ANYCUBIC Kobra 3 Max Combo

ANYCUBIC Kobra 3 Max Combo 3D Printer User Manual

Model: Kobra 3 Max Combo

1. INTRODUCTION

The ANYCUBIC Kobra 3 Max Combo is a high-performance 3D printer designed for large-scale and multi-color printing. It features an impressive build volume of 420x420x500mm, enabling the creation of substantial models. With a maximum printing speed of 600mm/s and advanced G-sensor vibration compensation, it delivers precise and efficient results. The integrated ACE Pro system facilitates multi-color printing, expanding creative possibilities. This manual provides essential information for setup, operation, maintenance, and troubleshooting to ensure optimal use of your 3D printer.
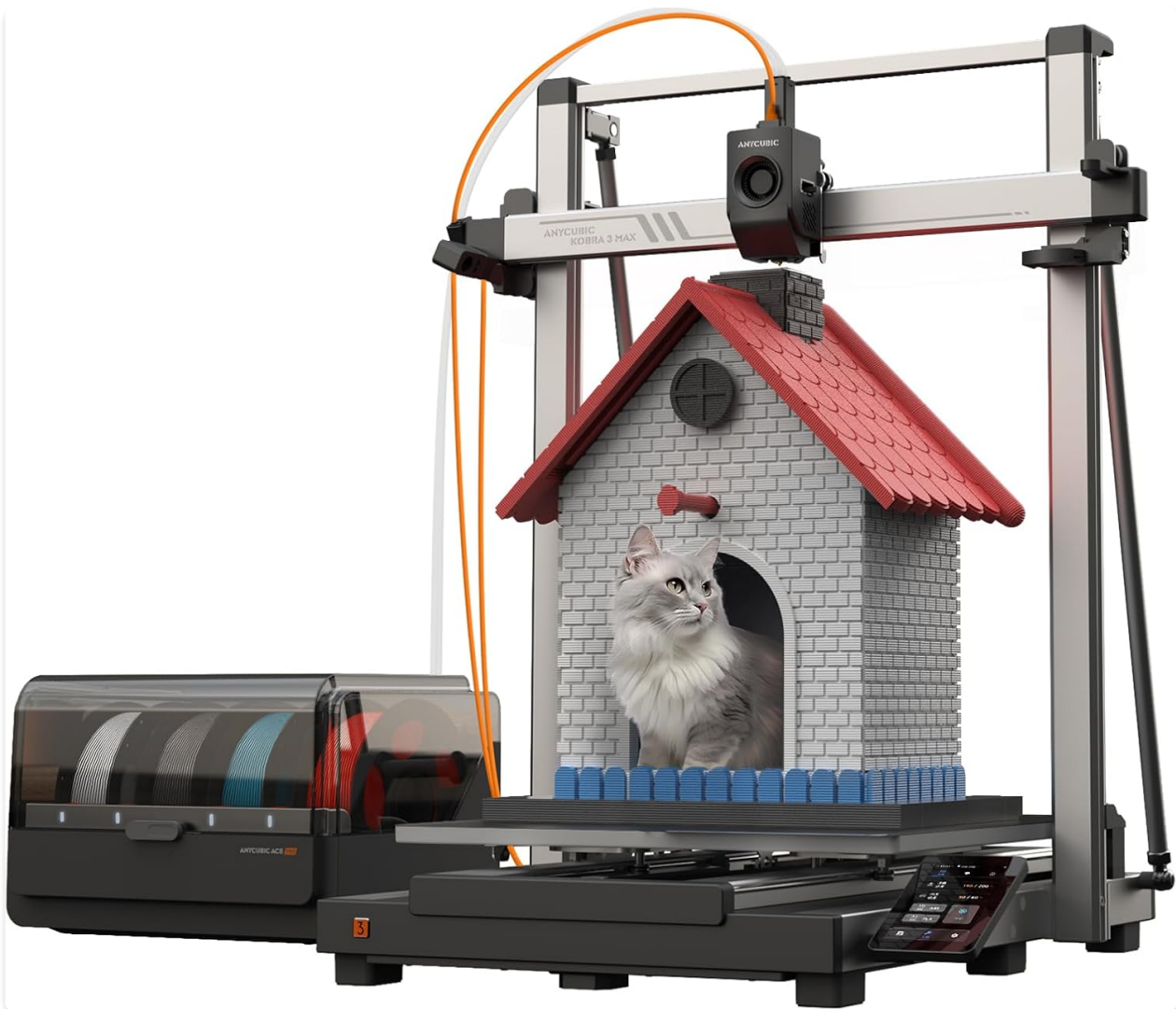
Figure 1: The ANYCUBIC Kobra 3 Max Combo 3D Printer with its large build volume demonstrated by a printed cat house.

