WAINLUX K10-3W

WAINLUX K10 3W Mini Laser Engraving Machine User Manual
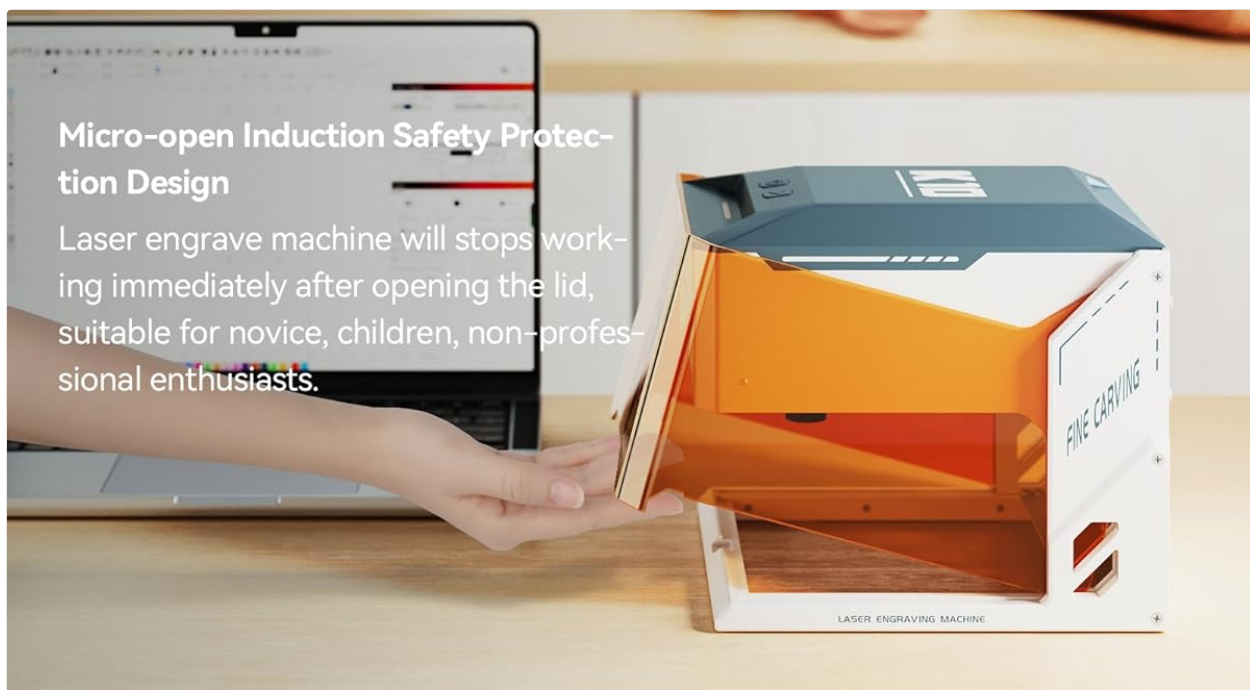
Model: K10-3W

1. SAFETY INFORMATION

Please read all safety instructions carefully before operating the WAINLUX K10 laser engraving machine. Failure to follow these instructions may result in injury or damage to the device.

- **Eye Protection:** The machine features an eye-friendly shield and laser filtering. However, always ensure the shield is properly closed during operation. Avoid direct exposure to the laser beam.

- **Enclosed Design:** The WAINLUX K10 is designed with a fully enclosed structure to enhance safety.

- **Automatic Stop Features:**

  - **Micro-open Induction Safety Protection:** The laser engraving machine will automatically stop operation immediately if the protective lid is opened during engraving.

  - **Tilt Induction Safety Protection:** If the machine's angle relative to the horizontal plane exceeds 13(±5°) for more than 1 second, the laser will stop working immediately.

- **Ventilation:** The machine includes a built-in fan for smoke extraction. Ensure proper ventilation in your workspace.

- **Material Compatibility:** This laser engraver is suitable for materials such as wood, plastic, leather, parchment, plywood, painted metal, and black plastic. **Do not engrave or cut white, transparent, or reflective materials directly** as the laser may not interact with them effectively or could cause unexpected reflections.

- **Flammable Materials:** Keep flammable materials away from the engraving area.

- **Supervision:** Do not leave the machine unattended during operation.

Micro-open Induction Safety Protection Design

Laser engrave machine will stops working immediately after opening the lid, suitable for novice, children, non-professional enthusiasts.

World-Leading Safety Performance
Let you more immersed in creating without apprehensions.

Tilt Induction Safety Protection Design

When the Angle between the laser engrave machine and horizontal plane is greater than 13°(±5°) and maintained for more than 1 second, laser machine will stop working immediately.

