### LASER CUTTING AND ENGRAVING SYSTEMS

**MARS160** 

•1000mm/s

· Servo Motors

 古子永光 THDER D' THDER D' THDER D'

• Auto focus

1600x1000mm working area

Super Smooth Cutting Quality

• Auto focus

•Red Dot And Alarm Lamp

Motorized Table

• Energy Saving

THUNDER LASER

## **Possible Applications And Materials**

#### Some Possible Applications

**Electronics Engraving** Wood Engraving & Cutting Marble & Stone Etching **Glass Etching Corporate Giveaways** Acrylic & Wood Signage Wedding Memorabilia Nameplates & Desk sets Appliqu és Toys & Games Wooden Models Photo Albums Holiday Decorations Laser Cut Cards & Invitations **Custom Jewelry** Corporate & Sporting Awards **Acrylic Plaques** Photo Frames One-of-a-Kind Gifts **Engraved Mirrors** Architectural Models Custom Pet Tags Inlaid Signage **3D** Models **Engraved Denim Jeans Photo Engraving Barcode Engraving** Logo Engraving on Parts **Tool Identification** Medical Part Marking Laptop & MP3 Player Customization And many other possibilities !

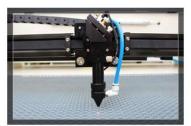
#### Materials

Almost all non-metal materials, and some metallic, can be engraved and/or cut by using a Thunder Laser System. Below is a selection of them. (See notation for metals)

	Engrave	Cut
Wood	$\checkmark$	$\checkmark$
Acrylic	$\checkmark$	$\checkmark$
Delrin	$\checkmark$	$\checkmark$
Cloth	$\checkmark$	$\checkmark$
Leather	$\checkmark$	$\checkmark$
Mat Board	$\checkmark$	$\checkmark$
Melamine	$\checkmark$	$\checkmark$
Paper	$\checkmark$	$\checkmark$
Mylar	$\checkmark$	$\checkmark$
Pressboard	$\checkmark$	$\checkmark$
Rubber	$\checkmark$	$\checkmark$
Wood Veneer	$\checkmark$	$\checkmark$
Fiberglass	$\checkmark$	$\checkmark$
Plastic	$\checkmark$	$\checkmark$
Cork	$\checkmark$	$\checkmark$
Corian	$\checkmark$	$\checkmark$
Twill	$\checkmark$	$\checkmark$
Anodized Aluminum	$\checkmark$	
Painted Metals	$\checkmark$	
Tile	$\checkmark$	
Glass	$\checkmark$	
Coated Metals	$\checkmark$	
Ceramics	$\checkmark$	
Marble	$\checkmark$	
Stainless Steel	*	
Brass	*	
Titanium	*	
Bare Metal	*	
* If you need to mark on ba	re metal directly, ple	ase contact us for

more information.

### Features



Visible Red Dot Pointer Make the laser beam "visible".



Alarm Lamp Show the work state and tell when the job is done, more safe for you.



Servo System 1000mm/s speed for engraving photo, super smooth vector cutting quality.



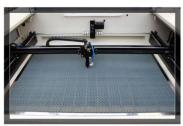
Open flap protection Laser will stop working if you open the front cover.



**Emergency stop** Turn off the machine immediately when there is an accident.



Smart Board Control the exhaust fan,air assist,and alarm lamp automaticly,energy saving.



Honey comb table Allows the laser beam to pass through the material you are cutting and reduces underside reflections.



High quality rails Keep the engraving/cutting precise and very durable.



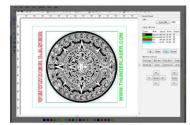
Auto focus Help the user to set the focus Easier. (based on motorized table).



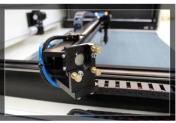
Motorized table Control the table up/down from LCD panel directly.



LCD panel Set speed, power, and more directly from the LCD panel.



Color mapping Change the working speeds and power by using color settings.



