



Laserlyte-Flex Alignment System

premier & acculase modulatable/ machine vision lyte-mv/dragonfly green/
imatronic/laserlyte/**laserlyte-flex**/guideline/hawkeye detector/
firefly green/firefly green mini/thread mountable cameo/15mm blue/
survelase/survelase maxi/beta tx/bluelyte/varilite lc/dca/microblock/
accessories/projection lenses/energy efficient/customised solutions.

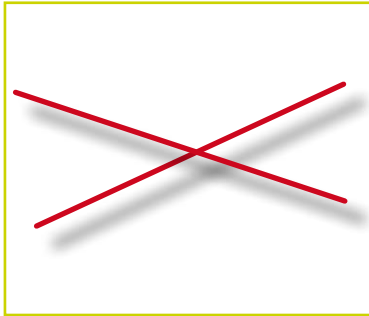
Laserlyte-Flex.

The Laserlyte-Flex Alignment System is a unique, interchangeable, low cost plug and play laser system. Designed specifically for aligning and positioning of garments, cloth, paper, wood and metal. The system has a range of interchangeable projections which convert the base dot laser into a line, cross or line+dot.

A range of intensities are available in order to maximise the visual appearance of the projection even against the darkest materials. The Laserlyte-Flex has a user adjustable focus making it easy to focus over a wide range of distances. Complete with mounting brackets, electrical leads and power supply the system is ready to use with no previous laser experience required.

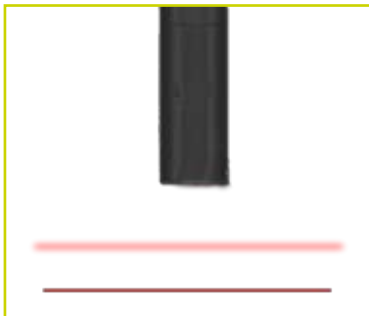


Laserlyte-Flex Features.



Brightness

The Laserlyte-Flex Alignment System is available with a power of 5mW at 650nm and also a more visually intense 635nm.



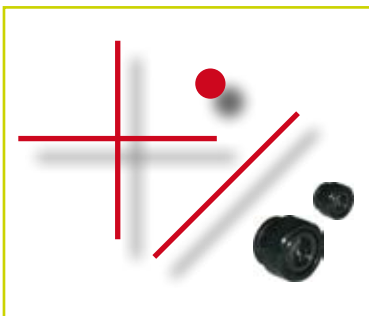
Adjustable Focus Control

The Laserlyte-Flex Alignment System has an adjustable focus control which allows the user to focus the laser at any required distance. A focus key is supplied to enable this.



Plug & Play System

The Laserlyte-Flex Alignment System has been designed so that the user can operate the system efficiently and effectively via simple DC connector jack plugs.



Interchangeable Optics

The Laserlyte-Flex Alignment System has a range of interchangeable lenses that can produce a dot, line, cross or line+dot projection. The projections are simply interchangeable by screwing on and off the appropriate projection holder on the front of the laser.



Mounting

The MK1 mounting kit provides a cost effective mounting solution. The laser clamp rotates horizontally through 360° and vertically through 180° and the mounting post allows vertical movement. The mounting clamp is compatible with Global Laser's mounting brackets and is supplied with two different lengths of machine screws to increase the range of mounting surfaces which can be utilised.



Mounting

The Heavy Duty Clamp has parallel and vertical adjustment which allows the user to aim the laser in any required direction or angle, the robust aluminium construction also assists in conducting heat away from the laser body as well as preventing movement due to shock and vibration. The base plate of the heavy duty clamp has a series of threaded holes to allow the heavy duty clamp to be securely fastened to a stable surface.



Magnetic Base

A Magnetic Base is also available which simply screws in to the base of the Heavy Duty Clamp and allows it to be fitted to a ferrous surface.



Power Supply



















The PS-1 & PS-4 range run on 110-240Vac input via an IEC mains lead (supplied) and have the benefit of a power on LED indicator. An optional key switch allows the power supply output to be switched on/off at the power supply. The PS-1 has one output to power one laser and the PS-4 has four outputs to power four lasers.




12/24 V dc Power Adapter

A 12/24 V dc power adapter allows the laser to be powered from an 11-32 V dc power source; a power on LED is also fitted as standard. All our power supplies are CE marked. A range of cables to connect the laser module to the power supply's are also available, which range in length from 1.5 to 10 metres long.

