

FYSETC 42-48mm Stepper Motor with 240mm Lead Screw

FYSETC 42-48mm Stepper Motor with Lead Screw for Anycubic Photon 3D Printers Instruction Manual

Model: 42-48mm Stepper Motor with 240mm Lead Screw

Brand: FYSETC

INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of the FYSETC 42-48mm Stepper Motor with Lead Screw, designed as a replacement Z-axis motor for Anycubic Photon series 3D printers and compatible CNC machines.

Please read this manual thoroughly before proceeding with installation or operation to ensure proper function and longevity of the component.

SAFETY INFORMATION

- Always disconnect power to your 3D printer or CNC machine before performing any installation or maintenance.
- Handle components with care to avoid damage.
- Ensure all connections are secure before restoring power.
- If you are unsure about any step, consult a qualified technician or refer to the official Anycubic Photon documentation.

PACKAGE CONTENTS

Verify that all items are present and undamaged upon opening the package.

- 1 x FYSETC 42-48mm Stepper Motor with 240mm Lead Screw

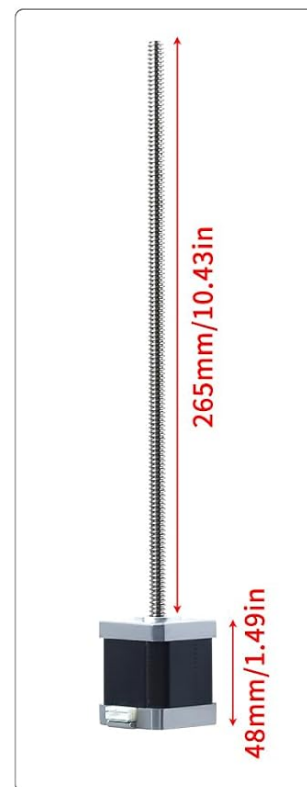
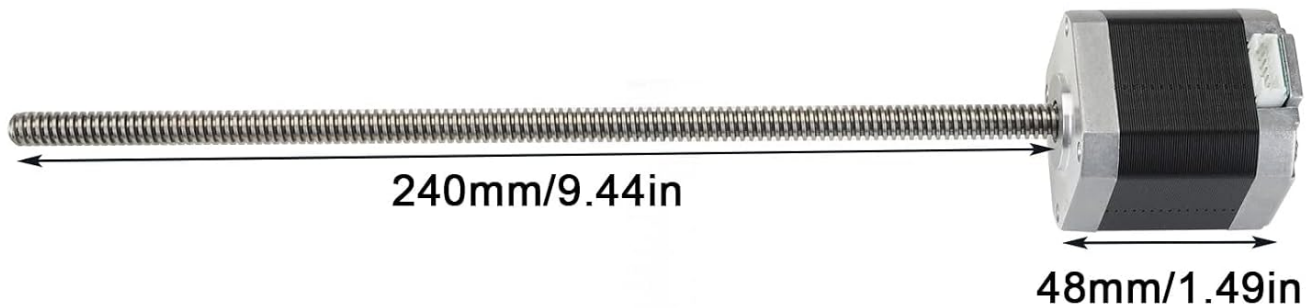


Image: The FYSETC 42-48mm Stepper Motor with its integrated lead screw, securely packaged in a cardboard box with foam inserts for protection during transit.

SPECIFICATIONS

Parameter	Value
Motor Type	Nema 17 Stepper Motor
Motor Dimensions	42 x 42 x 48 mm (1.65 x 1.65 x 1.8 inches)
Lead Screw Length	Approximately 240 mm (9.44 inches)
Lead Screw Diameter	5 mm (D-shape)
Step Angle	1.8° (Accuracy ±9%)
Rated Voltage	3.45 V

Current per Phase	1.5 A
Holding Torque	42 Ncm (60 oz.in)
Material	Metal



**For Anycubi Mono 4K
Asin:B0DB717VGB**

Image: A diagram illustrating the key dimensions of the FYSETC 42-48mm Stepper Motor, including the motor body (42mm x 48mm) and the 240mm lead screw length.

SETUP AND INSTALLATION

This stepper motor is designed as a direct replacement for the Z-axis motor in compatible Anycubic Photon series 3D printers and similar CNC machines. No firmware changes are typically required.