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Video 1: An overview of the ANYCUBIC Kobra 3 Max Series 3D Printer, highlighting its large build volume and capabilities.

2. SAFETY INSTRUCTIONS

- Always operate the printer in a well-ventilated area.

- Keep the printer away from flammable materials, heat sources, and water.

- Do not touch the print nozzle or heated bed during operation, as they reach high temperatures.

- Keep hands and loose clothing away from moving parts during operation.

- Ensure the power supply is correctly connected and grounded.

- Unplug the printer before performing any maintenance or cleaning.

- This device is not intended for use by children without adult supervision.

3. PACKAGE CONTENTS

Before beginning assembly, please verify that all components listed below are present in your package. Refer to the unboxing video for a visual guide.

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- Printhead Module
- Touchscreen Display
- Spool Holder
- Cable Holder
- Screw Bags (No. 1-6, various sizes)
- U Disk (1pcs)
- Power Cord (2pcs)
- Cable Organizer (5pcs)
- Filament Tube (5pcs)
- Signal Cable
- Allen Keys (6.0/4.0/3.0/2.5/2.0/1.5)
- Wrench
- Nozzle Cleaner
- Filament Sample
- Grease
- ACE Pro (for multi-color printing)

4. SETUP GUIDE

Follow these steps carefully to assemble your ANYCUBIC Kobra 3 Max Combo 3D Printer.

4.1. Unlocking the Frame and Base

1. Use an H3.0 Allen key to loosen the screws that secure the frame and base.
2. Then use an H4.0 Allen key to unscrew the fixing screws of the frame and base from both sides.

4.2. Frame Installation

1. Push the build platform to the front of the printer.
2. Place the gantry frame vertically on the base and then put the frame into the base.
3. Take out the No. 1 bag of screws and use an H3.0 Allen key to install the four short screws that secure the gantries on both sides.
4. Then use the H4.0 Allen key to install and secure the two long screws.

4.3. Support Rod Installation

Tip: Pay attention to the left and right distinction of the support rod before installation.

1. Take out the long screw from bag No. 2.
2. Pass the screw through the support rod and then through the pad column.
3. Use the H6.0 Allen key to fix the support rod to the printer base.
4. Take the cornet screw and pass it through the support rod and use the H6.0 Allen key to fix it to the upper part of the frame.
5. Follow the above steps to install the other support rod.

4.4. Z-axis Motor Cable Connection

1. Connect the Z-axis motor cables on both sides to the corresponding Z-axis motor ports respectively.

4.5. Printhead Cable Connection

1. Cut the zip ties securing the Z-axis belt.

2. Pull the Z-axis belt to lower the X-axis height.

3. Take out the printhead module and connect the printhead cable to the module cable interface.

4. Take out the No. 3 bag screws and use an H1.5 Allen key to install the print head connection wire screws.

4.6. Printhead Installation

1. Install the printhead module onto the X-axis.

2. Take out the No. 4 bag screws and use an H2.5 Allen key to install and fix the print head module.

4.7. Screen Installation

1. Insert the screen into the limit hole.

2. Take out the No. 5 screw from the bag and use an H2.5 Allen key to secure it.

4.8. X-axis Motor Cable Connection

1. Insert the motor cable (short Orange 6 Pin cable) upward into the bottom groove on the left side of the X-axis to tighten it.

