Nova 14 Elite

Nova 14 Elite Commercial Laser Cutting Machine











Our free standing CNC laser cutter. With the ability to be broken down into two pieces the laser can fit through standard doorways and hallways. The Nova series also features the all-in-one industry leading CleanPack technology. With a built-in water-cooling system, exhaust fan, air assist pump, and more! This CNC laser cutter is perfect for entrepreneurs, whether you run a sign shop, cut materials in high volume, professional home business or a high precision industrial manufacturer.

Description

The Elite Nova series freestanding laser engraver is unique, unlike other products on the market where all of the components are typyically on the exterior, are now inside with our clean pack design.

Brining the high power of a large machine into a compact space. With little space wasted the material bed basically the size of the machine. With the machine on rolling castors you can single handidly push or pull where you please.

This CNC laser cutter is can cut up to .75” wood and has the ability to of scan speeds of up to 2000 mm/sec. Also capable of quality engraving similarly to the Mira series.

Some techy features we are proud to showcase are a red dot pointer built into the laser engraving path making it easy to set your starting position. The autofocus comes in handy when you are adjusting the bed height for a variety of material thicknesses. The front and rear pass through doors

provide the advantage of placing oversized materials on the laser cutter.

Built in rotary plug to utlize rotary lathes, rotary rollers for tumblers etc.

No wiring required, the machine comes with all of the ports and interfaces needed to get the most out of your laser engraver.

PC or Mac via USB, Ethernet or WiFi. The controller has a built in 256 MB of onboard memory for storing repetitive jobs, you can also run programs straight from a USB Flash Drive.

Product Feature



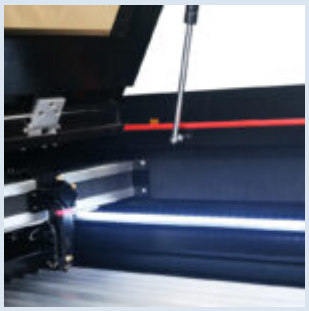
Clean pack design Built-in Water Cooling System, Exhaust Fan and Air Assist Pump



Front to rear passthrough
For those oversized pieces you can push through however long of a piece your heart desires.



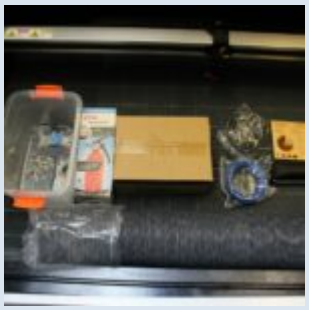
Integrated Auto Focus And Red Pointer
The red dot pointer built into the laser engraving path makes it easy to set your starting position. The autofocus comes in handy when you are adjusting the bed height for a variety of material thicknesses or switching jobs on the fly.



Built in rubber baffles
The laser is designed to clear the working space and protect the components using features such as built in rubber baffles, upper and lower draft table to quickly clear any lingering fumes from the lasers sensitive components. Small fans are also assisting the large blower by directing the airflow and fumes away from the work area. The motion components of the laser are isolated from the work bed limiting exposure to dust and debris. Minimizing the need for maintenance and frequent cleaning.



Integrated Auto Focus And Red Pointer
A highly reliable autofocus head with integrated positioning and autofocusing mechanism built right into the head of the laser.



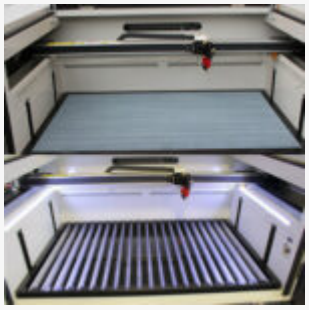
Safety
Equipped with an emergency stop button and a door sensor which stops the laser from cutting and moving if contact is broken.
The glass door is tempered and the built in exhaust works great at removing the fumes from the working area.
The Nova series come with a fire extinguisher and laser safety glasses



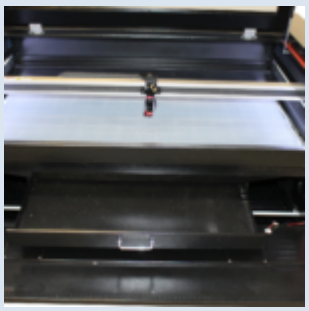
Flexibility built in for upgrades
You have the ability to order a Nova with laser tube wattage ranging from 75w-150w.
Lens options ranging from 1.5-4.0” allowing for a variety of materials and crisp engravings.



Built in Rotary device connector
Built in rotary plug to utlize the PiBurn rotary attachment, rotary lathes and rotary rollers for tumblers.



Two table styles (honeycomb and knife table)
The Mira comes standard with two table types which are honeycomb for extra support and small objects and the aluminum knife table to allow for small cutouts to fall between the knives to clean out later and there is less material surface in contact with your substrate.



Scrap Drawer
Making clean up nice and easy with the integrated scrap drawer. All of your cut pieces now fall into a conveniently located compartment below, which can be easily emptied to prevent scrap pieces from piling up and becoming a fire hazard.



Wifi and communication ports
For easy connectivity allowing you to send files wirelessly and control your machine from your computer.



