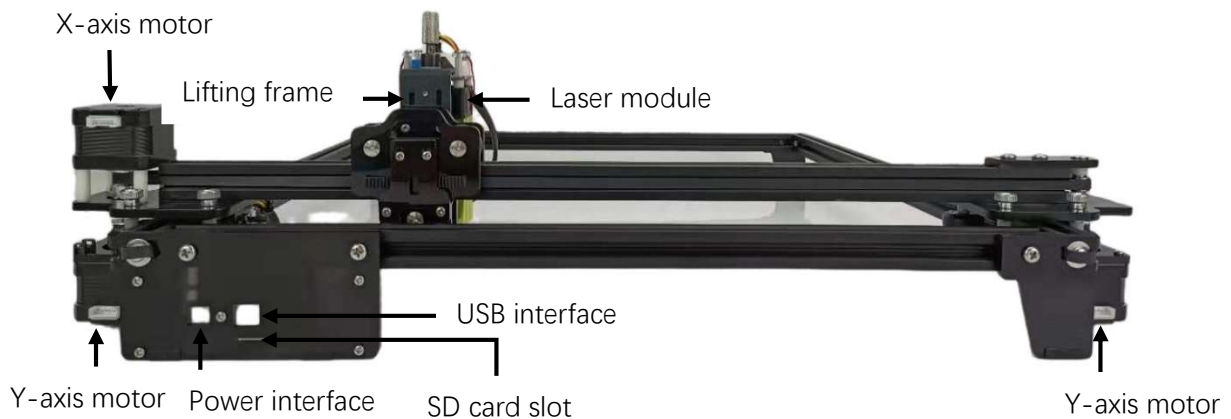


ZBT_3737O instructions

一、Summary

1. Frame description



- Power interface: connect the power supply to supply power to the machine
- USB interface: connect the computer to transmit data and control the machine through the computer
- SD card slot: store gcode code to complete offline engraving
- X、Y-axis motor: control the precise movement of the laser to complete the engraving
- Lifting frame: adjust the distance between the laser module and the carved object to achieve the best focal length
- Laser module: emit laser for engraving or cutting

2. Accessories list

Parts	description
	USB data cable: To connect to the machine through a computer, connect one end of the USB data cable to the USB port of the machine, and the other end to the USB port of the computer.
	12V-5A Power Adapter: To use the machine, connect the adapter to the machine's power interface, connect the plug to the adapter, and insert the adapter into an AC power outlet.

	protection goggle: Do not look directly at the laser while the engraving machine is working. If you want to observe the engraving situation and process, please wear protective glasses
	SD card + SD card reader: used for offline engraving

二、 Assemble the machine

1. parts list

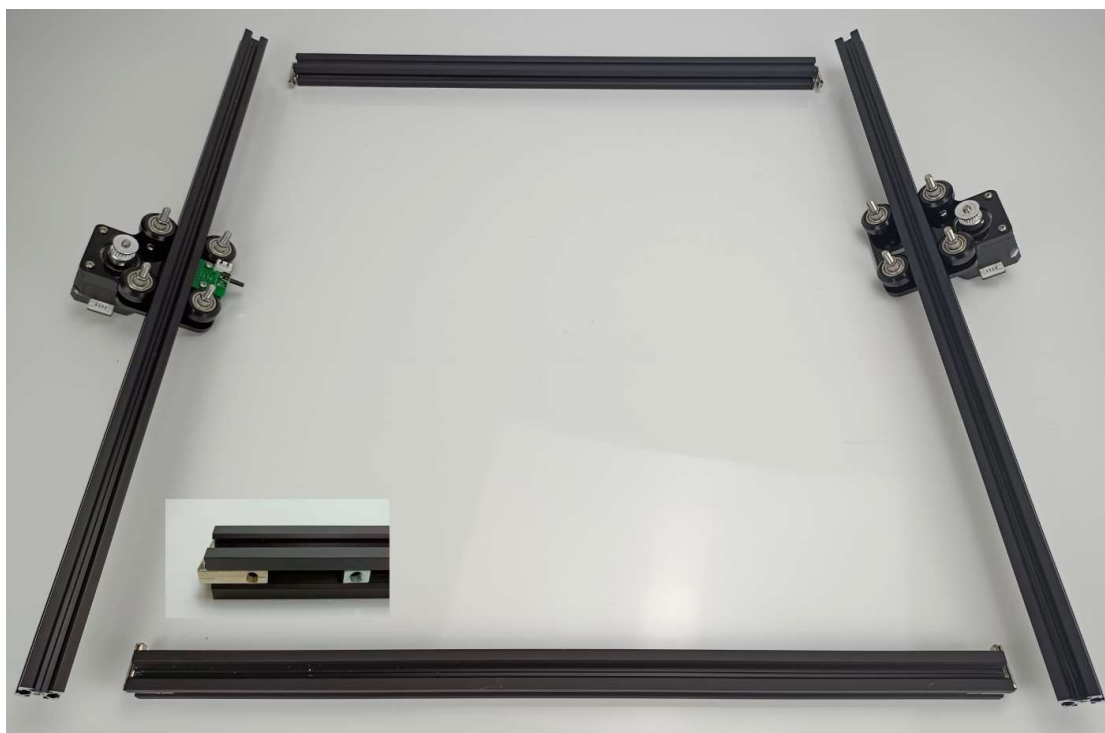
parts	name	specifications	quantity
	L-shaped corner groove		4
	Screw the nut by hand	M5	8
	screw	M5*10	10
	Corner slot nut	M5	1

