ANYCUBIC Kobra 2 Max

Anycubic Kobra 2 Max 3D Printer Instruction Manual

Model: Kobra 2 Max | Brand: ANYCUBIC

INTRODUCTION

The Anycubic Kobra 2 Max is a high-speed FDM 3D printer designed for large-volume printing. It features advanced technologies such as automatic leveling, smart Z-offset, and vibration compensation to ensure high-quality prints. This manual provides detailed instructions for setting up, operating, maintaining, and troubleshooting your printer.
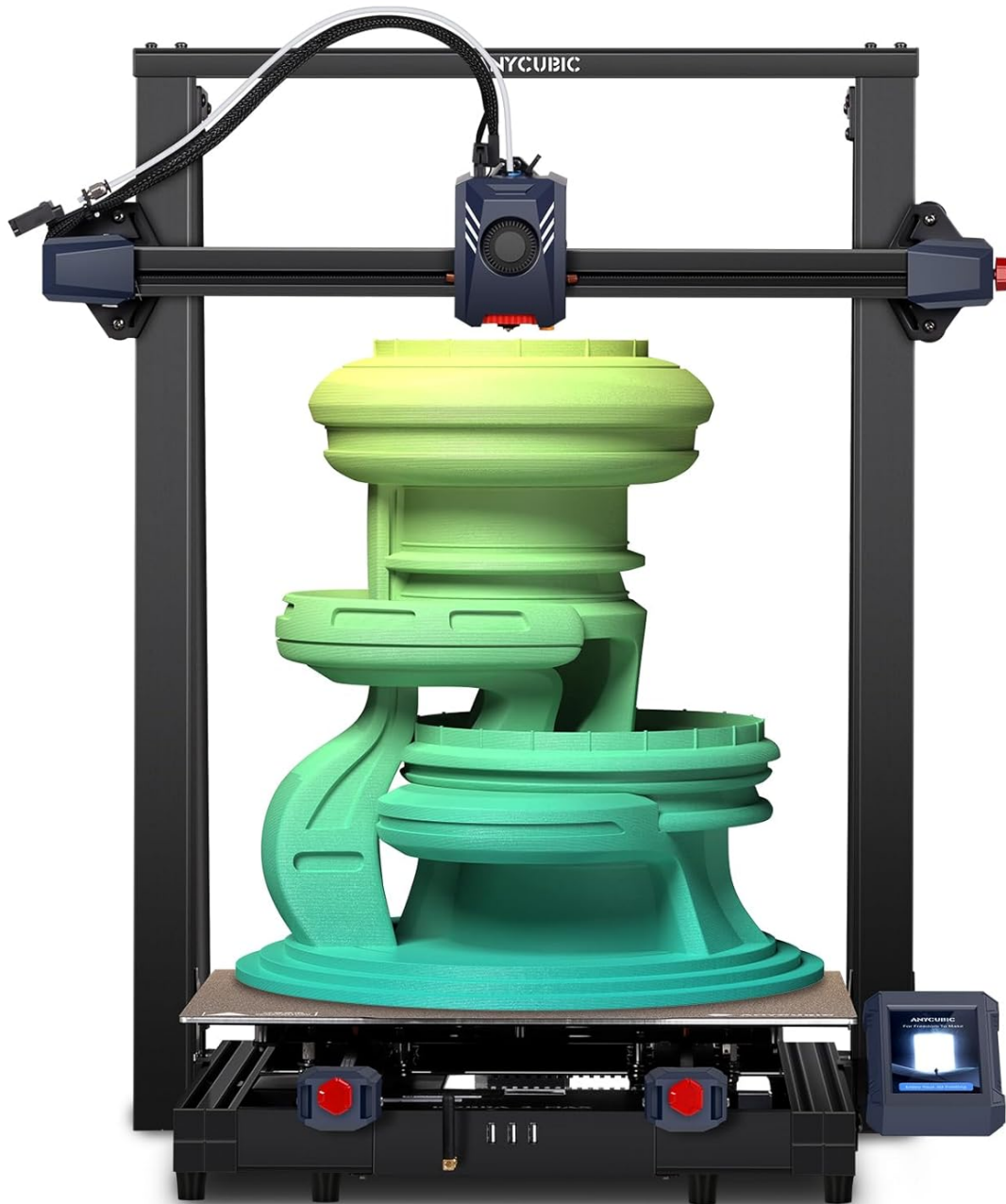
Figure 1: Anycubic Kobra 2 Max 3D Printer in operation, showcasing its large build volume and printing capabilities.