Rotary Device
These rotary fixtures can be used for various products, from cylindrical and flat to round objects. Whether you are planning to work with mugs or small hardware such as rings, bracelets, Pens, Bearings, etc. It is fast and easy to mount and dismount with a rotary accessory.

Light Burn
LightBurn software works on windows and Macs and is a layout, editing, and control software for your laser cutter. With LightBurn you can:
Import artwork in a variety of common vector graphic and image formats (including AI, PDF, SVG, DXF, PLT, PNG, JPG, GIF, BMP)
Apply settings like power, speed, number of passes, cut order, brightness & contrast, dithering mode, and much more
Send the result directly to your laser cutter



Installed Camera + Mount
Enjoy the benefits of a birds eye view to assist you with confirming where your design will appear by seeing a digital overlay of your design as it would appear on the material and laser path before firing the laser beam. This would ensure accurate placement of your design on the material further reducing material waste and eliminating test cuts.

Physical Features

Specification	MM	INCH
Horizontal Processing Envelope	1400x900mm	55.11 inch x 35.43 inch
Vertical Processing Envelope	200mm	7.87 inch
Fume Port Size	150 mm	5.90 inch
Fume Extractor CFM	Yes	Yes
Chiller (Litre Capacity)	5000/5200 chiller, 7L	5000/5200 chiller, 7L
Centralized Lubrication	No	No
Levelling Castors	Yes	Yes
Machine Footprint	1410*1900*1025mm	1410*1900*1025mm
Electrical Cabinet Size	Internal	Internal
Mira Footprint without stand	1410*1900*1025mm	58.26 inch * 75.78 inch * 44.29 inch
Net Weight	520Kg/1000 pounds	520Kg/1000 pounds
Gross Weight	660Kg/1200 pounds	660Kg/1200 pounds
Crate Size	1570 * 2020 * 1240 mm	61.81 * 79.52 * 48.81 inch

Power

Specification	MM	INCH
Voltage	110V	110V
Optional Voltage		
Power Requirement	1905W (+Laser Tube)	1905W (+Laser Tube)

Laser Power Options (watts)

Specification	MM	INCH
Standard Laser Wattage	75W	75W
Co2 Glass Tube (Option)	75/100/130/150W	75/100/130/150W

Specification	MM	INCH
RF Metal Tube (Option)	RF Tube 30W(air cooling), 40W~100W (water cooled) Davi Laser, 40W~100W Iradion made in USA (Available in NEW NOVAs)	RF Tube 30W(air cooling), 40W~100W (water cooled) Davi Laser, 40W~100W Iradion made in USA (Available in NEW NOVAs)
Ceramic Tube (Option)	40-100W Iradion made in the USA	40-100W Iradion made in the USA
Frequency	10600 nm	10600 nm
Laser Classification	Class 4 laser products, as defined in International Standard IEC 60825-10	Class 4 laser products, as defined in International Standard IEC 60825-10

Performance

Specification	MM	INCH
Positioning Accuracy	<=0.01mm	<=0.00039 inch
Max Scanning Precision	4000 DPI	4000 DPI
AutoFocus	Yes	Yes
Red Dot Positioning	Beam combiner	Beam combiner
Cooling Method Laser Head	External air pump	External air pump
Engraving Speed	1200mm/s	47.24 inch/s
Max Acceleration Speed	1.8G	1.8G
Cutting Thickness	0-30mm (depends on different materials)	0-30mm (depends on different materials)
Minimum Font Size	1.0x1.0mm	0.03 inch x 0.03 inch
Interface	Keypad & LCD display	Keypad & LCD display
Built In Operating System	Yes	Yes
Compatible Operating Systems	Windows & Mac	Windows & Mac
Screen Size	60mm * 110mm	2.4in x 4.35in
Touch Screen	Yes	Yes
Operating System	Ruida Controller	Ruida Controller
Inputs	Rotary, Camera	Rotary, Camera

Specification	MM	INCH
Wifi	Yes	Yes
Operating Temperature	10 to 40°C (50 to 104 F)	10 to 40°C (50 to 104 F)

Optics

Specification	MM	INCH
1.5" Focal Lens	Yes	Yes
2.0" Focal Lens	Yes	Yes
2.5" Focal Lens	Yes	Yes
3.0" Focal Lens	yes	yes
4.0" Focal Lens	Yes	Yes

Material Handeling

Specification	MM	INCH
Flow through Honey comb table	Yes	Yes
Automatic Z table	Yes	Yes
Knife table	Yes	Yes
Material Tray	Yes	Yes

Safety

Specification	MM	INCH
Limit Sensor On Door	Yes	Yes

Software

Specification	MM	INCH
RD Works	Yes	Yes

Specification	MM	INCH
Other Compatible Software	Lightburn / CorelDraw / Photoshop / AutoCAD / All kinds of Embroidery Software	Lightburn / CorelDraw / Photoshop / AutoCAD / All kinds of Embroidery Software
Graphic Format Supported	DSP / PLT / BMP / DXF / AI / DWG	DSP / PLT / BMP / DXF / AI / DWG
Wifi Data Transfer	Yes	Yes
Wifi Control	Yes	Yes