

Lightblade 1490



Laser cutting & engraving made simple & affordable

We have configured the Lightblade range of machines to make laser cutting and engraving a truly great experience. From setup, through usage to after sales support you will find that we do things a little bit differently at thinklaser.

This flexible low cost machine provides both cutting and engraving operations within a laser Class I process environment. The design has created a "Lightblade" which combines high speed processing with high beam placement accuracy resulting in high quality results generated economically.

As with all our machines in our range this version is available with a range of power outputs to suit your specific application, see listing next page.

The following information provides all the technical details you should need, however if we have missed anything then please talk to our very responsive staff who will be happy to help.

The LB range is capable of cutting and engraving a wide range of materials due to the CO2 wavelength of the laser. The list includes acrylic, wood, paper, card, foam, synthetic materials, glass, leather etc. Please consult thinklaser if you have materials not listed here or send examples that we would be happy to evaluate, free of charge.

We have structured our systems to have the following key features included as standard to aid in ease of set-up and productivity;

- Water chiller to keep the laser at optimum working temperature and maximise tube life
- Auto focus for faster job set-up
- Hybrid Stepper Servo X-Y drive motors for improved process accuracy and repeatability
- Lens cleaning kit to keep optics clean
- Full documentation, installation & training, backed up with telephone support



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Technical Information

If any of this information is unclear please contact technical support at Thinklaser who will be happy to answer any questions you may have.

Also included

- 12 months warranty
- Free delivery to UK mainland Site
- Replacement glass laser tube
- 3 focussing lens assemblies



Machine configuration and key feature information.

MODEL NUMBER	LB1490-60	LB1490-80	LB1490-100	LB1490-130	LB1490-150
LASER POWER	60 Watts	80 Watts	100 Watts	130 Watts	150 Watts
LASER TYPE	CO ₂				
WAVELENGTH	10.6 µm				
LASER FORMAT	Sealed Glass Tube (Manufacturer: EFR or RECI)				
COOLING TYPE	Water (Purified)				
CHASSIS DETAILS					
MACHINE SIZE	1860x1310x1110mm				
WEIGHT (NETT)	380kg				
BED SIZE (PROCESS AREA)	1400 x 900 mm (pass through port available, Class 4 laser operation)				
Z-MOTION	250 mm				
MOTION CONTROL					
X-Y STAGE DRIVES	Hybrid-Stepper Servo Drive Motors				
X-Y STAGE MOVEMENT	1400 x 900 mm				
Z STAGE DRIVE	Stepper Drive Motor				
Z STAGE	250 mm				
TARGETING LASER	Class II Red Dot Visible Laser (650nm <1mw output)				
AUTOFOCUS	Included as standard				
PROCESS DETAILS					
POSITIONAL ACCURACY	<0.01 mm				
HIGHEST SCANNING RESOLUTION	2500 dpi				
RECOMMENDED SMALLEST CHAR SIZE	1 mm (material dependant)				
SCANNING SPEED (ENGRAVING)	Up to 600mm/sec. (ultimate speed is material dependant)				
SCANNING SPEED (CUTTING)	Up to 600mm/sec. (ultimate speed is material dependant)				
ENVIRONMENTAL CONDITIONS					
OPERATING POWER	220 ~ 240v / 50 Hz / Typically less than 5 amps				
OPERATING TEMPERATURE	Ambient temperature: 10 - 30 degrees Celsius				
GENERAL ENVIRONMENT	Dust free, clean area with reasonable ventilation				
HUMIDITY	(relative) less than 70%				
WATER COOLING SUPPLY	Closed loop chiller supplied as standard				
AIR ASSIST	Air Pump supplied as standard				
OPERATING DETAILS					
OPERATING SOFTWARE	RD Works: Graphical interface package supplied with machine (PC only)				
COMMUNICATIONS INTERFACE	USB/Ethernet				
COMPATIBLE SOFTWARE	CorelDraw, Photoshop, AutoCAD, LightBurn (PC & MAC)				
SUPPORTED FILE FORMATS	PLT, DXF, BMP, DST, Ai, JPEG, PCX, TIFF, WMF, Vector PDF + more				

