

## Dioche Dioche8puawsbzc

# Dioche DC5V Vibration Motor Module Instruction Manual

## INTRODUCTION

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This manual provides detailed instructions for the Dioche DC5V Vibration Motor Module. This module is designed to convert electrical signals into mechanical vibrations, making it suitable for interactive projects, haptic feedback systems, and wearable devices. It features a high-quality 1027 mobile phone vibration motor, offering a strong and noticeable vibration effect.

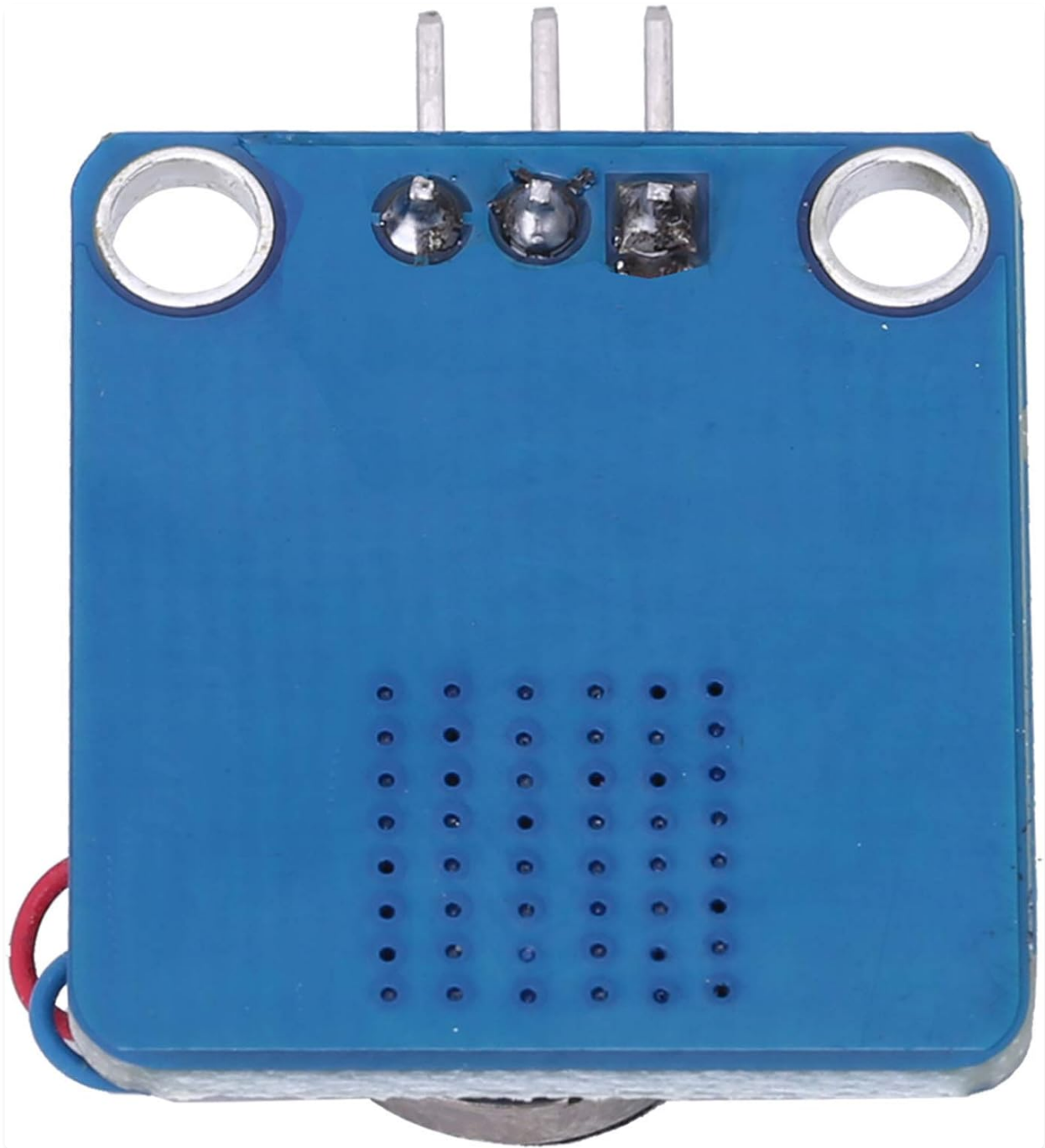


*Image description:* A top-down view of the Dioche DC5V Vibration Motor Module. The blue circuit board features a circular black vibration motor, resistors, and three connection pins labeled VCC, GND, and IN.