	screw	M3*8	2
	Stainless steel gasket	M5*14*1	4

2. Assembly steps

1. Assemble Y-axis slider





2. Column integral frame



3. Install the support feet



4. Wear the timing belt



5. Fixed timing belt (pay attention to belt tightness)



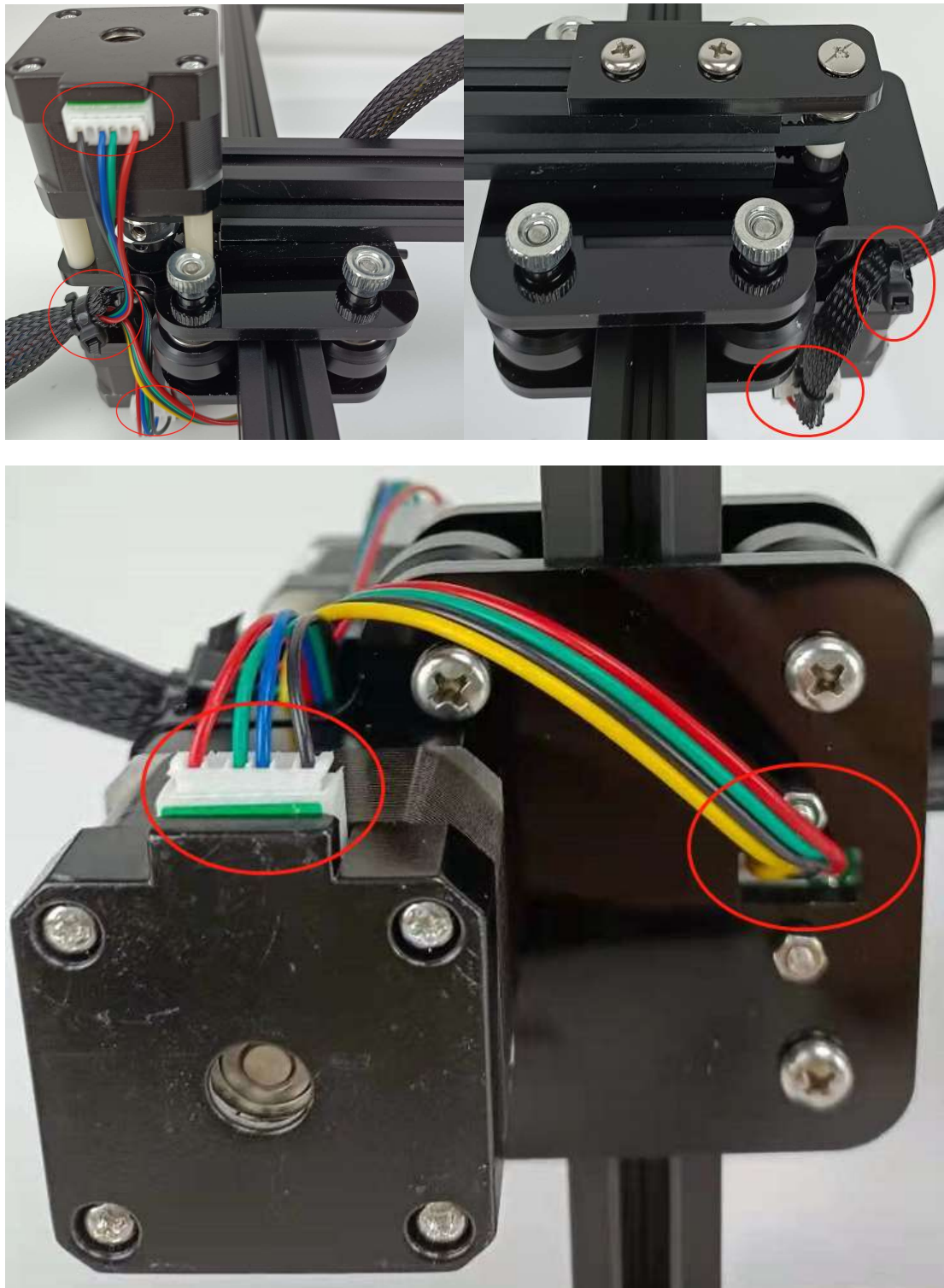
6. Clip YR shaft wire into profile groove