4.9. Cable Holder Installation

1. Press down the cable holder to secure it to the groove on the left side of the X-axis.

2. Insert the print head cable into the cable holder.

4.10. Filament Tube Connection (Monochrome)

For monochrome printing, follow these steps. If you intend to perform multi-color printing, please refer to the ACE Pro installation section below.

1. Insert one end of the filament tube into the hole above the print head and pass the other end through the wire clip.

2. Snap the filament tube and printhead cable into the cable organizer.

4.11. Spool Holder Installation

1. Take out the No. 6 bag screws.

2. Put the cylindrical handle into the spool holder hole, and then rotate it at a certain angle to fix it.

3. Press the spool holder down and insert it into the groove behind the printer base.

4. Use the H4.0 Allen key to install and fix the spool holder.

4.12. ACE Pro Installation (for Multi-Color Printing)

This section is for users utilizing the ACE Pro for multi-color printing.

ACE Pro Multicolor Filament Box

By paring two ACE Pros to conveniently store multiple spools of filaments in the same color series.The ACE Pro can swiftly convert into a backup filament box for seamless feeding.For spools of filament in different color series,organize them by color for easy access and avoid frequent spool changes.

Connect the two ACE Pro units with an eight-color feeder assembly The APP must be linked to anaccount and connected to the cloud network,while the slicing software must be connected to the cloud network or local area network.

Figure 2: The ANYCUBIC ACE Pro Multicolor Filament Box, designed for convenient storage and feeding of multiple filament spools.

1. Insert the 4-pin end of the ACE Pro signal cable into the hole on the left side of the device's external interface on the printer base, making sure the buckle faces downward.

2. Insert the 6-pin end of the cable into the hole on the left corner of ACE Pro. Note that the cable buckle faces outward.

3. Insert all four filament tubes into the printhead filament hub.

4. Pass all four filament tubes through the cable holder.

5. Use cable organizers to secure the cables.

6. Remove the four blue retainers at the filament tube connection port of the ACE Pro.

7. Insert all four filament tubes into the filament tube connection ports of the ACE Pro.

8. Install the four blue retainers back to their original positions.

9. Place filaments in ACE Pro. Please straighten the filaments or cut off the curved parts of the filaments before installing them to prevent the feed from getting stuck.

4.13. Power Connection

1. Use the power cord to connect the printer and ACE Pro to the power socket respectively.

2. Turn on the printer power button.

Note: After the installation is complete, turn on the machine and complete the machine boot options before you can start printing.

5. OPERATING INSTRUCTIONS

5.1. Basic Printing

1. **Power On:** Ensure the printer is connected to power and turned on.

2. **Filament Loading:** Load your chosen filament into the spool holder. If using ACE Pro, refer to section 4.12 for multi-color filament loading.

3. **Auto-Leveling:** The printer features LeviQ3.0 Leveling System for hassle-free, fully-automatic precise leveling. Initiate auto-leveling via the touchscreen interface to ensure a perfect first layer.

4. **Prepare Model:** Use Anycubic Slicer Next or other compatible slicing software (STL, OBJ, 3MF, etc.) to prepare your 3D model.

5. **Transfer File:** Transfer the sliced G-code file to the printer via USB or network.

