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.

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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.

Machine configuration and key feature information.

Model Number	TKL LB1490-60	TKL LB1490-80	TKL LB1490-100	TKL LB1490-150
Laser power	60 watts	80 watts	100 watts	150 watts
Laser type	CO2			
Wavelength	10.6 um			
Laser format	Sealed laser glass tube			
Cooling type	Water (purified)			
Chassis Details				
Machine size	1860 x 1310 x 1110 mm			
Weight (nett)	380 kg			
Bed size (process area)	1400 x 900 mm			
Z motion	250 mm			
Motion Control				
X-Y stage drives	DC Servo drive motors			
X-Y stage movement	1400 x 900 mm			
Z stage drive	Standard stepper motor drive			
Z stage movement	250 mm			
Targeting laser	Class II Red Dot Visible laser (650 nm 0.4 – 0.5 mw output)			
Autofocus	Included			
Process Details				
Positional accuracy	< 0.01mm			
Highest scanning resolution	2500 dpi			
Recommended smallest character size	1mm height (this is material dependant)			
Scanning speed (engraving).	Up to 1.2 metre/sec. (ultimate speed is material dependant)			
Scanning speed (Cutting).	Up to .75 metres/sec. (ultimate speed is material dependant)			
Environmental Conditions				
Operating power	220- 240v 50 Hz			
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			
Air assist	Air Pump supplied			
Operating Details				
Operating software	Graphical interface package supplied with machine			
Communications interface	USB			
Compatible software	CorelDraw, Photoshop, AutoCAD			
Supported file formats	PLT, DXF, BMP, DST, Ai			