SAFETY INFORMATION

- Always operate the printer in a well-ventilated area.
- Keep the printer away from flammable materials and heat sources.
- Do not touch the hot nozzle or heated bed during operation.
- Ensure the power supply voltage is correctly set (230V or 115V) before plugging in.
- Keep children and pets away from the printer during operation.
- Unplug the printer before performing any maintenance or cleaning.

PACKING LIST

Please check all items against the list below upon unboxing:

Component	Quantity

Component	Quantity
3D Printer (Frame & Base)	1
Touchscreen	1
Filament Holder	1
Print Head	1
Filament Detector	1
Cable Fixing Clip	Several
Grease	1
Testing Filament	1
Power Cable	1
Diagonal Member	2
Knob	1
WiFi Antenna	1
User Manual	1
Tool Set	1
USB Cable	1
Nozzle	1

SETUP GUIDE

Follow these steps to assemble your Anycubic Kobra 2 Max 3D printer.

1. Unboxing and Initial Preparation

Carefully remove all components from the packaging. Remove the foam sponge from the bottom of the heat bed. Use the M3.0 hex key to remove the 4 fixing plates that secure the gantry frame to the base for shipping.

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Video 1: Anycubic Kobra 2 Max Unboxing. This video demonstrates the unboxing process and initial steps to prepare the printer for assembly.

2. Assembling the Printer Gantry and Base

Separate the gantry frame from the base. Align the gantry frame with the base and secure it using the M3.0 and M4.0 hex keys as indicated in the user manual. Install the fixing screws of the diagonal tie rod combination using the M3.0 hexagonal wrench and open-end wrench.

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Video 2: Assembly for Anycubic Kobra 2 Max. This video provides a step-by-step guide for assembling the main components of the printer.

3. Installing the Print Head and Filament Holder

Pull the Z-axis belt to raise the X-axis bracket. Assemble the print head onto the X-axis bracket and use the M2.5 hex key to fix it. Install the X-axis belt tensioners, screwing them to the maximum, then loosen them one turn to make the belt tight. Assemble the consumable rack (filament holder) and install it on the base of the printer using the M3.0 hex key.

Optimized Configuration
Brand New Structure

Double Motor Double Z-axis
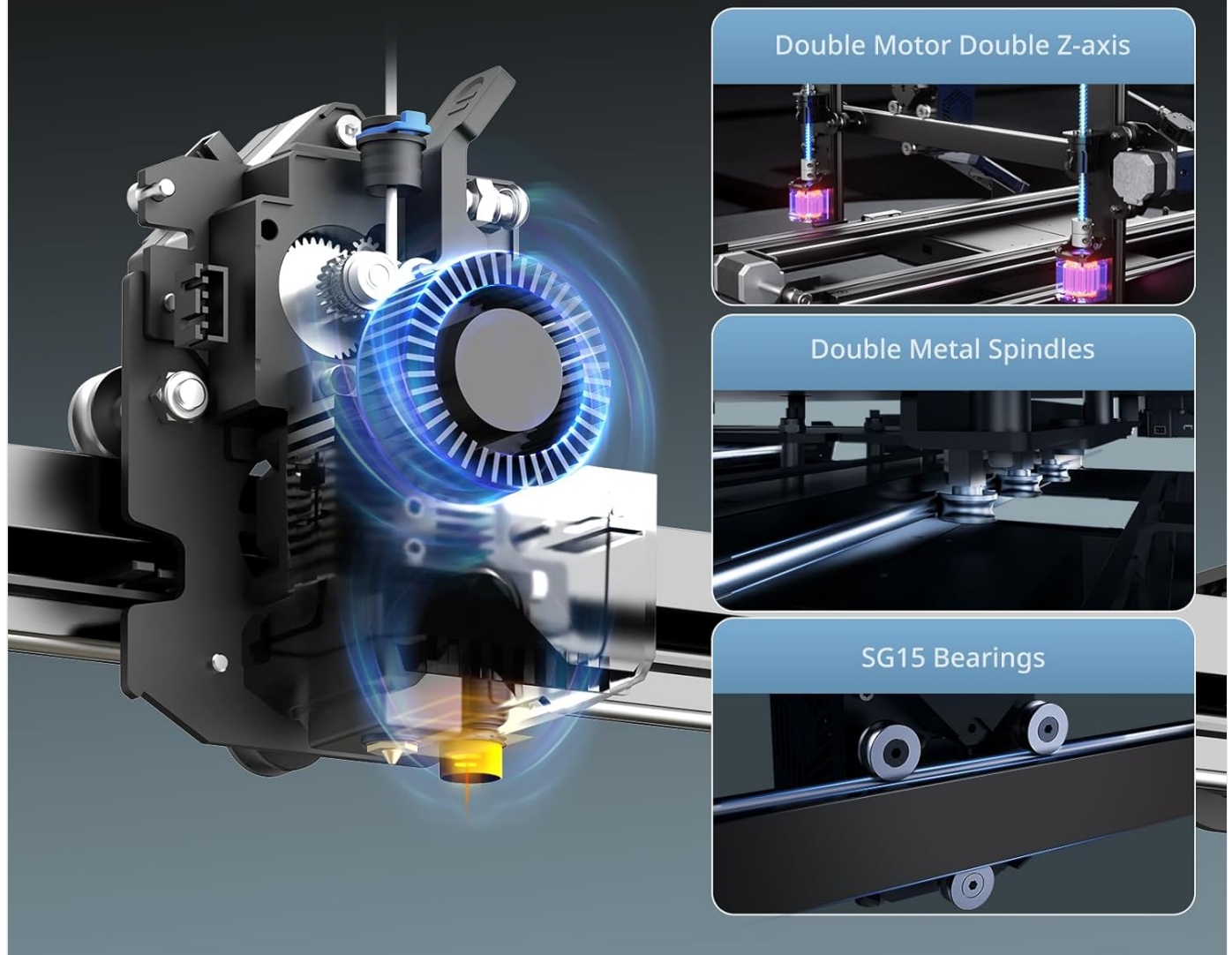
Double Metal Spindles