1. Preparation:

- Power off your 3D printer and disconnect it from the power source.
- Carefully open the printer's enclosure to access the Z-axis motor. Refer to your printer's specific service manual for instructions on accessing internal components.
- Measure the length of your original motor's lead screw to confirm compatibility. This replacement motor features a 240mm lead screw.

2. Removal of Old Motor:

- Locate the existing Z-axis stepper motor.
- Disconnect the motor's electrical connector.
- Unscrew any mounting hardware securing the motor to the printer frame.
- Carefully remove the old motor and lead screw assembly.

3. Installation of New Motor:

- Position the new FYSETC stepper motor with its lead screw into the designated mounting location.
- Secure the motor using the appropriate mounting screws. Ensure it is firmly attached but do not overtighten.
- Connect the motor's electrical connector to the corresponding port on the printer's mainboard. Ensure the connector is fully seated and oriented correctly.
- Verify that the lead screw is properly aligned with the Z-axis carriage nut.

4. Final Checks:

- Gently move the Z-axis carriage up and down manually to check for any binding or resistance. The movement should be smooth.
- Ensure all tools are removed from the printer's interior.
- Close the printer's enclosure.

Anycubi Photn Series--Z axis replacement Stepper Motor

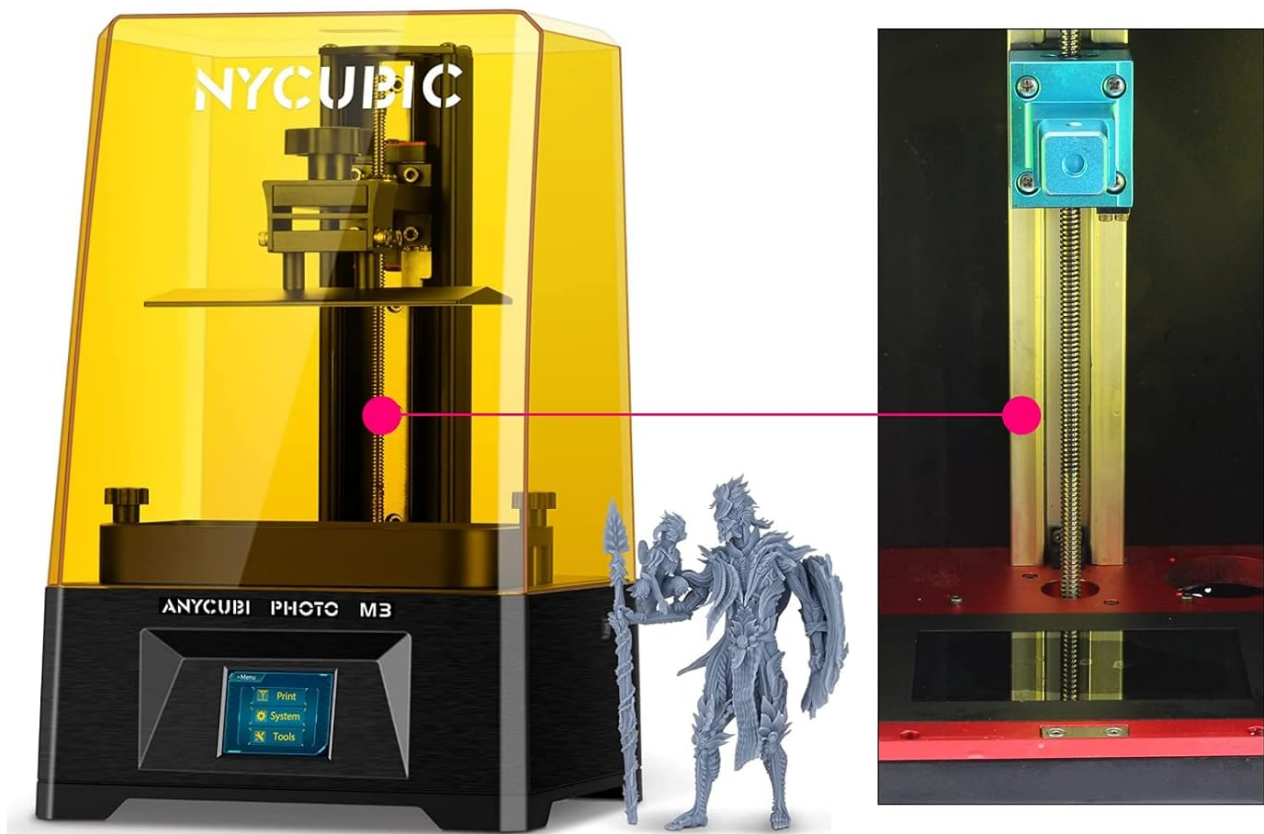


Image: An illustration showing the FYSETC stepper motor with lead screw installed as the Z-axis component in a resin 3D printer, highlighting its position and function.



Image: A detailed view of the lead screw emerging from the top of the stepper motor, showing the integrated design and mounting plate.

OPERATING INSTRUCTIONS

Once the FYSETC stepper motor is correctly installed, the operation of your 3D printer's Z-axis should function as before. This component is a direct replacement and does not require specific new operating procedures.

1. **Power On:** Reconnect your 3D printer to the power source and turn it on.
2. **Homing Z-axis:** Initiate the Z-axis homing procedure through your printer's control interface. Observe the Z-axis movement to ensure it travels smoothly and homes correctly.
3. **Test Print:** Perform a small test print to confirm the Z-axis functionality and print quality.

The motor's high torque and low self-inductance reactance contribute to responsive and accurate Z-axis movement, minimizing system errors during printing.

MAINTENANCE

- Regular maintenance helps ensure the longevity and optimal performance of your stepper motor and lead screw assembly.
- **Lead Screw Lubrication:** Periodically apply a small amount of appropriate lubricant (e.g., PTFE-based grease) to the lead screw. This reduces friction and wear. Avoid over-lubrication, which can attract dust.
