Bemonoc 6WATT 110V

Bemonoc AC Electric Motor Speed Controller 6W 110V User Manual

Model: 6WATT 110V

1. Introduction

This manual provides essential information for the safe and efficient operation of your Bemonoc AC Electric Motor Speed Controller. Please read these instructions thoroughly before installation and use to ensure proper function and to prevent damage to the unit or connected equipment.
The Bemonoc AC Electric Motor Speed Controller is designed to provide accurate and stable speed regulation for AC gear motors, ensuring smooth and efficient operation. It features a built-in capacitor for electromagnetic interference suppression and convenient mounting options.

2. Safety Information

- **Power Supply:** Ensure the power supply is AC110V 50/60Hz. The voltage fluctuation range must be within +/-10% of the nominal voltage.
- **Motor Power Matching:** Always ensure that the motor power matches the power rating of the speed controller. Using an undersized controller can lead to damage.
- **Initial Setup:** Before connecting power, turn the speed knob to the "0" position to prevent a momentary high current surge that could damage the speed controller or motor.
- **Electrical Safety:** All wiring should be performed by a qualified individual in accordance with local electrical codes. Disconnect power before making any connections or adjustments.
- **Environment:** Do not expose the controller to moisture, extreme temperatures, or corrosive environments.

3. Package Contents

- 1 x Bemonoc AC Electric Motor Speed Controller (6WATT 110V)

4. Product Features

- **Voltage Compatibility:** Designed for AC110V 50/60Hz power systems.

- **Built-in Capacitor:** Effectively suppresses electromagnetic interference, enhancing system stability.
- **Advanced Control Technology:** Provides accurate and stable speed regulation for smooth motor operation.
- **Easy Installation:** Features dual mounting holes (top and bottom) and a plug-pin interface for straightforward setup.
- **Speed Adjustment:** Allows for flexible motor speed control to optimize production line layouts and scheduling.

5. Setup and Installation

5.1 Pre-installation Checks

- Verify that the motor's power rating is equal to or slightly less than the controller's power rating (e.g., a 110W motor should use a 120W controller, not a 90W controller).
- Ensure the power supply voltage matches the controller's specification (110V).

5.2 Mounting

The controller features dual mounting holes, one on the top and one on the bottom, for secure installation. Choose a stable surface and use appropriate fasteners to mount the unit.

Figure 1: Front view of the Bemonoc AC Electric Motor Speed Controller, showing the speed knob, run/stop switch, and mounting holes.

Figure 2: Dimensional drawing of the speed controller, indicating measurements for installation planning.

5.3 Wiring Instructions

Refer to the wiring diagram below for correct connections. Ensure all connections are secure and insulated.