SG15 Bearings

Figure 2: Optimized Configuration. This image highlights the robust mechanical components of the printer, including the dual Z-axis motors and metal spindles, which contribute to stable and precise movement.

4. Connecting Cables and Screen

Connect the filament tube to the print head. Install the printer's WiFi antenna. Remove the wire fixing cable tie and connect the connecting wire to the print head, using the buckle to further fix the wiring plug. Connect the terminal with respect to the terminal plug on the Z-axis motor. Connect the screen to the printer base.
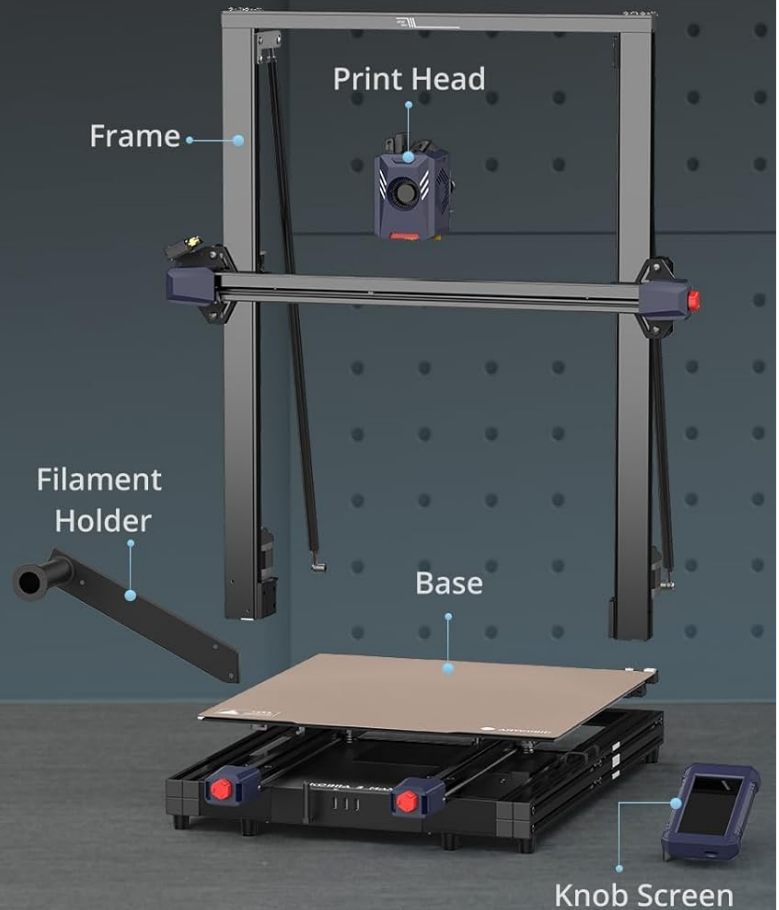
Figure 3: Detail Designs. This image showcases user-friendly features like the 4.3-inch full-color touch screen and the flexible spring steel magnetic platform for easy model removal.