13°(±5°)

Image: Micro-open Induction Safety Protection Design. The machine stops when the lid is opened.

Support Multiple Platform

Windows, MAC, IOS, Linux, Android

CutlabX

LightBurn

LaserGRBL

DIY Home Decor

Customised Gift

Small Business

Image: Tilt Induction Safety Protection Design. The machine stops if tilted beyond a safe angle.

Engrave Your Own Unique

Cardboard	Plywood	Bamboo	paper
Silica Gel	Leather	Slate	Food
Ceramic	Glass	Acrylic	paper
Cardboard	Canvas	Cork	Coated Metal

Image: Overview of multiple security protections including anti-blue light shield and built-in fan.

2. PRODUCT OVERVIEW

The WAINLUX K10 is a compact and versatile 3W mini laser engraving machine designed for various creative and practical applications. It offers high precision and multiple connectivity options.

Key Features:

- **Compact Size:** Measuring 27 x 27 x 14 cm, it is highly portable and suitable for various environments.

- **Laser Module:** Features a 3W compressed spot laser module with 24W input power.

- **High Accuracy:** Achieves an engraving accuracy of 0.01 mm for detailed results.

- **Engraving Area:** Provides an 80 mm x 80 mm engraving range.

- **Engraving Speed:** Capable of speeds up to 3000 mm/min.

- **Connectivity:** Supports Bluetooth connection via a mobile app (Android/iOS) and USB connection to Windows or Mac computers.

- **Supported File Formats:** JPG, BMP, PNG, PEG, GIF, PLT, XJ, HPGL, DXF.

- **Engraving Modes:** Black and white, discrete, and contour.

Supported Materials:

The WAINLUX K10 can engrave a wide range of materials, including:

- Wood chips, Plywood, Bamboo
- Plastic, Black Plastic
- Leather, Parchment
- Coated Metal (painted metal surfaces)
- Cardboard, Paper
- Silica Gel
- Slate
- Ceramic, Glass (with preparation, see Operating Instructions)
- Acrylic
- Food

It can also be used as a laser cutter for parchment up to 0.5 mm thick.

Image: The WAINLUX K10 laser engraver shown with various engraved items like a water bottle, flask, phone case, and mug.

Compact & Capability

Laser accuracy 0.01mm for HD reprint

Image: Demonstrates the compact size and capability of the K10, with a laptop displaying design software.

Image: Examples of unique designs engraved on different materials such as cardboard, plywood, bamboo, leather, slate, and glass.

3. SETUP

Follow these steps to set up your WAINLUX K10 laser engraving machine.

Package Contents:

Verify that all standard parts are included in your package:

- WAINLUX K10 Laser Engraver (3W)
- User Manual

- Power Supply
- Type-C Cable
- Maker Pen
- Wood Board *2
- Brush Kraft Paper *2
- Wrench

Optional parts (sold separately) may include an Air Purifier and an Engraving Positioning Module.

Image: The WAINLUX K10 machine along with its standard accessories and optional parts.

Initial Setup:

1. **Placement:** Place the WAINLUX K10 on a stable, level surface in a well-ventilated area.

2. **Power Connection:** Connect the power supply to the machine and plug it into a suitable power outlet.

3. **Device Connection:**

   - **Bluetooth (Mobile App):** Download the official WAINLUX app on your Android or iOS mobile phone. Enable Bluetooth on your phone and pair it with the K10 machine.

   - **USB (Computer):** Connect the machine to your Windows or Mac computer using the provided Type-C USB cable.

4. **Software/App Installation:** Install the WAINLUX application on your mobile device or the recommended software (e.g., CutlabX, LightBurn, LaserGRBL) on your computer. The application is free and supports various file formats.

Easy Height Adjustment

After raised the engraving machine rotary (not included) can be easily placed.

Image: Demonstrates easy height adjustment for accommodating larger items or rotary attachments (not included).

4. OPERATING INSTRUCTIONS

This section outlines the general steps for operating your WAINLUX K10 laser engraver.

Basic Engraving Process:

1. **Prepare Material:** Place the material you wish to engrave inside the machine's engraving area. Ensure it is flat and securely positioned.

2. **Connect Device:** Ensure your mobile phone or computer is connected to the K10 via Bluetooth or USB.

3. **Open Software/App:** Launch the WAINLUX app or your chosen engraving software (e.g., CutlabX, LightBurn, LaserGRBL).

4. **Import/Create Design:** Import your desired image or design into the software. The app supports various image formats like JPG, BMP, PNG, etc.

5. **Adjust Parameters:** Set engraving parameters such as power, speed, and engraving mode (black and white, discrete, or contour) based on your material and desired outcome. Refer to the software's guide for detailed parameter settings.