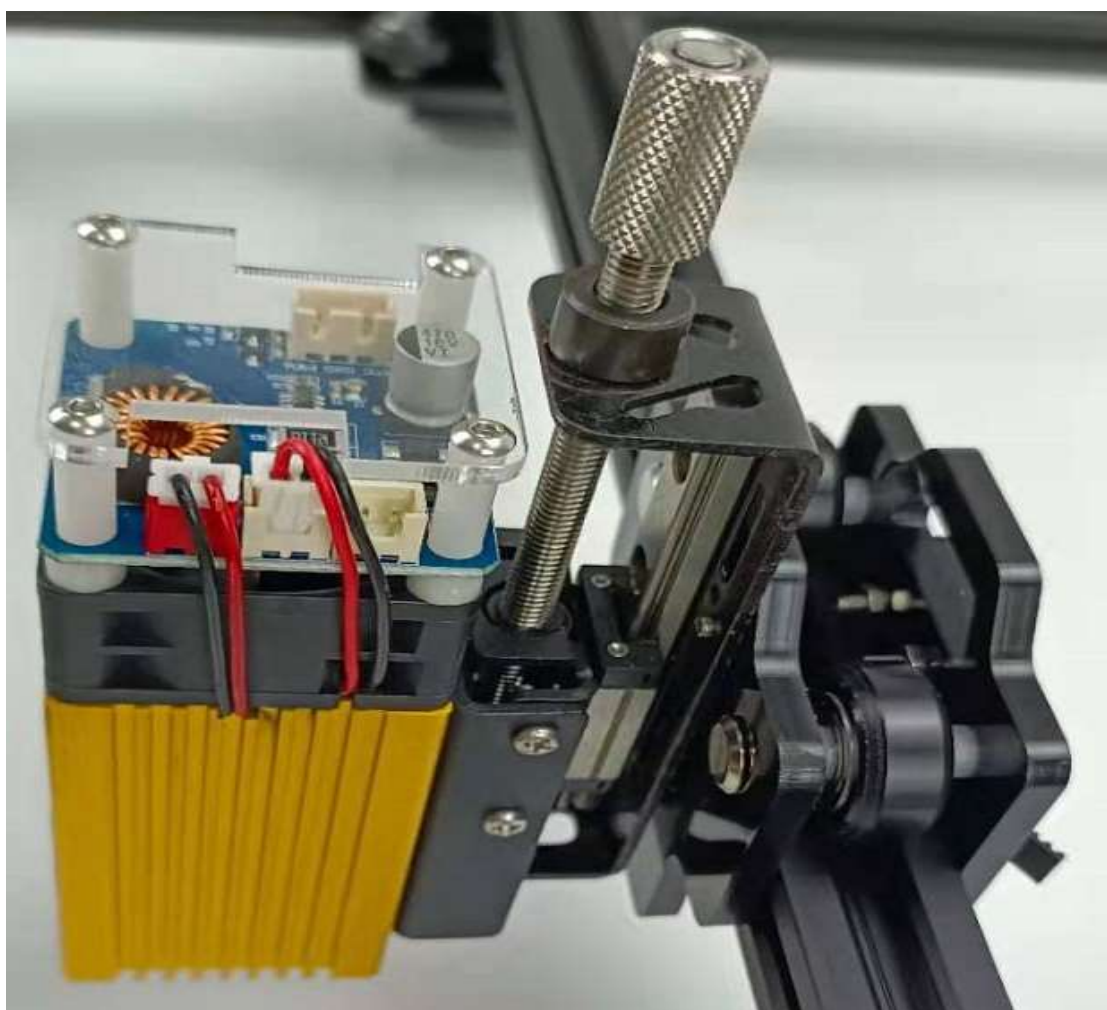
7. Install laser line and X axis

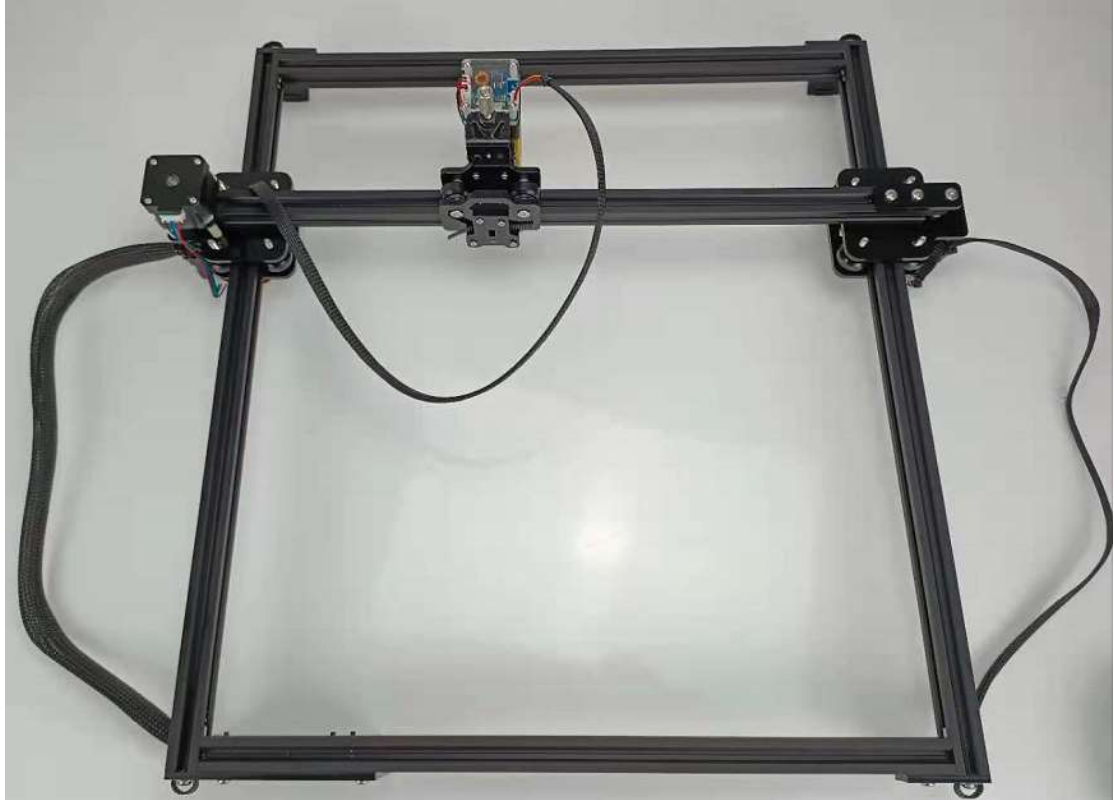


8. Install and fix x and y axis wires



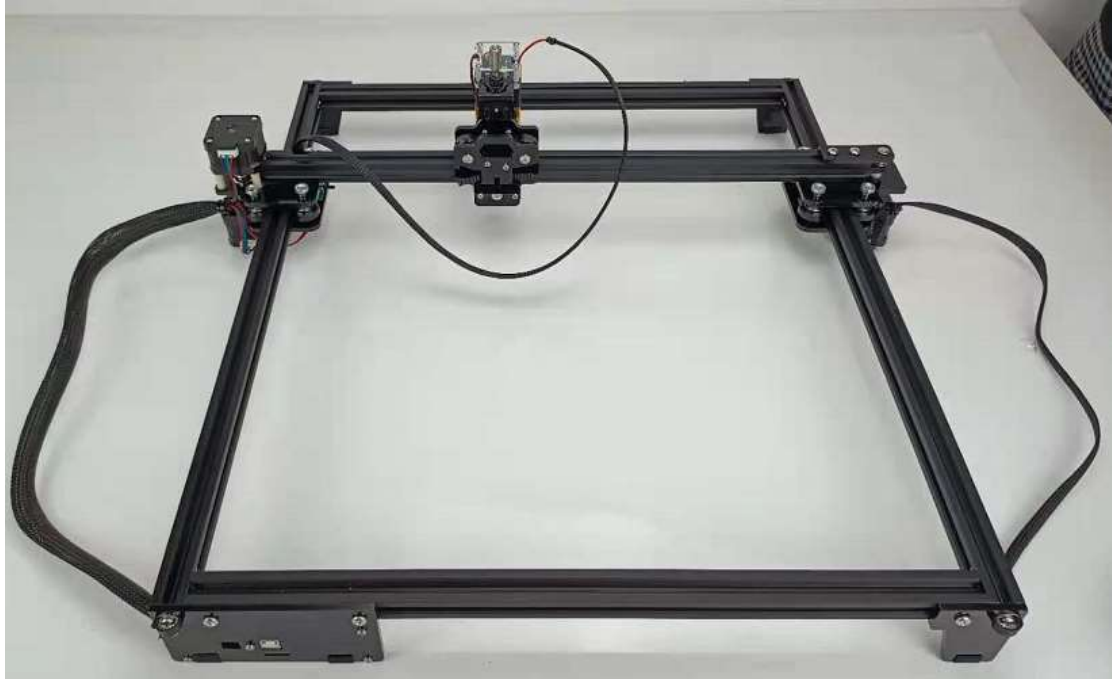
9. Install the laser module and connect the laser module to the motherboard





11. fix the x-axis screw





2. Connect the software

Connection mode 1 (wired):

1. Turn on the machine power
2. Connect one end of the data cable provided by us to the USB port of the machine and the other end to the USB port of the computer
3. Open the computer operating software and click the connect button to connect

Connection mode 2 (Bluetooth):

1. Turn on the machine power
2. Open the WIFI connection list of mobile phone or computer
3. Select the network "GRBL_ESP", password: 123456789. (please disconnect the wired network for PC), and wait for the network connection
