

Walfront FV-200Hz5V

Walfront FV-200Hz5V Frequency to Voltage Converter Module User Manual

Model: FV-200Hz5V

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and troubleshooting of the Walfront FV-200Hz5V Frequency to Voltage Conversion Module. Please read this manual carefully before use to ensure proper functionality and safety.

The FV-200Hz5V module is designed to convert an input frequency signal ranging from 0-200Hz into a corresponding 0-5V analog voltage output. This module is suitable for applications requiring an interface between PLCs, movement control cards, and frequency converters.

- The module's response time for frequency to voltage conversion is approximately 0.3-0.5 seconds.

3. OPERATING INSTRUCTIONS

3.1 Basic Functionality

The Walfront FV-200Hz5V module converts an input frequency signal (0-200Hz) into a proportional analog voltage output (0-5V). The output current is 5mA.



Image 3.1: The FV-200Hz5V module shown in an illustrative application, highlighting its use in converting interfaces between PLCs and frequency devices or movement control cards.

3.2 Calibration

The module is factory-calibrated. If a deviation in the frequency-to-voltage correspondence is observed, the blue multi-turn potentiometer (labeled 'W103' or similar) on the board can be adjusted. Use a small screwdriver to carefully turn the potentiometer until the desired output voltage is achieved for a given input frequency.

3.3 Linear Relationship

The conversion follows a linear relationship:

Input Frequency	Output Voltage
20 Hz	0.5 V
100 Hz	2.5 V
200 Hz	5 V

4. TROUBLESHOOTING

- **Incorrect Voltage Output:** If the output voltage is not as expected, first verify the input frequency signal. If a deviation persists, carefully adjust the blue potentiometer on the board.
- **No Output or Unstable Output:**
 - Check the power supply voltage. Ensure it is within the 12-30V DC range and meets the minimum 15V DC requirement if a 12V level input is used.
 - Verify all wiring connections are secure and correct according to Section 2.2.
 - The module is sensitive to input waveform. It is designed for square wave inputs and may not function correctly with sine waves or signals with slow slew rates. If your signal has a lazy slew rate, consider using an NPN transistor to sharpen the edges of the square wave (collector to input, emitter to ground, base to signal input).
 - Ensure the input frequency signal is stable and maintained for at least 0.5 seconds.
- **Interference Issues:** The module features input isolation to reduce interference. Ensure proper grounding and shielding in your system to minimize external noise.
- **PLC Compatibility:** If using with a PLC, confirm that the PLC output is NPN type and that a common ground wire is properly connected.

5. SPECIFICATIONS

Feature	Specification
Item Type	Frequency To Voltage Conversion Module
Model	FV-200Hz5V
Function	Input 0-200Hz frequency converted to 0-5V analog output
Output Current	5mA
Response Time	0.3-0.5 seconds
Input Power Supply Voltage	12-30V DC (Recommended: 15-24V DC)
Input Pulse Level	5V, 12V, 24V (direct input, no string resistor needed)
Dimensions (L x W x H)	Approx. 4.7 x 4.5 x 1.7 cm (1.85 x 1.77 x 0.67 inches)
Item Weight	Approx. 0.704 ounces / 0.02 Kilograms
Manufacturer	Walfront