6. **Start Print:** Select your file on the touchscreen and initiate the printing process.
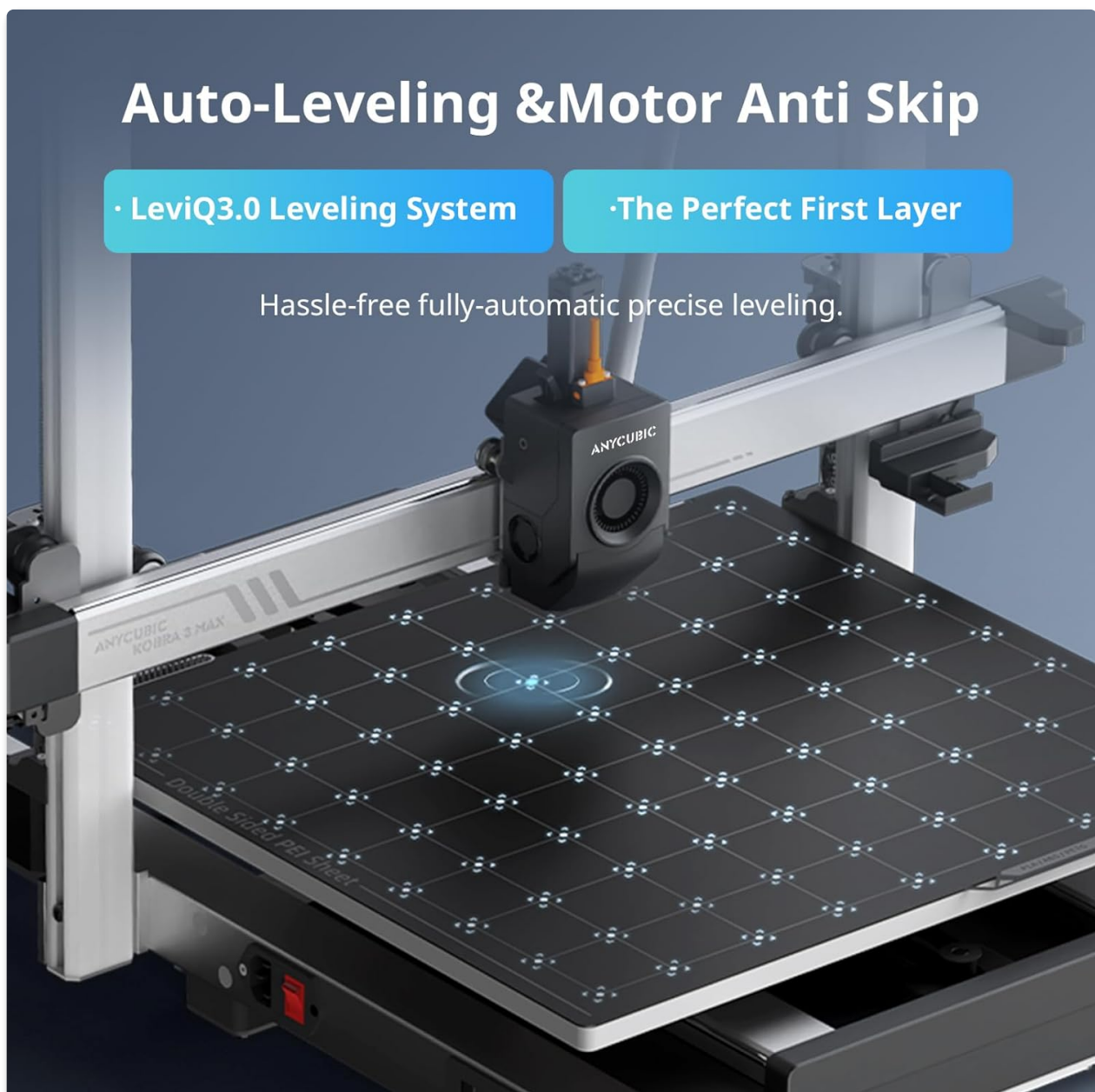
5.2. Multi-Color Printing with ACE Pro

The ACE Pro supports standard 4-color printing. By pairing two ACE Pro units, you can achieve brilliant 8-color printing, expanding possibilities for more vibrant and colorful creative projects.

Figure 4: The ACE Pro enables stunning multi-color prints, as demonstrated by a printed globe model.

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Video 3: A short demonstration of the ANYCUBIC Kobra 3 Max Combo's multi-color printing capabilities.

