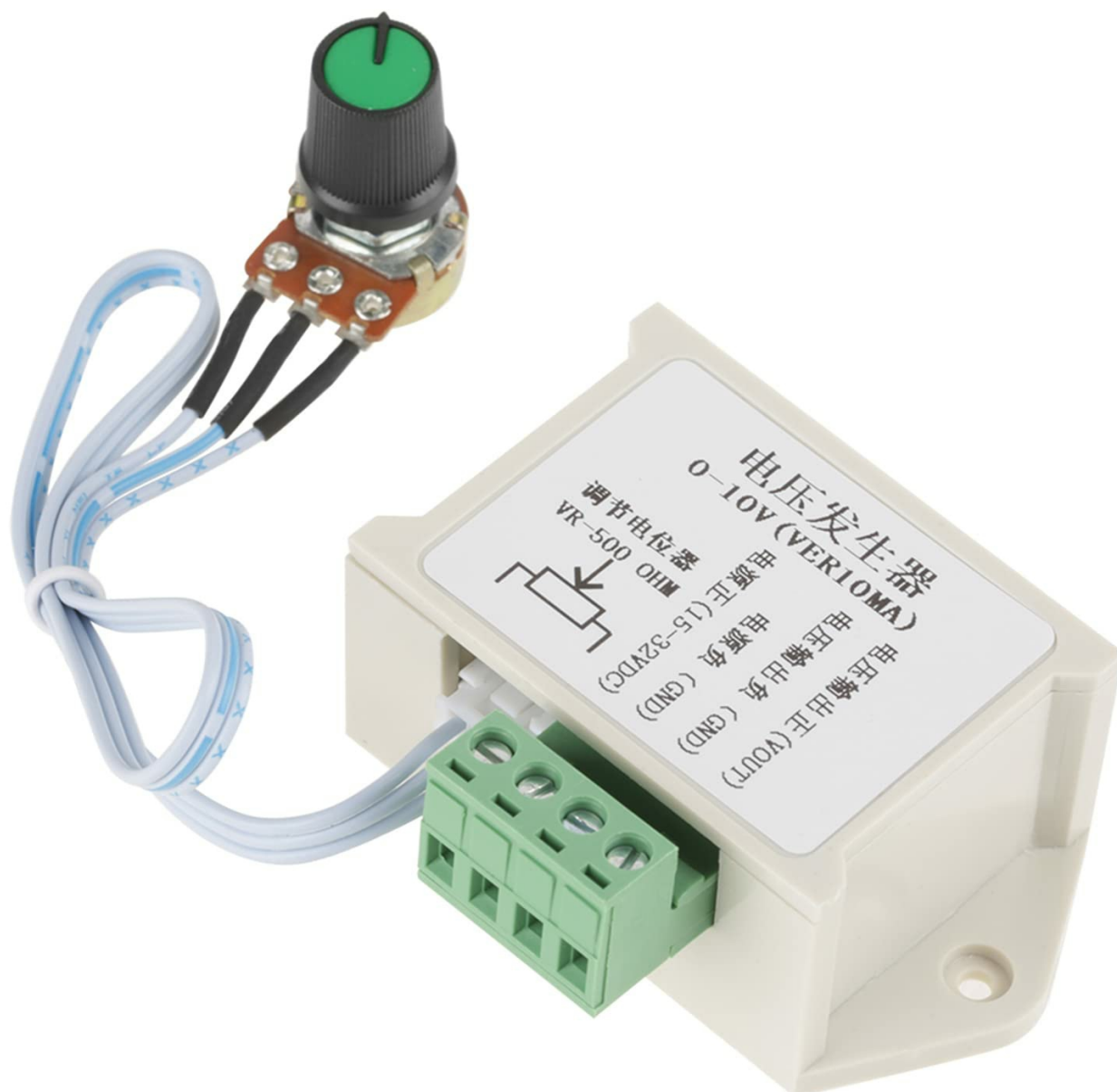


Figure 3.1: YWBL-WH DC 0-10V 10mA Signal Generator Module.