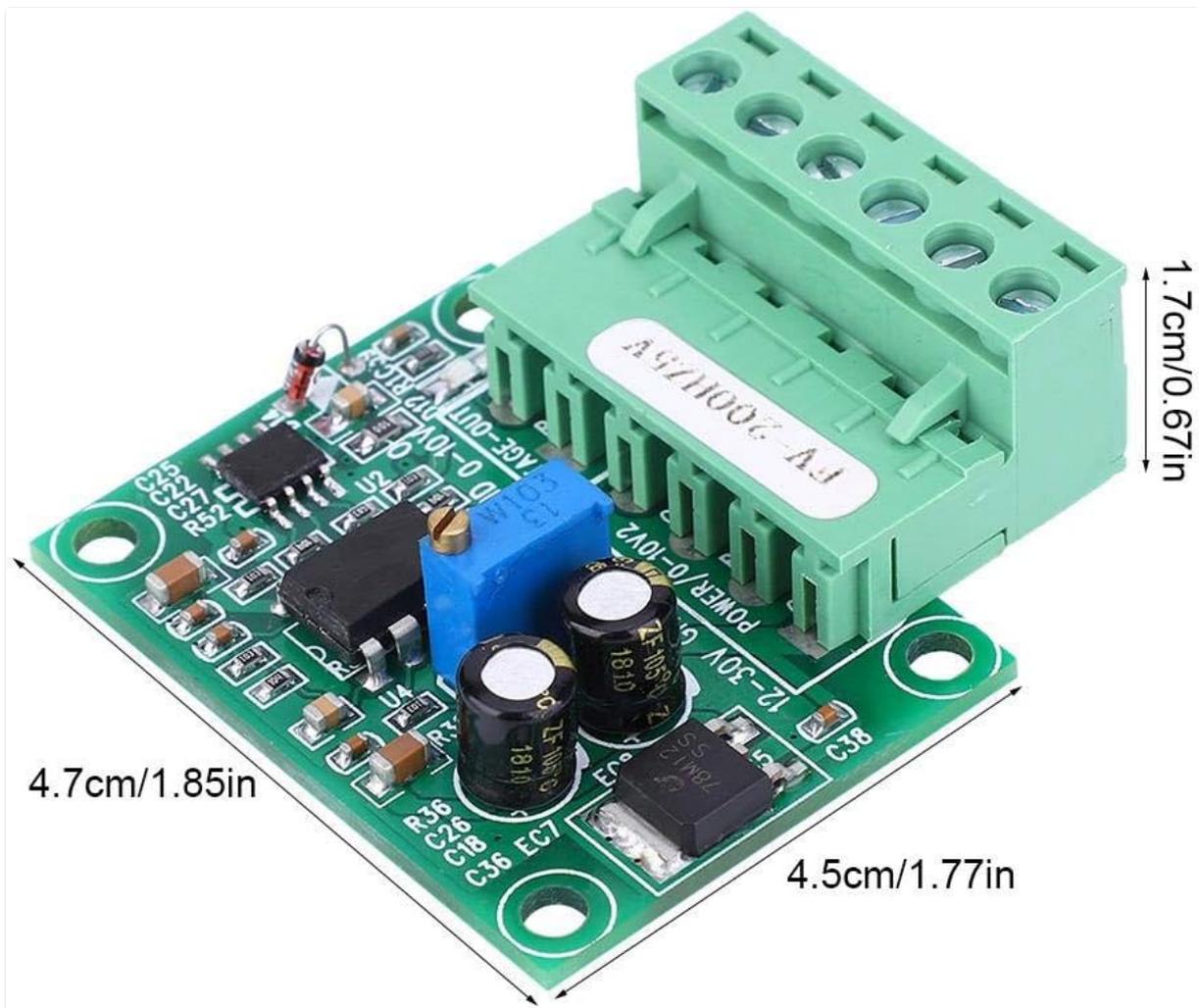


Image 5.1: The FV-200Hz5V module with its physical dimensions (length, width, height) clearly labeled in centimeters and inches.

6. MAINTENANCE

The Walfront FV-200Hz5V module is designed for reliable operation and requires no specific user maintenance. To ensure longevity, keep the module clean and free from dust, moisture, and corrosive substances. Avoid physical impact or excessive force on the components or terminals.

7. WARRANTY AND SUPPORT

Specific warranty details for this product are not provided in this manual. For warranty information, technical support, or service inquiries, please refer to the retailer from whom the product was purchased or contact Walfront directly through their official channels.

Related Documents - FV-200Hz5V



[Panasonic Ventilating Fan Installation and Operating Instructions](#)

This document provides comprehensive instructions for the installation, operation, and maintenance of Panasonic Ventilating Fan models. It includes essential safety warnings, installation guidelines, maintenance tips, and detailed specifications to ensure proper and safe use of the product.



[Panasonic Ventilation Solutions: High-Performance Fans for Indoor Air Quality](#)

Discover Panasonic's comprehensive range of high-performance, energy-efficient ventilation fans and indoor air quality solutions. This catalog details product lines like WhisperGreen, WhisperSense, and WhisperLine, highlighting key benefits, features, specifications, and installation guidance for creating healthier, more comfortable living and working environments.



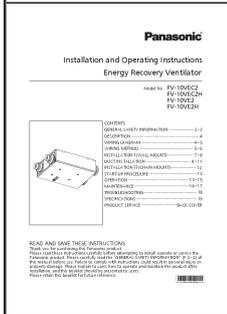
[Panasonic Ventilating Fan Installation Instructions - FV-0511VKSL3K and other models](#)

Comprehensive installation guide for Panasonic WhisperGreen Select ventilating fans, including models FV-0511VKSL3K, FV-0511VKSL3, FV-0511VKL3, and FV-1115VKL3. Covers safety information, unpacking, parts, wiring diagrams, features, installation procedures for ceiling and wall mounting, retrofit installations, maintenance, and specifications.



[Panasonic Ventilating Fan Installation Instructions](#)

Comprehensive installation instructions for Panasonic WhisperGreen ventilating fans, covering models FV-13VKM3, FV-08VKM3, FV-13VKS3, FV-08VKS3, FV-13VK3, FV-08VK3, and FV-05VK3. Includes safety information, dimensions, wiring diagrams, operation details, and maintenance guidelines.



[Panasonic Energy Recovery Ventilator \(ERV\) Installation and Operating Instructions](#)

This document provides comprehensive installation and operating instructions for Panasonic Energy Recovery Ventilators (ERV) models FV-10VEC2, FV-10VEC2H, FV-10VE2, and FV-10VE2H. It covers essential safety information, product description, wiring diagrams and methods, installation procedures (wall mount and chain mount), duct installation, start-up, operation, maintenance, troubleshooting, and technical specifications.



[Panasonic Ventilating Fan Installation and Operating Instructions](#)

Comprehensive guide for installing, operating, and maintaining Panasonic Ventilating Fans (Models FV-17CU9, FV-17CH9, FV-24CU9, FV-24CH9, FV-24CD9, FV-24CG9), including safety precautions, parts lists, specifications, and wiring diagrams.