5.3. High-Speed Printing

Achieve professional-grade precision even at blazing 600mm/s speeds and 20,000mm/s² acceleration. Powered by G-sensor vibration compensation, the printer eliminates layer shifts on complex models, ensuring rapid and accurate prints.
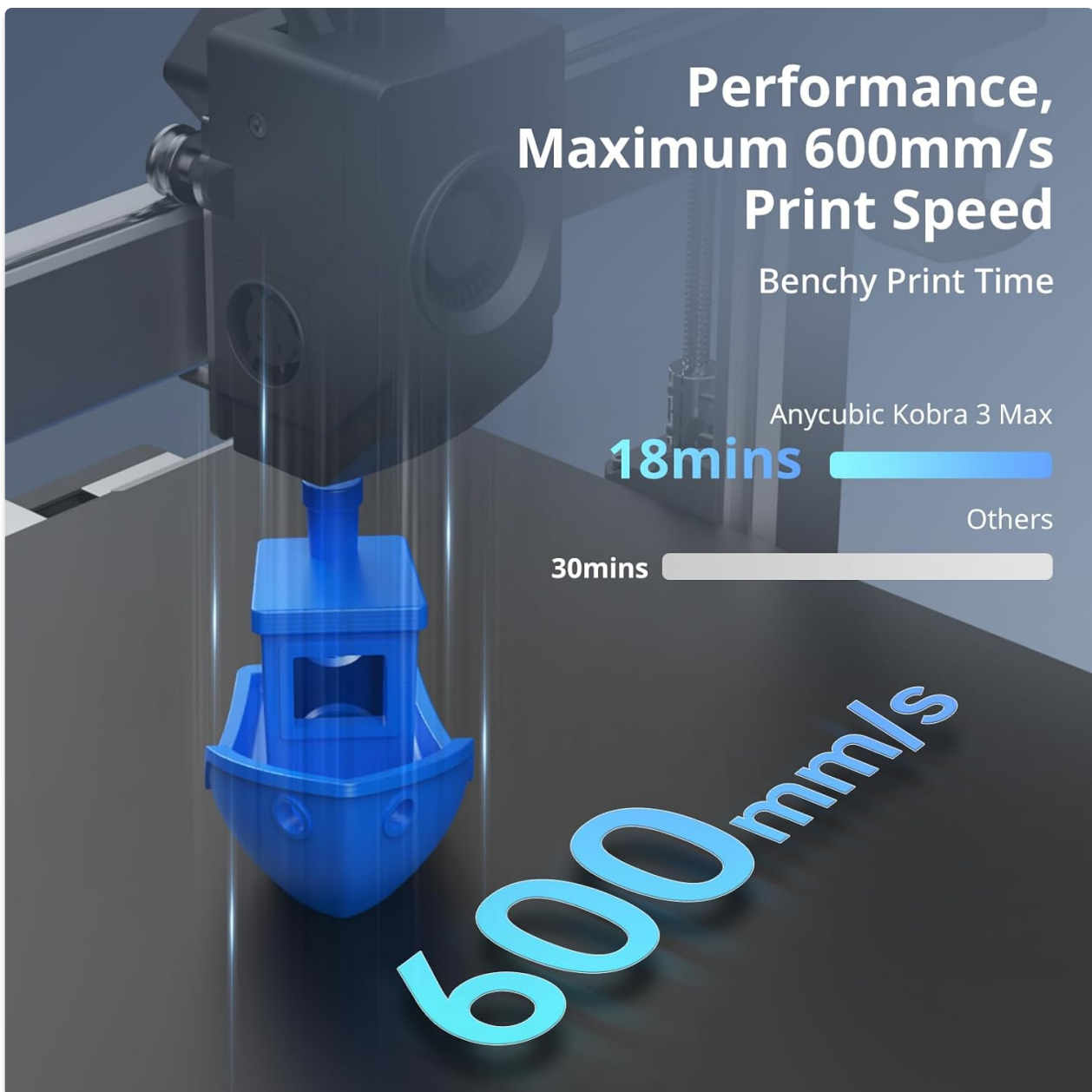
Figure 5: The Kobra 3 Max Combo demonstrates its 600mm/s print speed by completing a Benchy print in 18 minutes.

5.4. Large Volume Printing

The industry-leading 420x420x500mm build volume allows you to print life-size prototypes, furniture components, or multiple parts simultaneously, making it ideal for various applications.

Figure 6: Visual representation of the Kobra 3 Max Combo's supersized 420x420x500mm³ print volume, equivalent to over two carry-on suitcases.

5.5. Smart Features & Connectivity

- **Filament Runout Sensor:** The machine pauses automatically when filament ends, preventing wasted prints.

- **Offline Printing Mode:** Built-in resume function handles power outages for 24/7 reliability.