4. Then open the browser and enter the IP address of the controller ("192.168.0.1" in the example) in the address bar to open the Web control interface
5. Set the parameters as shown below

Label	Value
Station SSID	 Redmi_B3EC 
Station Password	 ***** 
Station IP Mode	 Static  
Station Static IP	 192.168.31.127 
Station Static Gateway	 192.168.31.1 
Station Static Mask	 255.255.255.0 
AP SSID	 GRBL_ESP 
AP Password	 ***** 
AP Static IP	 192.168.0.1 
AP Channel	 1 
Hostname	 grblesp 
HTTP Enable	 ON  
HTTP Port	 80 
Telnet Enable	 ON  
Telnet Port	 23 
Radio mode	 Bluetooth 1   

- a) Set the broadcast mode bit -Bluetooth
4. After the setup is completed, restart
5. Turn on the computer, look for bluetooth **【btgrblesp】** , and connect.
6. Open the operating software, select the corresponding serial port and click the connect button to connect

Connection mode 3(WIFI_AP mode):

1. Turn on the machine power
2. Open the WIFI connection list of mobile phone or computer
3. Select the network "GRBL_ESP", password: 12345678. (please disconnect the wired network for PC), and wait for the network connection
4. Then open the browser and enter the IP address of the controller ("192.168.0.1" in the example) in the address bar to open the Web control interface

Link mode 4(WIFI_STA mode):

1. Turn on the machine power
2. Open the WIFI connection list of mobile phone or computer
3. Select the network "GRBL_ESP", password: 12345678. (please disconnect the wired network for PC), and wait for the network connection
4. Then open the browser and enter the IP address of the controller ("192.168.0.1" in the example) in the address bar to open the Web control interface
5. Set the parameters as shown below