6. **Preview (if available):** Use the preview function to ensure the design is correctly positioned on your material.

7. **Start Engraving:** Close the protective lid and initiate the engraving process from the software/app. The machine will begin engraving.

8. **Monitor Progress:** Observe the engraving process through the eye-friendly shield. The machine will automatically stop if the lid is opened or if it is tilted.

9. **Completion:** Once engraving is complete, the machine will stop. Carefully remove your engraved item.

Engraving on Glass (Example):

For engraving on transparent materials like glass, a preparatory step is often required:

1. **Soak Colored Paper:** Soak a piece of colored paper (e.g., black) in water.

2. **Glue to Glass:** Carefully glue the wet colored paper to the surface of the glass where you intend to engrave. This provides a surface for the laser to interact with.

3. **Mobile App Design:** Use the mobile app to design or import your engraving pattern.

4. **Engrave:** Place the prepared glass inside the machine and start the engraving process. The laser will engrave through the paper onto the glass.
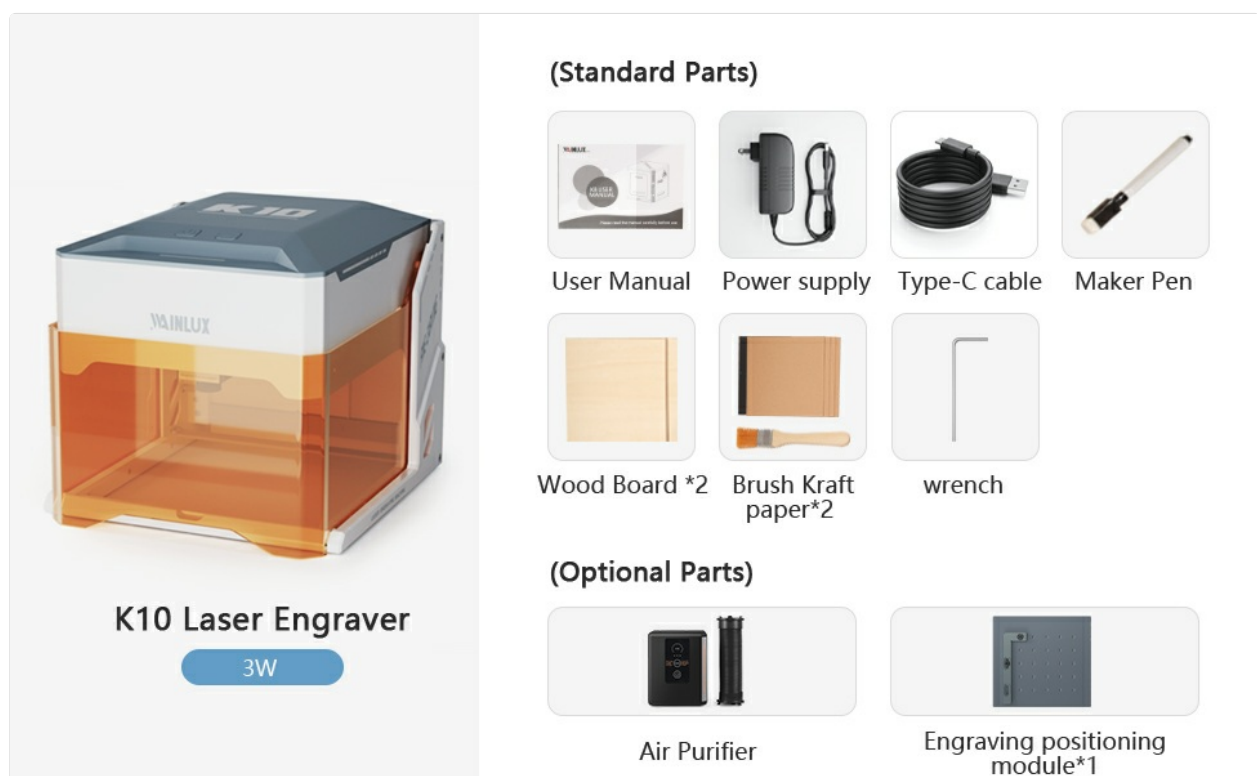
K10 Laser Engraver
3W

(Standard Parts)

User Manual Power supply Type-C cable Maker Pen

Wood Board *2 Brush Kraft paper*2 wrench

(Optional Parts)

Air Purifier Engraving positioning module*1

Image: Step-by-step guide for engraving on glass, showing preparation with colored paper and the final engraved result.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your WAINLUX K10 laser engraver.

- **Cleaning the Lens:** Periodically inspect the laser lens for dust or debris. Use a soft, lint-free cloth and a small amount of lens cleaning solution (if recommended by manufacturer, otherwise dry clean) to gently wipe the lens.