- **Intelligent Drying (ACE Pro):** The ACE Pro is equipped with an active drying function that, when combined with preset parameters for PLA/PETG filaments, allows for one-click activation to enhance performance and quality. It also supports drying while printing, enabling users to start prints immediately and boost printing efficiency.

- **Anycubic App:** Smart control interconnection allows remote operation and initiation of printing tasks via cloud servers. Real-time remote monitoring of printing progress is available through the Anycubic App and slicing software.

- **Anycubic Slicer Next:** Offers one-click slicing with pre-set printing parameters, multi-plate printing support, and versatile file compatibility (3mf, stl, step, obj, amf, ply, svg).

- **Makeronline:** Access a vast repository of models from over 3000 global designers, engage in incentivized model sharing, and connect with 3D printing enthusiasts worldwide.
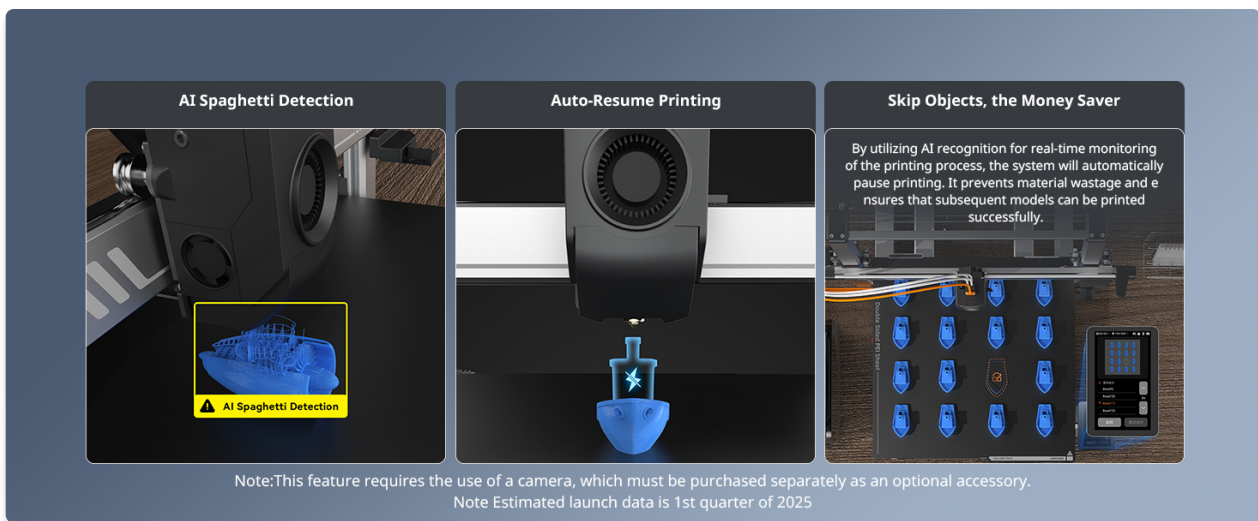
Figure 7: AI features like Spaghetti Detection, Auto-Resume Printing, and Skip Objects enhance print reliability. Note: Camera for AI features sold separately.

6. MAINTENANCE

6.1. Print Bed Care

- The printer features a dual-sided PEI spring steel plate for effortless print removal and reliable adhesion.
- Clean the print bed regularly with isopropyl alcohol to maintain optimal adhesion.

6.2. Nozzle Maintenance

- The all-metal hotend (300°C) allows for instant nozzle swaps (0.4mm standard).
- Regularly inspect the nozzle for clogs or wear. Use the provided nozzle cleaner if necessary.

6.3. Belt Tensioning

- The printer includes semi-automatic belt tensioning for consistent performance. Ensure belts are properly tensioned to prevent print quality issues.

6.4. General Cleaning

- Keep the printer free from dust and debris. Use a soft cloth to wipe down surfaces.
- Regularly check and clean the filament path to prevent blockages.