Label	Value
Station SSID	 Redmi_B3EC 1 
Station Password	 ***** 2 
Station IP Mode	 Static  
Station Static IP	 192.168.31.127 3 
Station Static Gateway	 192.168.31.1 4 
Station Static Mask	 255.255.255.0 
AP SSID	 GRBL_ESP 
AP Password	 ***** 
AP Static IP	 192.168.0.1 
AP Channel	 1 
Hostname	 grblesp 
HTTP Enable	 ON  
HTTP Port	 80 
Telnet Enable	 ON  
Telnet Port	 23 5 
Radio mode	 Client Station   

Bluetooth name	 btgrblesp 
Notification type	 NONE  
Notification Token 1	 
Notification Token 2	 
Notification Settings	 

- Set WiFi name
 - Set WiFi password
 - Set that address of the control panel in the same segment of the route
 - Set Telnet parameters
- After the setting is completed, restart, then open the browser and enter the IP address of the controller in the address bar ("192.168.31.127" in the example) to open the Web control interface

Third, matters needing attention

1. safety matters

- It is forbidden to directly irradiate the eyes of human beings or animals, otherwise it will cause harm to the eyes!
- Do not irradiate human body, animals, clothes, valuables, etc., otherwise it will cause injury or damage!
- It is forbidden to be used by children or people who have no ability to operate!
- It is forbidden to use in places with inflammable and explosive articles or combustible gases, so as to avoid fire or explosion!
- It is forbidden to look directly at the laser focus when engraving the machine. If you need to observe, please wear protective glasses!
- Never look at the laser focus for a long time, otherwise it will affect your eyesight!
- Please turn off the power when not using the machine.

2. Carving instructions

- Pay attention to the accuracy of focal length before carving!

- a) 30W, 40W-PRO adjustable focus module, the distance between the lens and the sculpture is 20-40 mm.
 - b) The distance between the 40W-PRO fixed-focus 20mm lens and the carving object is 20mm, so this module can be carved well
 - c) The distance between 40W-PRO fixed-focus 40mm lens and engraving is 40mm, so this module can cut well
 - d) The distance between 80W fixed-focus 45mm lens and engraving is 45mm, and this module is the best for cutting
2. In theory, the machine can work for a long time, but in order to better protect the laser head and prolong its service life, it is recommended to work for 2 hours and rest for 2 minutes
 3. If you have any questions, you can contact customer service (), or you can contact us by email on the website "".Contact informationcontact us

IV. Maintenance

1. Do not use the machine in damp/hot places.
2. Do not touch and operate the machine with wet hands.
3. Please wipe the lens of the machine regularly with a cotton swab dipped in alcohol to protect the lens.

V. Contact us

1. Enterprise name: ZBAITU
2. Address: Room 501, Building C, Boxing Industrial Zone, Gongye West Road, Minzhi Street, Longhua District, Shenzhen
3. Email: zbaitu@zbaitu-tech.com

appendix

TSLD40W_XX_PRO			
Material	Marking	Craving	Cutting
Plywood 5mm	√	√	√
Plywood 8mm	√	√	√
Plywood 18mm	√	√	×
MDF board 5mm	√	√	√
MDF board 8mm	√	√	√

MDF board 18mm	√	√	×
Balsa 8mm	√	√	√
Hard wood 18mm	√	√	×
Acrylic 8mm(Dark Color)	√	√	√
Brushed Acrylic(Transparent)	√	×	×
Corrugated cardboard < 8mm	√	√	√
Kraft Paper 0.5mm	√	√	√
Paperboard 2mm	√	√	√
Weeding invitation paper 0.5mm	√	√	√
Colored A4 Paper(Not White)	√	√	√
A4 Paper(White)	×	×	√
Spray art stencils from mylar sheets(<1mm)	×	×	√
Heat transfer vinyl	×	×	√
bamboo	√	√	√
Stamp rubber	√	√	√
Non-woven	√	×	√
Cotton	√	×	√
Linen	√	×	√
Velvet	√	×	√
Canvas	√	×	√
Fabric polyester	√	×	√
Fabric synthetics	√	×	√
Leather < 2mm	√	√	√
Leather < 4mm	√	√	√
Plastic	√	√	√
PPR	√	√	×
ABS Sheets 2mm(Dark Color)	√	√	√
PVC Sheets 2mm(Dark Color)	√	√	√
Brushed PVC Transparent board	√	×	×
Black foamex(EPE)	√	√	√
KT Board	×	×	√
EVA foam	√	√	√
Bakelite	√	√	×
Brushed Glass	√	×	×
Cobblestone	√	×	×
Brushed Ceramic	√	×	×
Printed Metal	√	×	×
PCB borad	√	×	×
Anodized Aluminium	√	×	×
Brushed Stainless Steel	√	×	×
Mirror Stainless Steel	√	×	×
Gold	×	×	×