## SPECIFICATIONS

Parameter	Value
Item Type	Vibration Module
Rated Voltage	5.0V DC
Working Voltage	3.0 - 5.3V DC
Rated Speed	9000 rpm
Rated Current	60 mA
Starting Current	90 mA

Parameter	Value
Starting Voltage	3.7V DC
Dimensions (Package)	8 x 6 x 3 cm
Weight	11 grams
Model Number	Dioche8puawsbzc



*Image description:* The underside of the Dioche DC5V Vibration Motor Module, showing the blue circuit board with solder points and mounting holes.

## SETUP

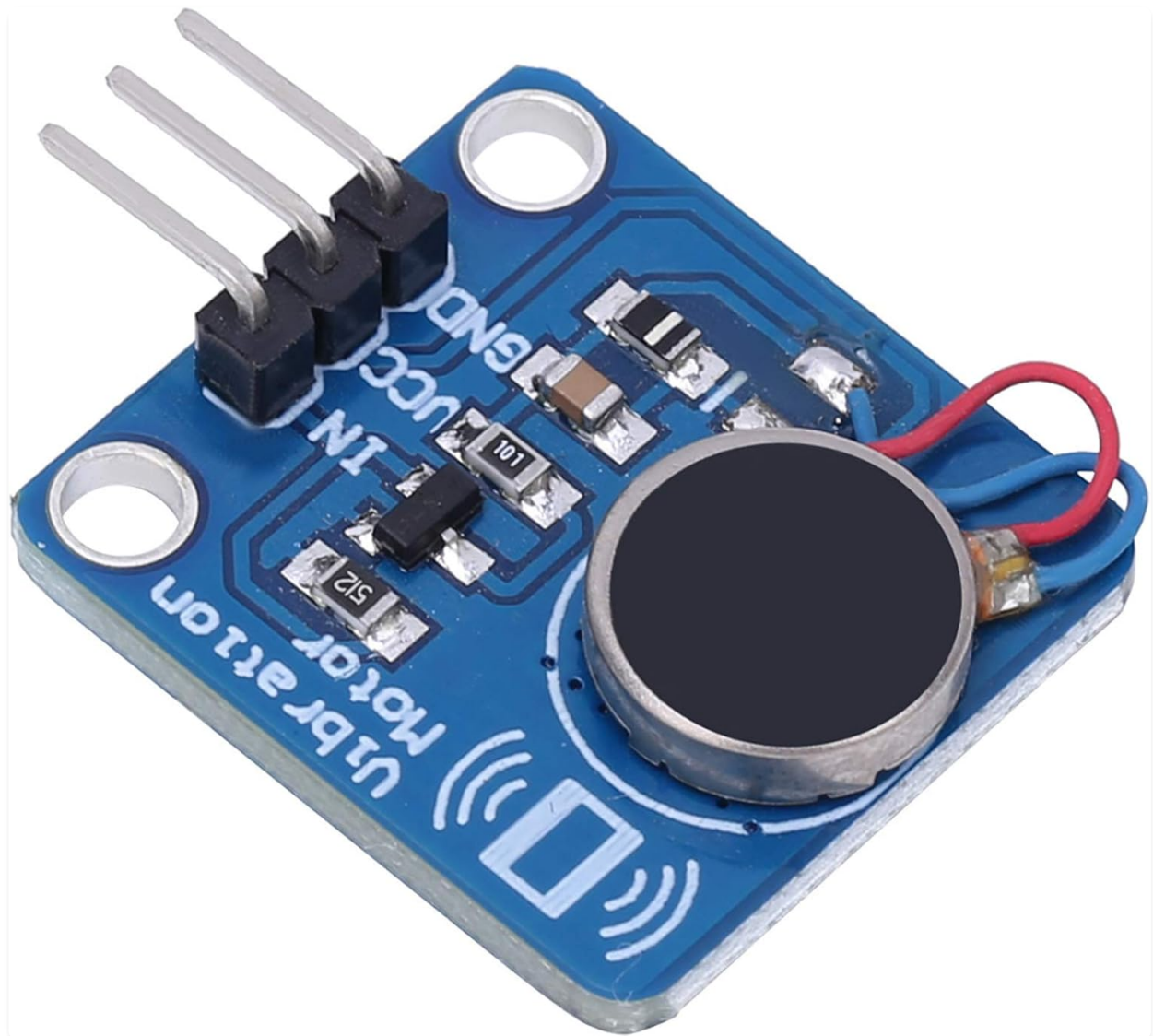
The Dioche DC5V Vibration Motor Module is designed for straightforward integration into electronic circuits. It typically requires three connections: VCC (power), GND (ground), and IN (signal input).