3.1 Components

- **Main Module:** Houses the electronic circuitry for signal generation.
- **Potentiometer (VR-500 OHM):** An external rotary knob used to adjust the output voltage.
- **Terminal Block:** For connecting input power and output signal wires.

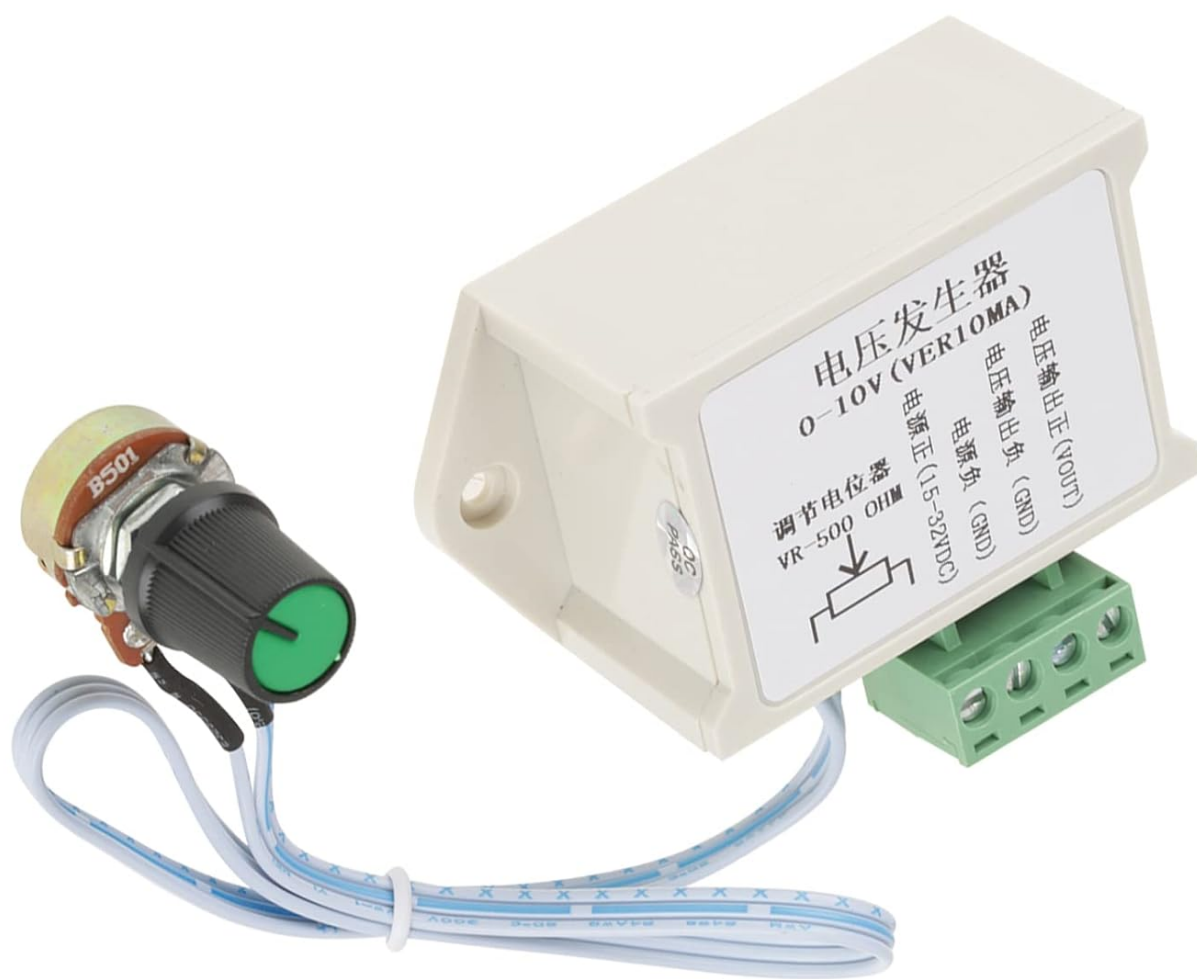


Figure 3.2: Top-down view of the module with terminal block and potentiometer.

