# Product Manual

## 01// Parameters

Optical power output:	5.5W	10W
Current:	1.8A	3.8A
Laser wavelength:	445nm±5nm	
Operating voltage:	DC 12V	
Focus:	0.08*0.08	
PWM/TTLinput:	0-5V	
Input interface:	XH2.54-3Pin(+,-,PWM/TTL)	
Working frequency:	<30KHz	
Laser class:	Class IV	
Life time:	15000-20000 hours	

# 02// Precautions

- Please wear laser goggles when using and avoid direct contact with the laser eyes and skin with your fingers!
- Do not engrave mirror objects or highly reflective metal, otherwise the operator may be injured or the laser may be burned.
- When connecting the laser, check the corresponding interface and laser voltage to avoid burning out the laser.
- When the operating temperature of the laser diode exceeds 70 degrees, please do a good job of heat dissipation.

# 03// **FAQ**

#### Q: Why does the title say 80W, 40W, but the laser is 10W/5.5W?

A: 80W I 40W is the effective power of the laser machine, and its actual optical power output should be 10W and 5.5W.

#### Q: What materials can be engraved?

A: Various wood, bamboo, plastic, leather, coated glass, mirror stainless steel, brushed stainless steel, black acrylic, cardboard, aluminum oxide layer, ineffective electroplating layer, painted metal, after blackening Utility knife. (Cannot engrave: blue/purple/white/transparent materials, aluminum (no oxide layer).

#### Q: Is it compatible with my machine?

A: Our modules are compatible with machines and control boards controlled by TTL/PWM signals such as Ortur/Sculpfun/comgrow/Two tree.

#### Q: After using for a period of time, engraving effect decreases.

A: After the laser is used, the smoke generated by engraving will adhere to the lens and cause the power to decrease. You can use alcohol cotton pads to clean the lens regularly.

#### Q: Why can't I adjust the PWM/laser power?

A: The PWM pulse signal is 0-5V. If it is connected to a 5V interface that is too low (such as 0-3V), too high (5-12V), or stable, the PWM will not work properly.

## 04// Product Service

- Amazon@lunyee.com
- eBay@lunyee.com
- AliExpress@lunyee.com



## 05// TWO ways to us

Except for the output power, voltage and current, 40w 80w the appearance, kit, and fixed focus method are the same.



Good for cutting



Good for engraved

## 06// How to focus



Due to the wide variety of machines and motherboards, the connection methods vary from machine to machine. We bring two laser cables.

- 3pin-3pin: VCC 12/24V (red), GND (black), PWM 0-5v, 0-20khz (yellow)
- 3pin-4pin:
   VCC 12/24V (red), GND (black/white), PWM 0-5v, 0-20khz (yellow)
   If the wire sequence doesn't match yours, you'll need to rearrange the wire sequence. Just connect VCC, GND and PWM accordingly.