**Mirror mount** Easily re-adjusting 3D mirror mounts.



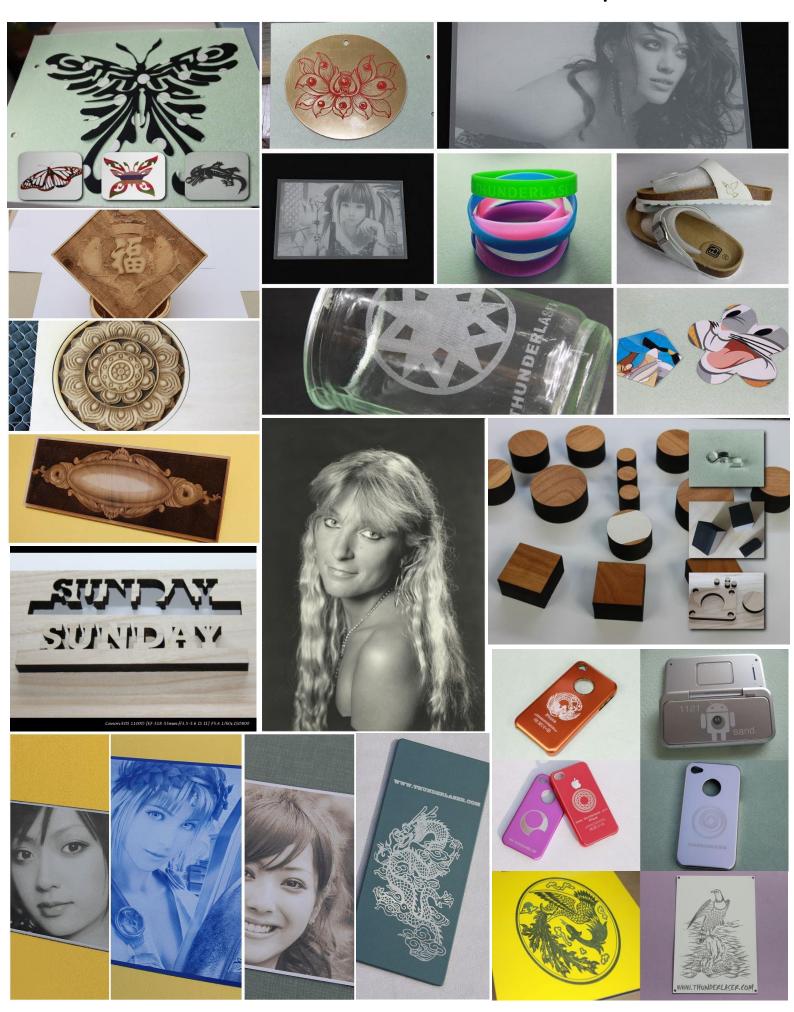
Water protection Laser will stop working if the water cooling system is not working.



**3D engraving** Engrave high quality 3D photos directly.

# Samples

What can you create?



# **Technical Specifications**

**Items** 





HR Head Rotary Axis			
Laser Tube Wattage		100-150Watt	
Laser Type		Sealed Co2 Glass Laser Tube	
Cooling		Water Cooled	
Work Area		1600x1000mm(63.0" x 39.4")	
Max Part Size	Front door closed	1700x1130x270mm(66.9" x 44.5" x10.6")	
(WxLxH)	Pass-through door	1700x∞x30mm(66.9"x ∞"x1.2")	
Table Size		1700x1130mm(66.9" x 44.5")	
Z Axis Height		230mm(9.1")	
Dimensions(WxDxH)		2150x1485x1105mm(84.6" x 58.5" x43.5")	
Motion Control System		High-Speed Servo Motors	
Maximum Speed		1000mm/S(39.4IPS)	
Speed and Power Control		Computer or manually controlled speed and power from 0-100%. Vector color	
(engraving depth)		mapping sets speed and power settings using RGB color mapping.	
Operating Modes		Optimized raster, vector, and combined mode	
Resolution(DPI)		User controlled from 100 to 500DPI(standard laser head), up to 1000 DPI(HR	
		head)	
Computer Interface		Ethernet and USB Connection	
Compatible Operating Systems		Windows XP/2000/Vista/7	
Buffer Memory		128MB Standard	
Display Panel		3" LCD panel showing current file, total working time, laser power, speed etc.	
Net Weight		350kgs(772lbs)	
Electrical Requirements 110 to 240 volts, 50 or		110 to 240 volts, 50 or 60 Hz, single phase	
Ventilation System	Integral exhaust fan. There is 1 output port, 5.7" (145 mm) in diameter in the rear		
	of the case.		
Standard Features		Water chiller CW5000, Servo system, Alarm lamp, Smart board, Auto focus,	
		Red dot pointer, Motorized table, Pass-through Door, Air Assist, Exhaust fan,	
		Honeycomb Table, 2" (50.8 mm) Focus Lens, LCD Display,3D Engraving ,	
		Water protection, Emergency stop, Open cover protection	
Optional Featu			
High Resolution H	Head	Increases the resolution up to 1000DPI	
Rotary Axis	Used to engrave on round items		



Water Chiller

LASER RADIATION -AVOID DIRECT EYE EXPOSURE CLASS 3R LASER PRODUCT LASER DIODE 5mW MAX OUTPUT AT 630~680nm







Company Address: No.197, Hudong Road, Shatian Town, Dongguan City, Guangdong Province, China

Tel: (86)769 82665376 Service Email: sales@thunderlaser.com tech Email:tech@thunderlaser.com

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Tel:(86)769 82665376 Service Email:sales@thunderlaser.com Tech Email:tech@thunderlaser.com Website:www.thunderlaser.com