5. Power Supply Voltage Check

Before powering on, confirm whether the input mode of the power supply voltage is correct. 230V is suitable for 220V-240V, and 115V is suitable for 110V-120V. Please adjust the appropriate voltage level according to your local voltage situation.

OPERATING INSTRUCTIONS

1. Automatic Leveling (LeviQ 2.0)

The LeviQ 2.0 automatic leveling system simplifies bed leveling. The printer will automatically detect and compensate for any Z-axis offset. This ensures a higher success rate for your prints and an easier printing experience.
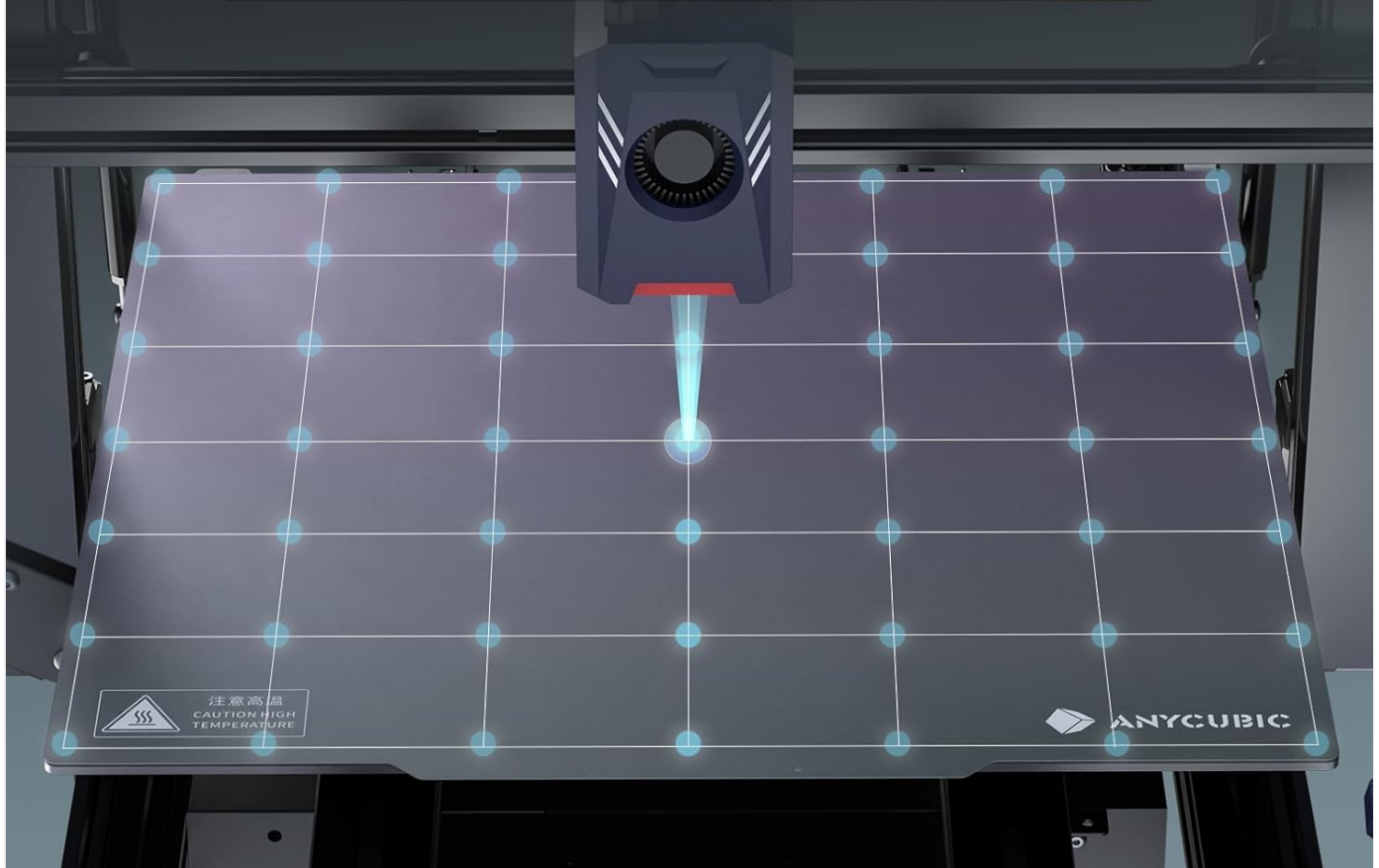
Figure 4: LeviQ 2.0 Automatic Leveling. This image illustrates the printer's auto-leveling system, which uses a probe to map the print surface and ensure optimal first layer adhesion.