## Pinout

- **VCC:** Connect to a 3.0V to 5.3V DC power supply. The rated voltage is 5.0V DC.
- **GND:** Connect to the ground of your power supply and control circuit.
- **IN:** Connect to a digital output pin of your microcontroller (e.g., Arduino, Raspberry Pi) to control the vibration.

## Connection Diagram Example

Below is an example of how to connect the module to a microcontroller. Ensure all connections are secure before applying power.



*Image description:* An angled view of the Dioche DC5V Vibration Motor Module, clearly showing the three connection pins (VCC, GND, IN) and the vibration motor on the blue circuit board.

## OPERATING INSTRUCTIONS

The vibration intensity of the motor can be controlled directly through a digital port using Pulse Width Modulation (PWM).

## Basic Operation

1. **Power On:** Ensure the module is correctly connected to a stable DC power supply within the specified voltage range (3.0V - 5.3V).
2. **Digital Control:** Use a digital output pin from your microcontroller to send signals to the 'IN' pin of the module.
3. **PWM Control:** To vary the vibration intensity, apply a PWM signal to the 'IN' pin. A higher duty cycle will result in a stronger vibration, while a lower duty cycle will produce a weaker vibration.
4. **On/Off Control:** For simple on/off vibration, set the 'IN' pin to HIGH (e.g., 5V) for vibration and LOW (e.g., 0V) to stop vibration.

