Lightblade 1610

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 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	TKL LB1610-60	TKL LB1610-80	TKL LB1610-100	TKL LB1610-130	TKL LB1610-150
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				
COOLING TYPE	Water (Purified)				
CHASSIS DETAILS					
MACHINE SIZE	2100x1410x1070mm				
WEIGHT (NETT)	390 kg				
BED SIZE (PROCESS AREA)	1600 x 1000 mm				
Z-MOTION	200 mm				
MOTION CONTROL					
X-Y STAGE DRIVES	DC Hybrid-Servo Drive Motors				
X-Y STAGE MOVEMENT	1600 x 1000 mm				
Z STAGE DRIVE	Standard Stepper Motor Drive				
Z STAGE	250 mm				
TARGETING LASER	Class II Red Dot Visible Laser (650nm 0.4 ~ 0.5mw 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 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 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				
COMPATIBLE SOFTWARE	CorelDraw, Photoshop, AutoCAD				
SUPPORTED FILE FORMATS	PLT, DXF, BMP, DST, Ai, JPEG, PCX, TIFF, WMF, Vector PDF + more				