 - **Cleaning:** Keep the lead screw free from dust, resin residue, or other debris. Use a soft cloth or brush to gently clean the threads.
 - **Inspection:** Regularly inspect the motor and lead screw for any signs of wear, damage, or loose connections. Ensure mounting screws remain tight.
 - **Motor Body:** The motor body itself generally requires no specific maintenance other than keeping it clean and free from obstructions to ensure proper heat dissipation.

TROUBLESHOOTING

If you encounter issues after installing the FYSETC stepper motor, refer to the following troubleshooting steps:

Problem	Possible Cause	Solution
Z-axis not moving or moving erratically	◦ Loose or incorrect electrical connection. ◦ Lead screw binding or obstruction. ◦ Motor driver issue (less likely if old motor worked).	◦ Check motor cable connection to the mainboard. ◦ Inspect lead screw for debris or misalignment; lubricate if dry. ◦ Ensure the Z-axis carriage moves freely by hand.
Grinding noise from Z-axis	◦ Lack of lubrication on lead screw. ◦ Lead screw misalignment. ◦ Damaged lead screw or nut.	◦ Apply appropriate lubricant to the lead screw. ◦ Re-check lead screw alignment with the Z-axis carriage nut. ◦ Inspect lead screw and nut for physical damage.
Layer shifting or inconsistent Z-height	◦ Loose motor mounting screws. ◦ Lead screw binding. ◦ Motor overheating (unlikely with proper ventilation).	◦ Tighten motor mounting screws. ◦ Clean and lubricate the lead screw. ◦ Ensure adequate airflow around the motor.

If problems persist after following these steps, contact FYSETC customer support or consult your 3D printer's manufacturer for further assistance.

WARRANTY INFORMATION

FYSETC products are manufactured to high-quality standards. For specific warranty terms and conditions, please refer to the warranty statement provided with your purchase or visit the official FYSETC website. Typically, warranty covers manufacturing defects under normal use conditions.

CUSTOMER SUPPORT

For technical assistance, troubleshooting, or inquiries regarding your FYSETC 42-48mm Stepper Motor, please contact FYSETC customer support through the following channels:

- **Email:** Refer to your purchase documentation or the official FYSETC website for the most current support email address.
- **Online Resources:** Visit the [FYSETC Store on Amazon](#) for product information and updates.
- When contacting support, please provide your product model and a detailed description of the issue.

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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.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

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.

Submit question