

## Product Model: SCULPFUN S30 5W

### Main features:

1. Automatically controlled air assist system: The traditional adapter air assist will always be turned on and cannot be controlled during engraving, and the engraved pattern will be smoked into a fuzzy fog. The S30 series is equipped with an airassist 32-bit motherboard and a control-type air pump, which can intelligently control the air-assist switch during engraving through the LightBurn software M8 button, this makes the engraving and cutting very clean, and is very suitable for the manufacture of exquisite gifts.
2. Built-in high pressure air assist nozzle: S30 series is equipped with advanced high-pressure air-assisted metal nozzle, which can generate high-pressure airflow under the air pump, greatly improving the cutting efficiency, and the cutting speed is more than 5 times faster than that without air assistance. The powerful airflow blows away the residue, making the cut surface very clean.
3. Ultra-thin 5W, 10W, 20W three laser options: S30 series adopts ultra-thin laser shaping technology, the laser focus is as thin as hair, very powerful for engraving or cutting. S30 5W laser is high cost-effective and can meet 90% of hobby needs; S30 Pro 10W laser is suitable for frequent cutting, do everything faster; S30 Pro Max 20W pursues the ultimate cutting speed, suitable for professionals, shops or factory.
4. Replaceable protective lens: S30 series laser adopts innovative replaceable lens, which greatly improves the service life of the laser, which is more than 10 times longer than other general lasers. When the lens is damaged or after long-term use, the lens can be replaced to restore the cutting power. A free lens is included with the purchase, more lens can be easily purchased from SCULPFUN.
5. Expandable engraving area on both XY axes: The S30 series adopts an innovative XY axis expandable design, the original engraving area is about 400x400mm, but you can purchase a Y-axis expansion kit to expand the engraving area to 935x400mm; purchase an XY-axis expansion kit to upgrade Up to 935x905mm huge engraving area, which can help you better handle large area engraving or cutting work.
6. Upgraded 32-bit air-assist motherboard: The latest 32-bit motherboard supports automatic air-assist control. Reserve Bluetooth, SD card offline printing function. (Upgrade Kit sold separately)
7. Industrial-grade cutting accuracy: S30 series adopts extremely solid and high-precision linear slide rail X-axis, making it reach industrial-grade engraving accuracy. When comparing small engraving details, the S30 series does not have the wavy pattern that appears in ordinary engraving machines.
8. Detachable laser eye shield: The S30 series is equipped with a detachable eye shield, which will not dazzle even without glasses. Also if you don't need it, you can easily disassemble it.
9. Sturdy and durable frame: The S30 series is made of high-strength aluminum alloy, its frame can bear up to 50KG weight without damage, and is very durable. The frame can be used for a long time and maintain high precision, only need to upgrade the latest laser when the machine needs to be upgraded.
10. Safety design: The presented A4 size steel pad can well protect the table from laser damage. Isolate fire hazards. There is a very safe and eye-catching power switch on the machine, you can directly and quickly turn off the power in an emergency.
11. Right-angle measuring ruler: There are precise scale lines on the X-axis and Y-axis to form a right-angle measuring ruler, which is convenient for you to quickly measure the size of the engraved object. The 410x400mm large-area engraving range can meet your various engraving needs.

**Laser Information:**

Diode laser output power: 5W (note that this is light energy not electrical energy)  
Laser focus: 0.06x0.06mm  
Laser wavelength 455±5nm  
Focusing method: fixed focus column + sliding device

**Machine Information:**

Engraving accuracy: 0.005mm  
Engraving area size: the standard version is 410\*400mm, which can be expanded to 935x400mm or 935x905mm  
Machine power: about 60W

**Air pump:**

Type: mainboard-controlled air pump, voltage 12V, flow 30L/min  
Air hose inner diameter: 7.5mm

**Motherboard:**

32-bit air-assisted motherboard, reserve Bluetooth, SD card offline printing function. (Upgrade Kit sold separately)

**Engraving/cutting materials:**

Engraving material: all kinds of wood (including walnut, cherry and other high-density wood), MDF, zigzag, cardboard, plastic, leather, PCB board, aluminum oxide, 304 stainless steel, ceramic, dark stone  
Cutting material: all kinds of wood (including walnut, cherry and other high-density wood), MDF, acrylic board, cardboard, non-woven, bamboo, leather, some plastic boards, PCB boards

**Operating software:**

LightBurn (with air assist function M8), LaserGRBL, LightBurn, Benbox, GrblController, LiteFire, support Windows system, support MAC system. Supported file formats NC, BMP, JPG, PNG, DXF and other image formats.  
Data transmission method: USB connection or Bluetooth wireless connection

**Power supply:**

Power Input: 100-240V AC, 50/60HZ Output: 12V 5A  
Packing weight: 6.7kg  
Packing size: 62.3\*24\*22.5cm  
Certification: CE FCC RoHS FDA ICE certification

**SCULPFUN S30 engraving machine packing list:**

1×S30 laser	1× Laser Goggles
1× Laser Repair Kit	1 x A4 metal backing plate
1×12V automatic air pump	Step 1-6 Install the package
3 x A4 size 3mm wooden board	1× Manual
1×12V 5A power adapter	1 x X-axis assembly
1 x power cord	2 x X profiles
1×USB cable	2 × Y profiles
1× Air tube	1×Control Box Assembly
3× Installation Kit	3 x support feet

**Precautions:**

- Because of the powerful laser power, it is forbidden to run the engraving machine without being supervised. Pause it if you're not around.
- For detailed machine instructions, please refer to the manual for parameter settings.
- When operating the laser engraving machine, please install the laser protective cover; if it is not installed, you need to wear goggles.
- Do not touch the laser with your hands, otherwise you may burn your hands.
- Please avoid strong impact on the machine.
- It is forbidden for children under 14 years old to use this product, and children over 14 years old need adult supervision.
- Do not apply the laser directly to any specular reflection object, which may cause injury to the operator or burn the laser.