2. Loading Filament

Insert the filament into the print head. Click the "Extrude" button on the touchscreen until the filament is extruded from the nozzle. Ensure the filament is properly seated in the filament detector.

3. First Print / Test Print

After successful leveling and filament loading, you can initiate your first print. The printer supports high-speed printing up to 500mm/s, significantly reducing print times. A typical 3D Benchy model can be printed in approximately 18 minutes and 6 seconds.

Figure 5: High-Speed Printing. This image emphasizes the printer's impressive speed of 500mm/s, allowing for rapid completion of print jobs.

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Video 3: Anycubic Kobra 2 Max 3D Printer. This video provides a general overview of the printer's features and capabilities, including its speed and large build volume.

4. Anycubic APP Control

The Anycubic Kobra 2 Max supports the Anycubic smart app for enhanced control. This allows for Bluetooth provisioning, firmware upgrading, status monitoring, and remote control of your printer. Ensure your printer firmware is version 3.0.5 or above for full functionality. Users need to prepare their own cameras to enable video monitoring functionality.
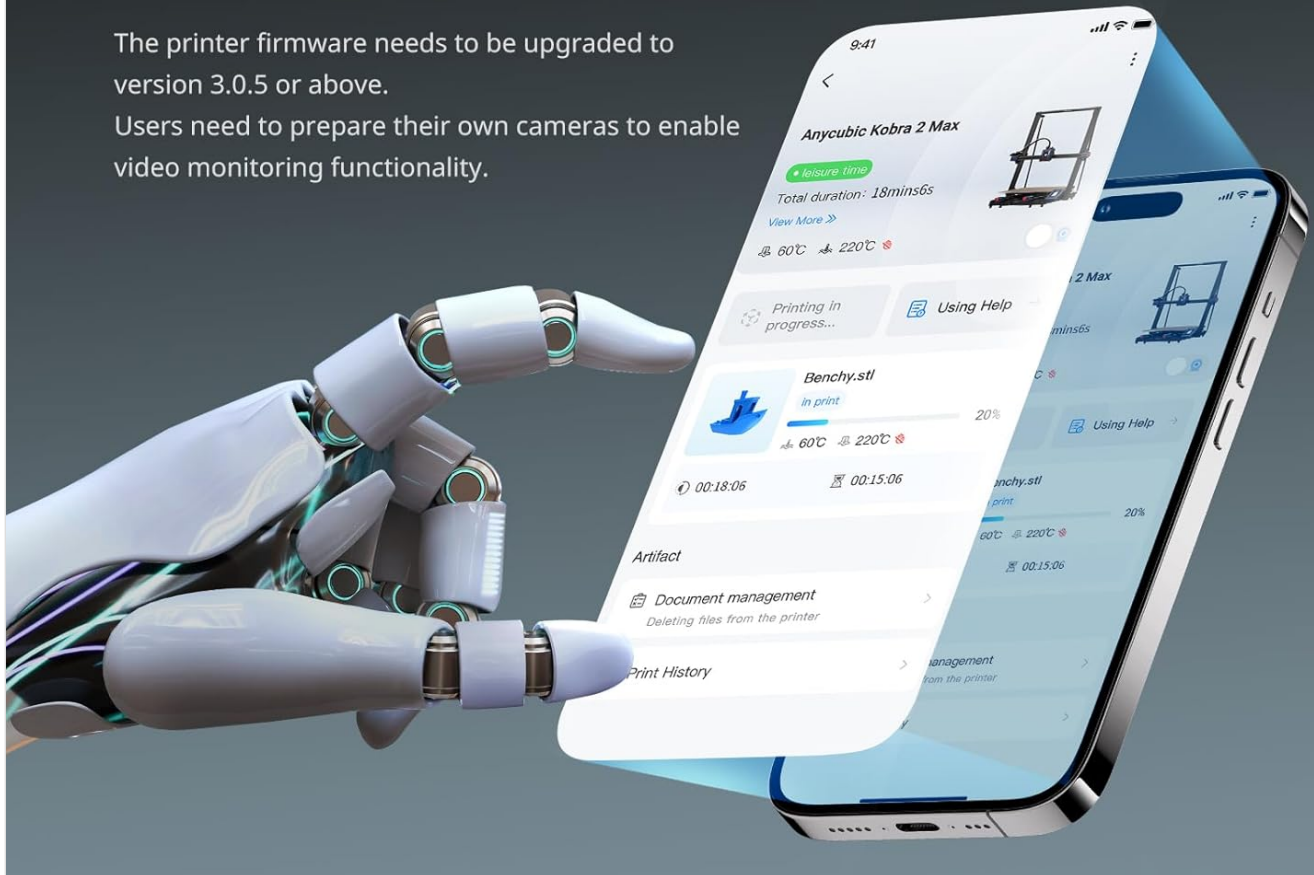
Figure 6: Anycubic APP Support. This image illustrates the various functions available through the Anycubic mobile application, enabling remote management and monitoring of print jobs.