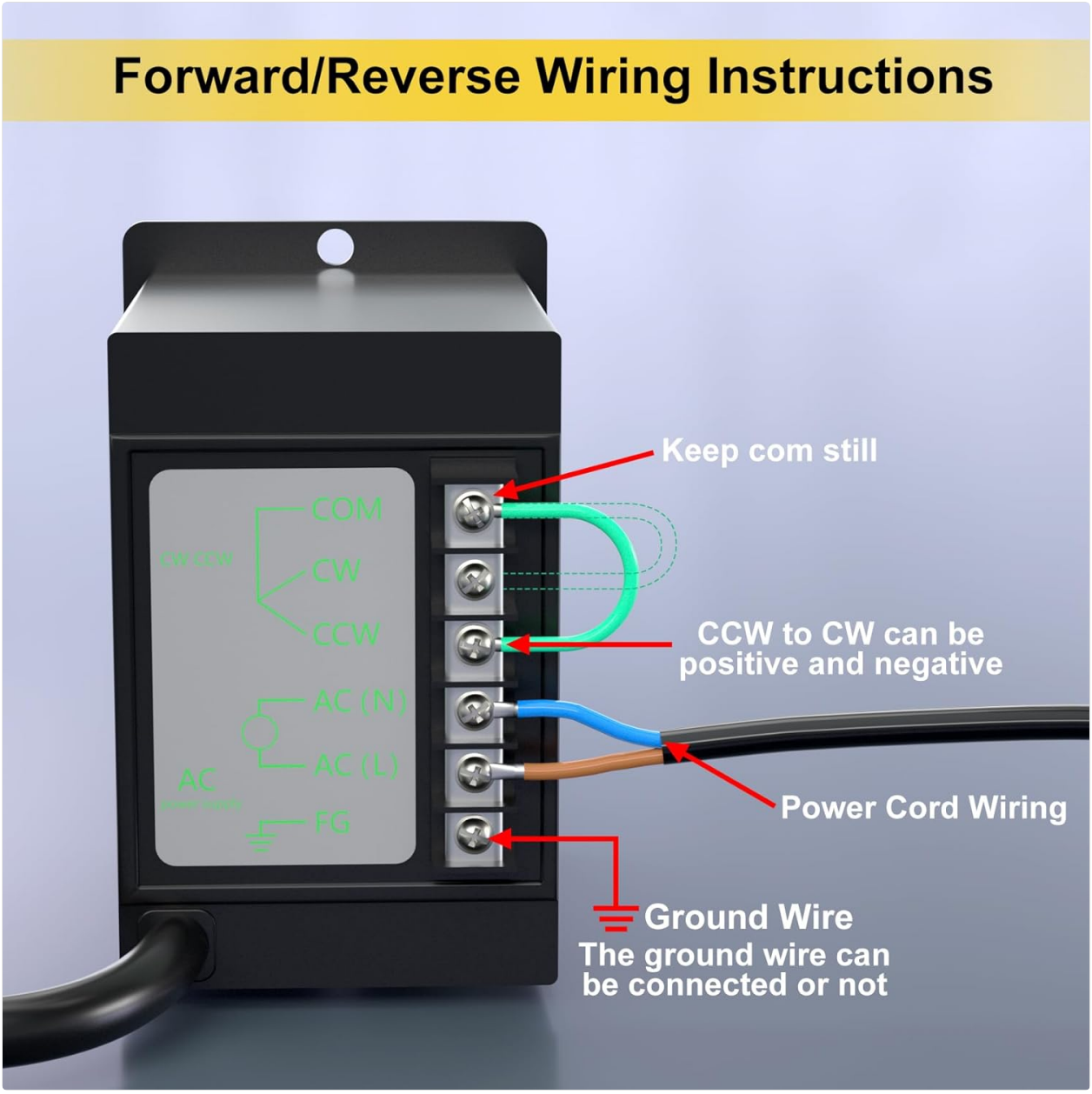

Figure 3: Detailed wiring diagram showing connections for power, motor, and forward/reverse control. The diagram illustrates how to connect the power cord (AC N, AC L), ground wire (FG), and motor control wires (COM, CW, CCW) for forward and reverse operation.

- **Power Cord Wiring:** Connect the AC (N) and AC (L) terminals to your 110V AC power supply.
- **Ground Wire (FG):** Connect the FG terminal to a reliable ground. This connection is optional but recommended for safety.
- **Motor Control (COM, CW, CCW):**
    - Connect the motor's common wire to the COM terminal.
    - For forward rotation (CW), connect the motor's CW wire.
    - For reverse rotation (CCW), connect the motor's CCW wire.
    - To switch between CW and CCW, ensure the COM terminal remains connected, and switch the connection between CW and CCW terminals.

Figure 4: Illustration of the speed controller's reversible design, highlighting its wide speed range capabilities.

Figure 5: The speed controller shown connected to a compatible AC gear motor, illustrating a typical setup.

6. Operating Instructions

6.1 Power On/Off

- Ensure the speed knob is set to "0" before applying power.
- Use the RUN/STOP switch on the front panel to turn the motor on or off.

6.2 Speed Adjustment

- Once the motor is running (RUN position), slowly rotate the speed knob clockwise to increase the motor speed.
- Rotate the speed knob counter-clockwise to decrease the motor speed.
- The speed can be adjusted from low to high, offering a wide range of control.

7. Maintenance

- **Cleaning:** Keep the controller clean and free from dust and debris. Use a dry, soft cloth for cleaning. Do

not use liquid cleaners.

- **Inspection:** Periodically inspect all wiring connections to ensure they are secure. Check for any signs of wear or damage to the casing or cables.
- **Ventilation:** Ensure adequate ventilation around the controller to prevent overheating.

8. Troubleshooting

Problem	Possible Cause	Solution
Motor does not run	No power supply; Incorrect wiring; Speed knob at '0'; Motor or controller fault.	Check power connection; Verify wiring against diagram; Turn speed knob up; Test motor/controller separately.
Inconsistent speed control	Motor power mismatch; Overload; Faulty controller.	Ensure motor power matches controller; Reduce load on motor; Contact support if issue persists.
Controller overheats	Insufficient ventilation; Overload; Internal fault.	Ensure proper airflow; Reduce load; Discontinue use and contact support.
Motor runs in wrong direction	Incorrect CW/CCW wiring.	Refer to wiring diagram and swap CW/CCW connections as needed.

If you encounter issues not listed here or if solutions do not resolve the problem, please contact Bemonoc customer support.

9. Specifications

Feature	Specification
Brand	Bemonoc
Model	6WATT 110V
Power Supply	AC110V 50/60Hz
Rated Power	6 Watts
Voltage	110 Volts
Product Dimensions	3.54 x 2.05 x 3.54 inches (90mm x 52mm x 90mm approx.)
Material	Plastic

10. Warranty and Support

Bemonoc products are manufactured to high-quality standards. For warranty information and technical support, please refer to the documentation included with your purchase or visit the official Bemonoc website. Please have your product model and purchase date available when contacting support.

For further assistance, you may visit the Bemonoc Store on Amazon.