7. TROUBLESHOOTING

7.1. Print Quality Issues

- **Layer Misalignment:** The upgraded dual Y-axis motor enhances robustness and stability, effectively reducing the occurrence of step loss and layer misalignment. Ensure all belts are properly tensioned.
- **Rough Surface/Voids:** Active Extrusion Flow Control effectively minimizes resonance patterns on printed models and reduces model corner spills and voids, enhancing printing precision. Ensure filament is dry and print settings are optimized.

Figure 8: Comparison illustrating the enhanced stability and reduced layer misalignment with the upgraded Dual Y-Axis Motor.

7.2. Printing Interruptions

- **Filament Runout:** The printer will automatically pause. Replace the filament and resume printing.

- **Power Outage:** The auto-resume printing function allows the printer to continue from where it left off after power is restored.

- **AI Spaghetti Detection:** This feature uses a camera (purchased separately) for real-time monitoring. It automatically pauses printing if spaghetti-like errors are detected, preventing material wastage.

- **Skip Objects:** This feature allows the printer to skip failed objects on the build plate, continuing to print the remaining models successfully.

8. SPECIFICATIONS

Figure 9: Overview of the technical specifications for the Kobra 3 Max Combo.

Feature	Specification
Brand	ANYCUBIC
Model	Kobra 3 Max Combo
Build Volume	420x420x500mm³
Printing Speed	Max 600mm/s
Acceleration	20,000mm/s²
Nozzle Temperature	Max 300°C
Hotbed Temperature	Max 90°C
Compatible Materials	PLA, PLA+, ABS, ASA, PETG, TPU
Leveling System	LeviQ3.0 Auto-Leveling
Connectivity	USB, Wi-Fi (via Anycubic App)
Supported File Formats	STL, OBJ, 3MF, AMF, PLY, SVG
Special Features	Multi-color printing (with ACE Pro), Filament Runout Sensor, Offline Printing Mode, AI Spaghetti Detection (optional camera), Skip Objects, Dual Y-Axis Motor, Active Extrusion Flow Control, Quick-Swap Nozzle
Machine Weight	22.5KG
Power Supply	300W
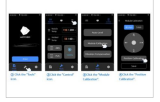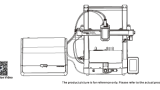
9. WARRANTY AND SUPPORT
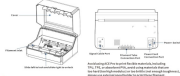
For warranty information, technical support, and service inquiries, please refer to the official ANYCUBIC website or contact their customer service directly. Keep your purchase receipt as proof of purchase for warranty claims.

Online Resources:

- Official ANYCUBIC Store: Visit Store

- Product Page: View Product

Related Documents - Kobra 3 Max Combo

Anycubic Slicer User Guide	**Anycubic Slicer User Guide** A comprehensive user guide for the Anycubic Slicer software, detailing system requirements, installation, configuration, slicing, and remote control features for Anycubic 3D printers.
Kobra 2 Max Firmware Upgrade Guide	**Anycubic Kobra 2 Max Firmware Upgrade Guide** Comprehensive guide for upgrading the firmware on the Anycubic Kobra 2 Max 3D printer, covering Wi-Fi connection, firmware installation, device calibration, and troubleshooting steps.
Anycubic Kobra 3 Combo User Manual	**Anycubic Kobra 3 Combo User Manual** User manual for the Anycubic Kobra 3 Combo 3D printer, covering product overview, machine installation, power-on guide, printer binding, printing, other functions, maintenance, and important attention points.
Anycubic Kobra 2 Max User Manual	**Anycubic Kobra 2 Max User Manual: Setup, Operation, and Maintenance** Comprehensive user manual for the Anycubic Kobra 2 Max 3D printer, covering setup, operation, maintenance, and troubleshooting. Learn how to assemble, print, and care for your device.

Anycubic Kobra S1 Combo User Manual - Setup and Operation Guide
Comprehensive user manual for the Anycubic Kobra S1 Combo 3D printer, covering product overview, machine installation, power-on guide, print model setup, printer binding, and important safety information.

Anycubic Kobra 3 User Manual: Setup, Operation, and Maintenance Guide
This comprehensive user manual provides detailed instructions for setting up, operating, and maintaining the Anycubic Kobra 3 3D printer. It covers installation, software configuration, first print, advanced functions, and troubleshooting for optimal performance.