5. Vibration Compensation and Flow Control

The printer features one-click vibration compensation and intelligent flow control. These functions ensure printing accuracy and stability, significantly improving print quality and detail, especially at high speeds.

MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Anycubic Kobra 2 Max.

- **Clean the Print Bed:** Regularly clean the spring steel magnetic platform with isopropyl alcohol to ensure good adhesion and prevent residue buildup.
- **Check Belt Tension:** Periodically check the tension of the X and Y-axis belts. Adjust the tensioners as needed to prevent layer shifting and ensure smooth movement.
- **Nozzle Maintenance:** Inspect the nozzle for clogs or wear. Replace the nozzle if it shows signs of damage or consistent clogging.
- **Lubricate Moving Parts:** Apply a small amount of grease to the lead screws and smooth rods to ensure smooth operation and reduce wear.

- **Heater and Thermistor Replacement:** If you experience heating issues or temperature reading errors, you may need to replace the heater cartridge or thermistor. These components are designed for easy replacement with short connections, eliminating the need to re-run long wires through the printer's loom.

TROUBLESHOOTING

This section addresses common issues you might encounter with your Anycubic Kobra 2 Max.

Problem	Possible Cause	Solution
Print not sticking to bed	Bed not level, dirty bed, incorrect Z-offset, wrong bed temperature.	Perform LeviQ 2.0 auto-leveling. Clean the print bed with isopropyl alcohol. Adjust Z-offset. Verify bed temperature settings for your filament type.
Layer shifting	Loose belts, print speed too high, motor issues.	Check and tighten X/Y-axis belts. Reduce print speed. Inspect motor connections.
No filament extrusion	Clogged nozzle, tangled filament, broken filament, extruder issue.	Clear nozzle clog. Check filament path for tangles. Ensure filament is loaded correctly.
Poor print quality (ghosting, ringing)	Vibrations, loose components, high acceleration.	Enable vibration compensation. Ensure printer is on a stable surface. Check for loose screws on the print head or frame.
Printer not powering on	Power cable issue, incorrect voltage setting, internal fault.	Check power cable connection. Verify voltage switch (115V/230V). Contact support if issue persists.