TSLD80W_FF45_PRO			
Material	Marking	Craving	Cutting
Plywood 5mm	√	√	√
Plywood 8mm	√	√	√
Plywood 18mm	√	√	√
MDF board 5mm	√	√	√
MDF board 8mm	√	√	√
MDF board 18mm	√	√	√
Balsa 8mm	√	√	√
Hard wood 18mm	√	√	√
Acrylic 8mm(Dark Color)	√	√	√
Brushed Acrylic(Transparent)	√	×	×
Corrugated cardboard < 8mm	√	√	√
Kraft Paper 0.5mm	√	√	√
Paperboard 2mm	√	√	√
Weeding invitation paper 0.5mm	√	√	√
Colored A4 Paper(Not White)	√	√	√
A4 Paper(White)	×	×	√
Spray art stencils from mylar sheets(<1mm)	×	×	√
Heat transfer vinyl	×	×	√
bamboo	√	√	√
Stamp rubber	√	√	√
Non-woven	√	×	√
Cotton	√	×	√
Linen	√	×	√
Velvet	√	×	√
Canvas	√	×	√
Fabric polyester	√	×	√
Fabric synthetics	√	×	√
Leather < 2mm	√	√	√
Leather < 4mm	√	√	√
Plastic	√	√	√
PPR	√	√	×
ABS Sheets 2mm(Dark Color)	√	√	√
PVC Sheets 2mm(Dark Color)	√	√	√
Brushed PVC Transparent board	√	×	×
Black foamex(EPE)	√	√	√
KT Board	×	×	√
EVA foam	√	√	√

Bakelite	√	√	×
Brushed Glass	√	×	×
Cobblestone	√	×	×
Brushed Ceramic	√	×	×
Printed Metal	√	×	×
PCB borad	√	×	×
Anodized Aluminium	√	×	×
Brushed Stainless Steel	√	×	×
Mirror Stainless Steel	√	×	×
Gold	×	×	×

Material	Cutting Speed	
	TSLD40W_XX_PRO	TSLD80W_FF45_PRO
Plywood 2mm	160mm/min, S1000,1Pass	480mm/min, S1000,1Pass
Plywood 3mm	120mm/min, S1000,1Pass	480mm/min, S1000,1Pass
Plywood 4mm	100mm/min, S1000,1Pass	480mm/min, S1000,1Pass
Plywood 5mm	120mm/min, S1000,2Pass	480mm/min, S1000,1Pass
Plywood 8mm	120mm/min, S1000,3Pass	480mm/min, S1000,1Pass
Plywood 18mm	120mm/min, S1000,8Pass	480mm/min, S1000,3Pass
Bitch ply 3mm	240mm/min, S1000,1Pass	480mm/min, S1000,1Pass
MDF board 3mm	120mm/min, S1000,2Pass	480mm/min, S1000,1Pass
MDF board 5mm	120mm/min, S1000,4Pass	120mm/min, S1000,2Pass
MDF board 8mm	120mm/min, S1000,5Pass	120mm/min, S1000,3Pass
Black acrylic plate 3mm	120mm/min, S1000,2Pass	120mm/min, S1000,1Pass
Black acrylic plate 3mm	120mm/min, S1000,4Pass	120mm/min, S1000,2Pass

* unpainted glass and ceramics Laser printing paper is needed to assist engraving

FCC Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Radiation Exposure Statement

To comply with FCC RF exposure compliance requirements, this grant is applicable to only mobile configurations. The antennas used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.