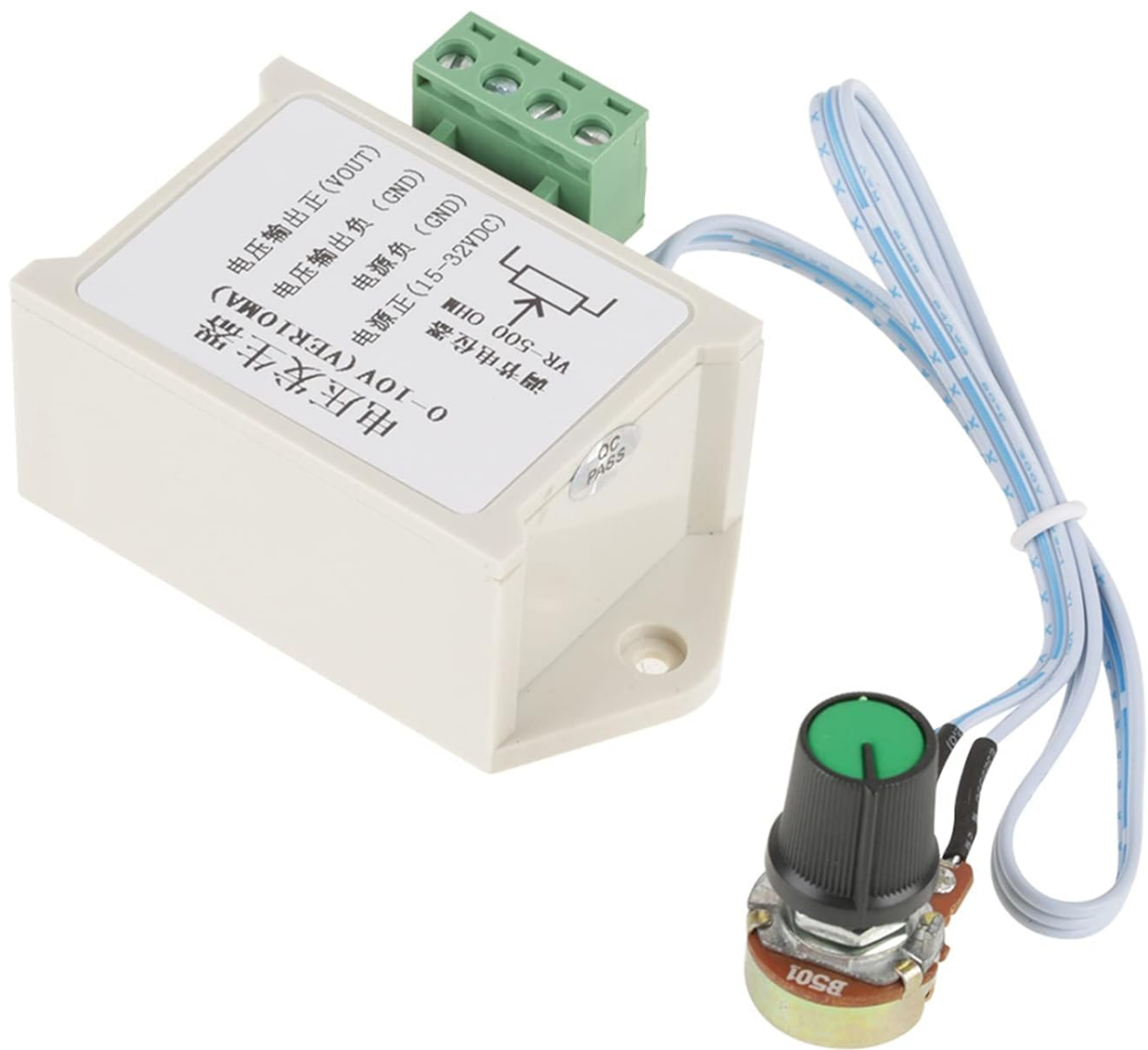


Figure 3.3: Side view of the module with connected potentiometer.