SPECIFICATIONS

- **Printing Technology:** FDM (Fused Deposition Modeling)
- **Build Volume:** 420 x 420 x 500 mm (88 Liters)
- **Max Printing Speed:** 500 mm/s
- **Typical Printing Speed:** 300 mm/s
- **Processor:** High-performance Cortex-A7 1.2GHz
- **Leveling:** LeviQ 2.0 Automatic Leveling & Smart Z-Offset
- **Extruder:** Upgraded Direct Extruder
- **Cooling System:** Upgraded Cooling System for rapid prints
- **Connectivity:** USB, WiFi, Anycubic APP
- **Supported File Formats:** STL, OBJ
- **Item Weight:** 46.2 Pounds
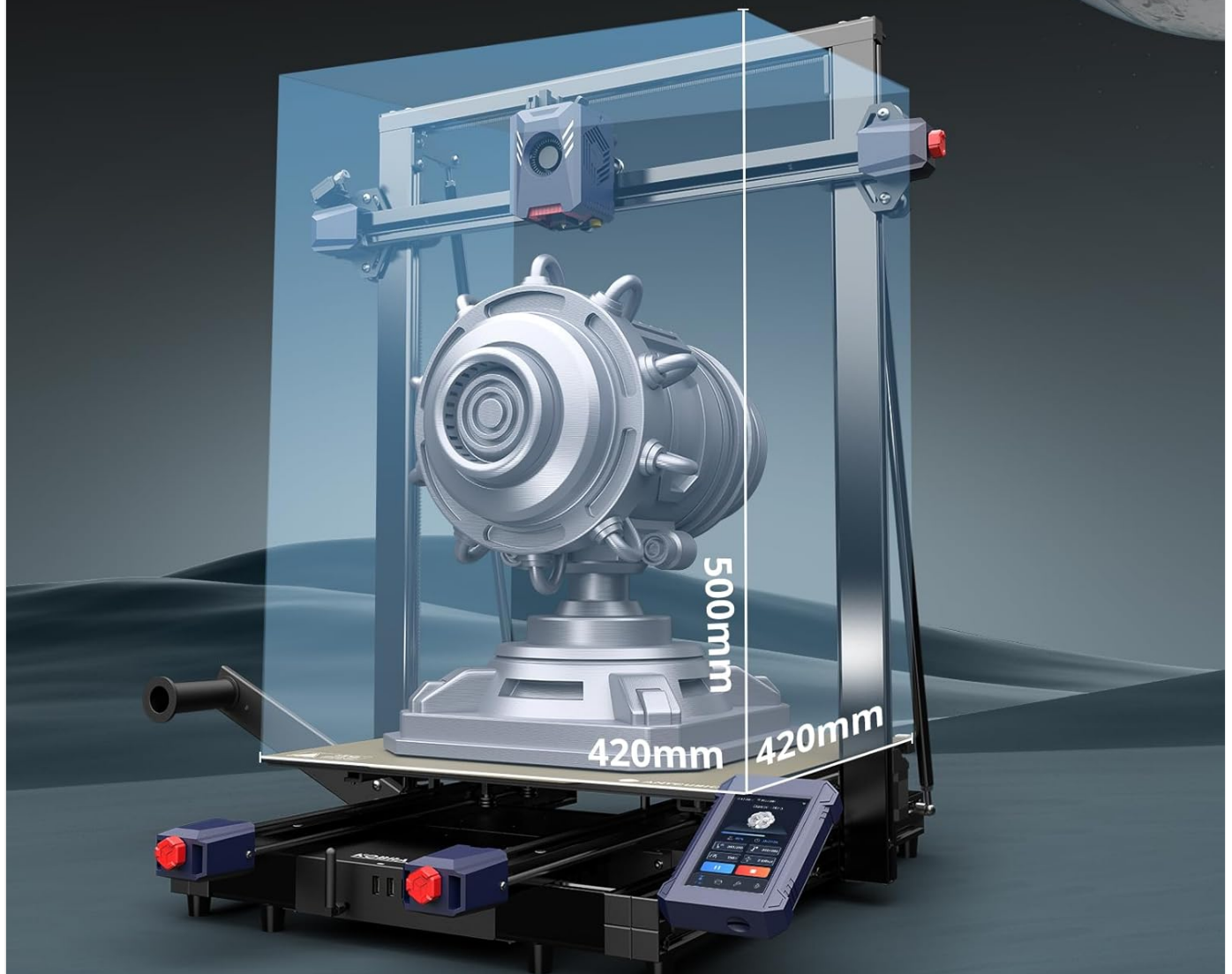- **Product Dimensions:** 30"D x 29.5"W x 7.25"H

Figure 7: Large Printing Volume. This image visually represents the substantial build dimensions of the Kobra 2 Max, highlighting its capacity for large-scale projects.

Figure 8: High-Performance Computing. This image showcases the Cortex-A7 1.2GHz processor, indicating the printer's powerful internal hardware for faster calculations and motor control.

WARRANTY AND SUPPORT

Each Anycubic Kobra 2 Max 3D printer undergoes strict testing before delivery. It comes with a one-year service warranty (with the print head for 3 months and the heated bed for 6 months), lifetime technical support, and 24/7 customer service. If you have any questions or needs, please contact Anycubic customer service.

For additional resources, you can refer to the official User Guide (PDF) and Installation Manual (PDF).