- **Cleaning the Engraving Area:** After each use, clear any debris, dust, or small material scraps from the engraving platform and surrounding area. A small brush or vacuum can be used.

- **Fan Cleaning:** The built-in fan helps extract smoke and fumes. Over time, dust may accumulate. Gently clean the fan vents to ensure proper airflow.

- **External Cleaning:** Wipe the exterior of the machine with a soft, damp cloth. Avoid using harsh chemicals or abrasive cleaners.

- **Storage:** When not in use, store the machine in a clean, dry environment away from direct sunlight and extreme temperatures.

6. TROUBLESHOOTING

If you encounter issues with your WAINLUX K10, refer to the following common problems and solutions.

Problem	Possible Cause	Solution
Machine does not power on.	Power cable not connected; power outlet issue.	Ensure power cable is securely connected to machine and outlet. Test outlet with another device.
Laser not firing or weak engraving.	Lens dirty; incorrect material settings; material incompatible.	Clean the laser lens. Adjust power/speed settings in software. Ensure material is compatible (not white/transparent/reflective).
Connection issues (Bluetooth/USB).	Bluetooth not enabled; incorrect USB port/cable; software driver issue.	Ensure Bluetooth is on and paired. Try a different USB port or cable. Reinstall software/drivers.
Engraving quality is poor or inconsistent.	Material not flat; incorrect focus; machine vibration.	Ensure material is flat and secured. Verify laser focus. Place machine on a stable surface.
App/Software crashes or freezes.	Outdated software; system incompatibility; corrupted file.	Update app/software to the latest version. Check system requirements. Try a different design file.

If the problem persists after attempting these solutions, please contact customer support for further assistance.
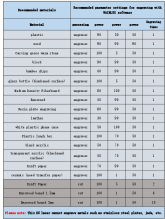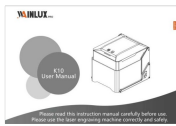
7. SPECIFICATIONS

Feature	Detail
Model Number	K10-3W
Manufacturer	DEWALLIE
Product Dimensions	21 x 21 x 0.1 cm (packaging/product base); Unit: 27 x 27 x 14 cm
Weight	2.6 Kilograms
Laser Power	3W (compressed spot laser module)
Input Power	24W
Engraving Accuracy	0.01 mm
Engraving Speed	Up to 3000 mm/min
Engraving Area	80 mm x 80 mm
Connectivity	Bluetooth (Android/iOS App), USB (Windows/Mac)
Batteries Required	No
First Available Date	January 31, 2024

8. WARRANTY AND SUPPORT

WAINLUX is committed to providing quality products and excellent customer service.

- **Quality Assurance:** The WAINLUX K10 laser engraving machine undergoes rigorous quality checks to ensure performance and reliability.

- **Customer Service:** A professional customer service team is available to assist you with any pre-sales inquiries or post-purchase issues.

- **Support:** For product services, technical support, or warranty information, please refer to the official support website or contact customer service directly. Contact details can typically be found in the product packaging or on the manufacturer's website.

Related Documents - K10-3W

	[WAINLUX K10 3W Laser Engraver Software Engraving Parameter Table](#) A comprehensive guide to software engraving parameters for the WAINLUX K10 3W Laser Engraver, detailing settings for various materials including wood, paper, leather, acrylic, glass, ceramics, and metals.
	[WAINLUX K6 Pro Laser Engraver: Material Engraving Settings Guide](#) Detailed parameter settings for engraving various materials like wood, leather, acrylic, and paper using the WAINLUX K6 Pro laser engraver with WAINLUX software.
	[WAINLUX K10 Laser Engraving Machine User Manual - Setup, Operation, and Safety Guide](#) This comprehensive user manual for the WAINLUX K10 laser engraving machine provides detailed instructions on setup, safety precautions, operation, software installation (CutLabX, LaserGRBL, LightBurn), connectivity, troubleshooting via FAQ, and maintenance procedures.
	[Wainlux Laser Engraving Machine User Manual](#) Comprehensive user manual for the Wainlux laser engraving machine, covering specifications, accessories, operation modes, software settings, photo and text engraving, and mobile app usage. Includes instructions for both desktop software and smartphone app control.
	[Wainlux K10 Firmware Update Guide: Protective Cover and Gyro Sensitivity](#) A comprehensive guide to updating the firmware on the Wainlux K10 laser engraver, including instructions for closing/opening the protective cover and adjusting gyro sensitivity.
	[WAINLUX K6 Laser Engraver User Manual](#) A comprehensive user manual for the WAINLUX K6 laser engraver, covering setup, software download for mobile and desktop, and troubleshooting.