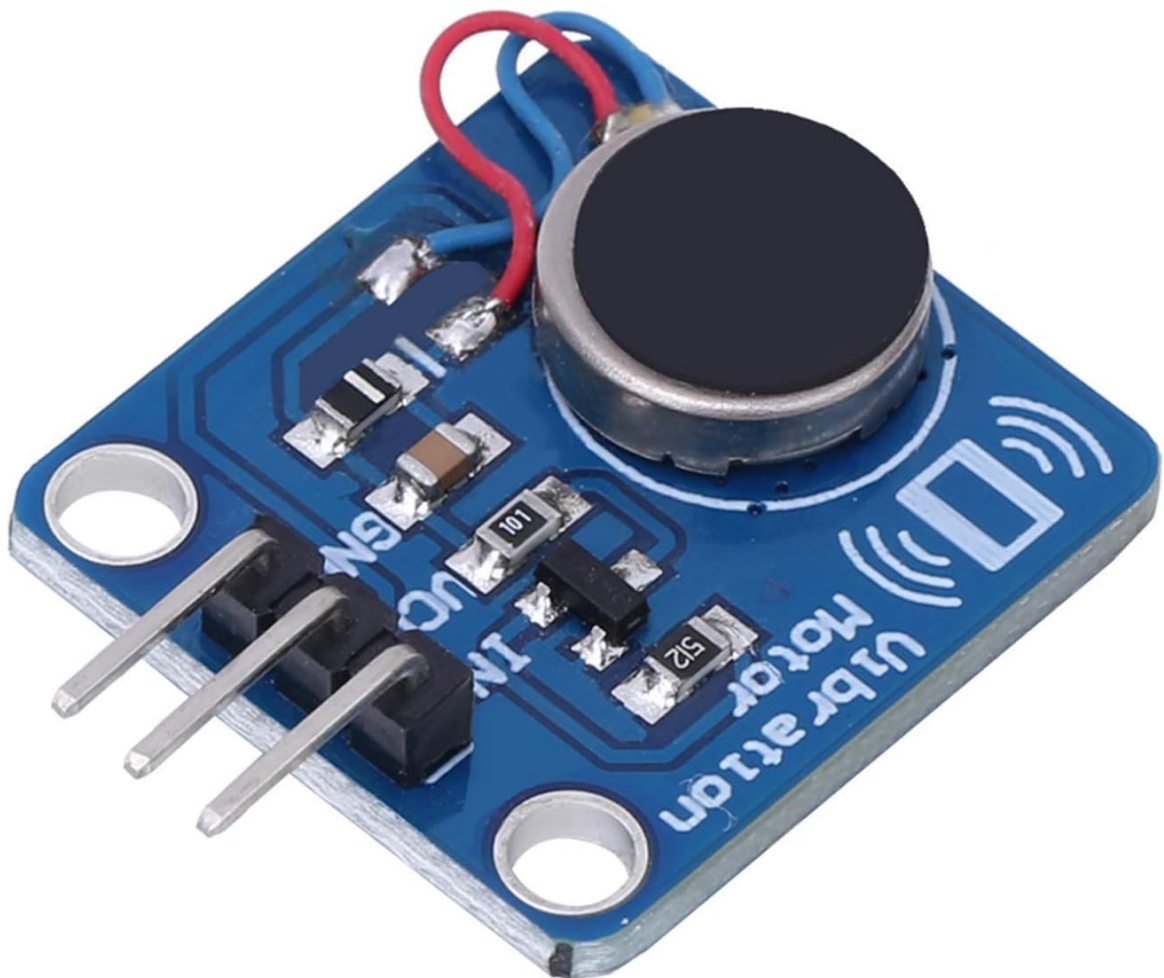
## Example Application

This module is ideal for haptic feedback in gaming controllers, notification alerts in wearable devices, or interactive art installations where tactile feedback is desired.

### Obvious vibration effect

It can be controlled directly through the digital port

The vibration intensity of the motor is controlled by PWM



*Image description:* The Dioche DC5V Vibration Motor Module with overlaid text indicating its features: "Obvious vibration effect", "It can be controlled directly through the digital port", and "The vibration intensity of the motor is controlled by PWM".

## MAINTENANCE

The Dioche DC5V Vibration Motor Module is a low-maintenance electronic component. Following these guidelines will help ensure its longevity and reliable performance:

- **Keep Dry:** Avoid exposure to moisture or liquids, which can damage the electronic components.
- **Cleanliness:** Keep the module free from dust and debris. Use a soft, dry brush or compressed air for cleaning if necessary.
- **Handle with Care:** Avoid dropping or subjecting the module to strong impacts, as this can damage the internal motor or circuit board.
- **Proper Storage:** Store the module in a cool, dry place away from direct sunlight and extreme temperatures.

## TROUBLESHOOTING

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If the vibration module is not functioning as expected, consider the following troubleshooting steps:

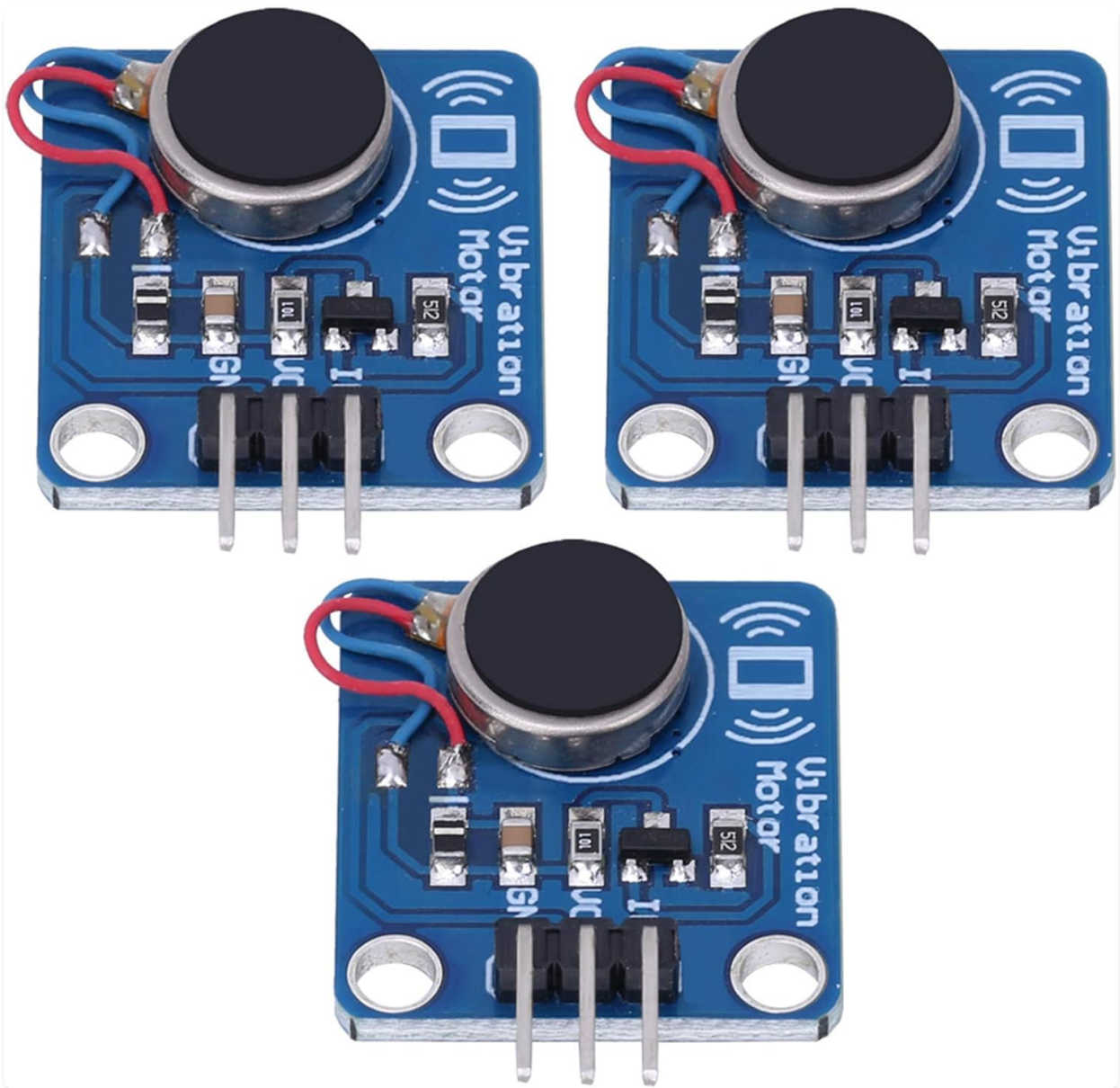
- **No Vibration:**
  - Check power connections (VCC and GND) to ensure they are secure and providing the correct voltage (3.0V - 5.3V DC).
  - Verify the signal connection to the 'IN' pin. Ensure your microcontroller is sending a HIGH signal or an appropriate PWM signal.
  - Confirm the microcontroller's digital output pin is configured correctly and functioning.
  - Inspect the module for any visible damage or loose components.
- **Weak Vibration:**
  - If using PWM, increase the duty cycle of the PWM signal.
  - Ensure the power supply can deliver sufficient current (rated current 60mA, starting current 90mA).
  - Check for any obstructions preventing the motor from vibrating freely.
- **Intermittent Vibration:**
  - Check all wiring for loose connections or poor contacts.
  - Ensure the power supply is stable and not fluctuating.
  - Verify the signal from the microcontroller is consistent.

## WARRANTY AND SUPPORT

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For warranty information and technical support, please refer to the retailer or manufacturer's official website. Keep your purchase receipt as proof of purchase.

For additional assistance, you may visit the [Dioche Store on Amazon](#).



*Image description:* A pack of three Dioche DC5V Vibration Motor Modules, showing them as a complete set for multiple projects.