

# Laser Engraving Machine User Manual

## 1. Warning Statements (Warning)

### ⚠ Warning: Laser Radiation Hazard

This device contains a high-power laser module. Direct or indirect

### ⚠ Warning: Fire and Smoke Hazard

The laser processing process generates high temperatures, posing a high risk of igniting materials. Processing certain materials (e.g.,

Operation and maintenance of this device are strictly prohibited for

### | Compliance Marks |

CE Certificate No.: HTT202112264L

Test Standard : EN 60825-1:2014/A11:2021

Test Report No. : KTi250729S1799A2

## 2. Product Name

Product Name: Laser Engraver

## 3. Product Brand (Product Brand)

Brand: TWOTREES

Manufacturer: Shenzhen Two Trees Technology Co., Ltd.

## 4. Product Features & Functions (Product Features & Functions)

Core Technology: Equipped with a high-performance 445 nm blue

Core Functions:

Engraving: Enables permanent engraving of graphics, text, and

Cutting: Capable of precise cutting of thin non-metallic materials

Software Compatibility: Compatible with mainstream control software

Device Characteristics: Compact design suitable for desktop

## 5. Usage Instructions (Usage Instructions)

Environmental Preparation: Place the device on a stable, well-

Software Connection: Connect the device to a computer via a USB

Material Fixturing and Focusing: Securely and evenly fix the

workpiece onto the worktable. Adjust the laser focus precisely to the

Parameter Setup and Test Run: Set appropriate power, speed, and pass count in the software according to material type and thickness.

Starting Processing: Close the protective cover and activate the exhaust system, then send the processing command from the

Ending Operation: After processing completes, wait until the device has fully stopped and the laser head has completely cooled before

## 6. Precautions & Usage Restrictions (Precautions & Usage

Safety First: Laser safety goggles matched to the  $445\pm\text{nm}$

Material Restrictions: Engraving/cutting of the following materials is strictly prohibited: PVC (polyvinyl chloride), fluorinated plastics (e.g.,

Environmental Requirements: The working environment should be

Device Protection: Do not operate at full power continuously beyond the maximum continuous duty time specified in the product manual,

Prohibited Actions: Unauthorized disassembly of the laser module, electrical circuit modification, removal of safety interlocks (e.g.,

## 7. Frequently Asked Questions (FAQ)

Q1: What should I do if engraving/cutting depth is insufficient?

A: Please check the following sequentially: 1) Whether the laser focus is precisely aligned to the material surface; 2) Whether the

Q2: Why are engraving edges unclear or charred?

A: This is typically caused by excessive power or insufficient speed. Reduce the power percentage or increase the travel speed, then

Q3: Why is the device not recognized after connecting to the

A: Please verify: 1) Whether the USB cable is undamaged and securely connected; 2) Whether the device's USB driver is correctly

Q4: Why does the laser head emit no light?

A: Please check: 1) Whether all power connections are secure and functional; 2) Whether the "Laser Enable" option is activated in the

Q5: How thick a material can be cut?

A: Cutting capability depends on laser power, material properties, and focal length. For common 3 mm basswood or acrylic sheets,

#### 8. After-Sales Service (After-Sales Service)

Warranty Policy: This product is covered by a limited warranty valid for [e.g., 12 months] from the date of receipt.

The warranty covers failures arising from material or manufacturing

Technical Support: For assistance, please contact us via the

After-sales email: [service@twotrees3d.com](mailto:service@twotrees3d.com)

WhatsApp: +86 198 7919 9817

#### 9. Disclaimer (Disclaimer)

1. By using this product, the user acknowledges and agrees to the

2. The manufacturer and seller shall not be liable for any direct or

3. Failure to operate, maintain, or store the device in accordance with

4. Unauthorized modification of the device, or use of non-OEM or

5. Use of the device outside its intended purpose, or processing of

6. Installation, commissioning, or repair performed by personnel not

7. Damage caused by force majeure or unforeseen events such as

8. Normal wear and tear (e.g., natural power decay of the laser