4. SETUP

Follow these steps to set up your signal generator module:

1. **Connect the Potentiometer:** The external potentiometer is pre-wired to the module. Ensure the connection is secure.
2. **Identify Terminal Connections:** The terminal block has clearly labeled connections. Refer to the diagram on the module or the image below for guidance.



Figure 4.1: Terminal block connections.

- **Power Input (+):** Connect the positive terminal of your DC power supply (15-32VDC).
 - **Power Input (GND):** Connect the ground terminal of your DC power supply.
 - **Output (GND):** Connect to the ground of your receiving device (e.g., PLC, MCU).
 - **Output (VOUT):** Connect to the analog input of your receiving device. This will be the 0-10V adjustable output.
3. **Power Supply Requirements:** Ensure your DC power supply provides a voltage between 15V and 32V. The input voltage must be at least 2V higher than the maximum desired output voltage (e.g., for 10V output, input should be at least 12V, but the module specifies 15-32V).
4. **Secure Connections:** Use appropriate wiring and ensure all screw terminals are tightened securely to prevent loose connections.

5. OPERATING INSTRUCTIONS

Once the module is correctly wired and powered, you can adjust the analog output voltage.

1. **Apply Power:** Turn on the DC power supply connected to the module.

2. **Adjust Output Voltage:** Rotate the external potentiometer knob (VR-500 OHM) clockwise to increase the output voltage and counter-clockwise to decrease it. The output voltage will range from 0V to 10V.
3. **Monitor Output:** Use a multimeter or your connected device's input monitoring function to verify the output voltage.



Figure 5.1: Adjusting the output voltage with the potentiometer.

6. MAINTENANCE

The YWBL-WH Signal Generator Module requires minimal maintenance.

- Keep the module clean and free from dust and moisture.
- Avoid exposing the module to extreme temperatures or direct sunlight.
- Periodically check all wiring connections for tightness and signs of wear.
- Do not attempt to open the module casing, as this may void any potential warranty and expose sensitive components.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
No output voltage or incorrect voltage.	- Incorrect wiring. - Input power supply outside specified range (15-32VDC). - Input voltage not at least 2V higher than desired output. - Faulty potentiometer. - Module used as a power supply.	- Verify all connections according to Section 4. - Check input power supply voltage. - Ensure input voltage meets the minimum requirement. - Test the potentiometer. - Remember, this is a signal generator, not a power supply.
Output voltage is unstable.	- Loose connections. - Unstable input power supply.	- Check and tighten all terminal connections. - Ensure the input power supply is stable.
Module not responding.	- No power. - Incorrect polarity for power input. - Module damage.	- Verify power supply is on and connected. - Double-check power input polarity. - If all else fails, the module may be damaged.

8. SPECIFICATIONS

Feature	Value
Brand	YWBL-WH
Model Number	YWBL-WHkbrvhoyc8i
Output Voltage Range	0-10V DC (Adjustable)
Maximum Output Current	10mA
Input Power Supply Voltage	15-32V DC
Minimum Input Voltage Requirement	Output Voltage + 2V
Dimensions (L x W x H)	7 x 5 x 3 cm
Weight	50 grams
Material	Metal (for contact material)
UPC	724316071881
ASIN	B07SYLQNYK

9. WARRANTY AND SUPPORT

This product is subject to the standard return policy of the retailer from which it was purchased. Please refer to your purchase documentation for specific details regarding returns and replacements.

For technical support or inquiries, please contact the manufacturer, YWBL-WH, through their official channels or the retailer's customer service.

Manufacturer: YWBL-WH

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

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