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DollaTek DC3V-6V DC-Getriebemotor

DollaTek DC 3-6V Gear Motor with Plastic Wheel - Instruction Manual

Model: DC3V-6V DC-Getriebemotor

INTRODUCTION

This manual provides essential information for the DollaTek DC 3-6V Gear Motor with Plastic Wheel. This product is designed for use in smart car robot projects, educational DIY kits, and as a replacement part. It combines a DC gear motor with a durable plastic wheel, offering a compact and efficient solution for various robotic applications.

PRODUCT FEATURES

- **Color:** Black wheel with yellow plastic housing.
- **Materials:** Constructed from plastic, metal, and rubber for durability.
- **Reduction Ratio:** 1:48, providing suitable torque for robotic applications.
- **Operating Voltage:** 3-6V DC, compatible with common power sources.
- **Operating Torque:** 5.5kg/cm (at 6V), ensuring sufficient power for movement.

PACKAGE CONTENTS

The package includes the following items:

- 5 x DC Gear Motors
- 5 x Plastic Wheels



Image: A complete set of DollaTek DC Gear Motors with attached plastic wheels, as typically included in the package.

SETUP

The DollaTek DC 3-6V Gear Motor with Plastic Wheel is designed for ease of use and requires no assembly. The motor and wheel come pre-assembled, ready for integration into your project.

1. **Connection:** Identify the two motor terminals. These are typically small metal tabs on the motor casing.
2. **Power Supply:** Connect the motor terminals to a DC power source within the 3-6V range. Polarity determines the direction of rotation. Reversing the polarity will reverse the motor's direction.
3. **Mounting:** Secure the motor assembly to your robot chassis or project using appropriate mounting hardware (not included). The motor housing typically has mounting holes for this purpose.



Image: Rear view of the gear motor and wheel assembly, showing the motor housing and potential mounting points.

OPERATING INSTRUCTIONS

Once connected to a suitable power source, the motor will begin to rotate the wheel. The speed of rotation is directly proportional to the applied voltage within the specified range (3-6V).

- **Voltage Control:** Varying the input voltage between 3V and 6V will adjust the motor's speed. Higher voltage results in higher speed.
- **Direction Control:** To change the direction of the wheel's rotation, reverse the polarity of the voltage applied to the motor terminals.
- **Integration:** For advanced control (e.g., precise speed, direction, or integration with sensors), connect the motor to a microcontroller (like Arduino) via a motor driver circuit.



Image: Side view of the gear motor and wheel, illustrating the compact design suitable for various robotic platforms.

MAINTENANCE

These gear motors and wheels are designed for low maintenance. Follow these guidelines to ensure longevity:

- **Cleaning:** Keep the motor and wheel free from dust, dirt, and debris. Use a soft, dry cloth to wipe surfaces. Avoid using liquids directly on the motor.
- **Inspection:** Periodically check the wheel for wear and tear, especially the rubber tire. Ensure the motor's connections are secure.
- **Storage:** Store the components in a dry, cool environment away from direct sunlight and extreme temperatures.
- **Avoid Overloading:** Do not exceed the specified operating voltage or torque. Overloading can lead to premature motor failure.



Image: Close-up view of the wheel's rubber tire tread, highlighting its texture for traction.

TROUBLESHOOTING

If you encounter issues with your DollaTek gear motor and wheel, consider the following:

- **Motor Not Spinning:**

- Check power connections for secure contact.
- Verify the power supply is providing 3-6V DC.
- Ensure there are no obstructions preventing the wheel from turning.
- Inspect motor terminals for damage or poor solder joints.

- **Motor Spinning Slowly or Weakly:**

- Confirm the power supply voltage is sufficient (closer to 6V for higher speed/torque).
- Check for excessive friction in the system the motor is driving.
- Ensure the motor is not overloaded beyond its specified torque.

- **Unusual Noise:**

- Inspect for any foreign objects caught in the gears or wheel.
- Ensure the motor is securely mounted and not vibrating excessively.

SPECIFICATIONS

Brand	DollaTek
Model Number	DC3V-6V DC-Getriebemotor
Materials	Plastic, Metal, Rubber
Color	Black + Yellow
Operating Voltage	3-6V DC
Reduction Ratio	1:48
Operating Torque	5.5kg/cm (at 6V)
Motor Dimensions (L x W x H)	70 x 27 x 23 mm (approx. 7 x 2.7 x 2.3 cm)
Wheel Diameter	65 mm
Wheel Width	27 mm
Recommended Uses	DIY robotics projects, educational purposes, replacement parts.
Educational Objective	Learning robotics, electronics, and programming through DIY educational projects.
UPC	725835040570



Image: The gear motor and wheel assembly shown next to a ruler, indicating its approximate dimensions.

WARRANTY AND SUPPORT

DollaTek products are designed for reliability. For specific warranty information or technical support, please refer to the retailer's return policy or contact DollaTek directly through their official channels. Keep your purchase receipt for any warranty claims.

For further assistance, you may also consult online robotics communities and forums where similar components are frequently discussed.