Model Matrix & Projection.

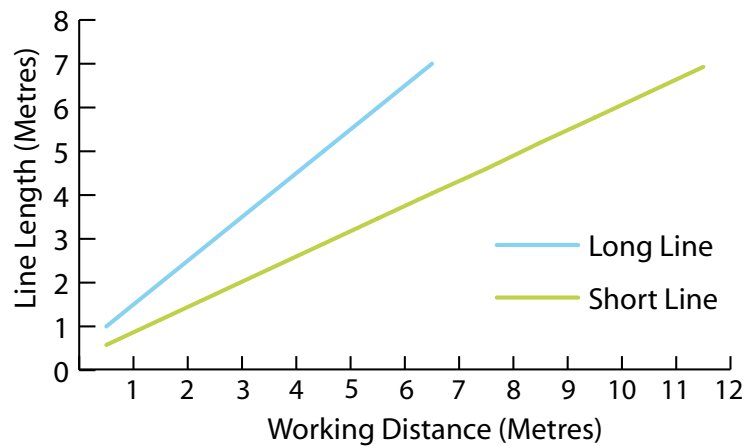
						
	Dot	Short Line Fan Angle 60°	Long Line Fan Angle 90°	Small Cross Fan Angle 9°	Large Cross Fan Angle 60°	Long Line + Dot Fan Angle 100°
Standard Power Red 650nm 5mW						
Bright Power Red 635nm 5mW						

KEY:

 These units project a red output

Line Length Table.

The graph below shows the typical line length achieved at a range of working distances for both the short (60°) and long (90°) line laser.



Specifications.

Mechanical Information	
Dimensions (mm)	15 x 37 (Without line optics) 11 x 42 (With line/cross optics)
Housing	Black Anodised Aluminium
Isolated Body	Yes
Optical Information	
Diode Power (mW)	5
Wavelength (nm)	635 or 650*
Intensity Distribution	
Dot	Gaussian
Short Line	Homogeneous
Long Line	Homogeneous
Small Cross	DOE
Large Cross	Homogeneous
Long Line + Dot	Gaussian
Focus Range	6mm to infinity
Delivery Set Focus	300mm (user adjustable)
Environmental Information	
Operating Case Temperature (°C)	-10 to +45
Storage Temperature (°C)	-10 to +85
Operating Humidity (%RH)	90 (non condensing)
MTTF @ 25°C (hrs)	>25,000*
Electrical Specifications	
Cable Length	1500mm
Connector Type	DC Jack
Reverse Polarity Protection	Yes

NOTES
* Varies with laser model
All specifications are typical @ 25°C

Fan Angle & Working Distance

The size of the fan angle (or spread of the beam) will determine how long the line is. When viewed from the same distance and at 90 degrees to the surface a line with a fan angle of 60 degrees will be longer than a line of 30 degrees. The Laserlyte-Flex can be fitted as standard as standard with line optics with a fan angle of 60 and 90 degrees, cross optics with fan angle of 8 degree and 60 degrees and a line+dot optic with a fan angle of 100 degrees.

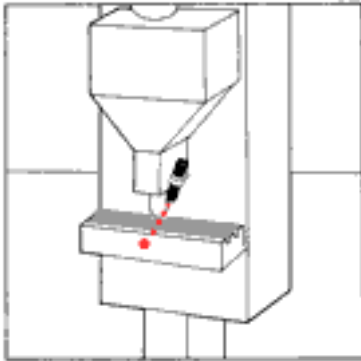
Fan Angle (Degrees)	Distance to Object (mm)	Line Length (mm)
30	100	54
60	100	115

As a guide to relationship between working distance, line length and fan angle please see table below.

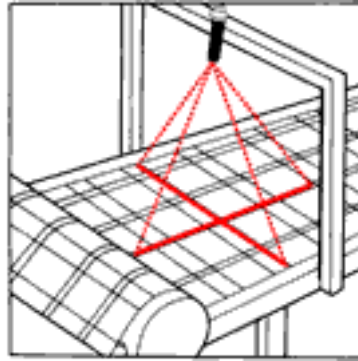
		Fan Angle (Degrees)					
		9°	60°	90°	100°		
Distance From Object (mm)	250	39	289	500	596	Line Length (mm)	
	500	79	577	1000	1192		
	750	118	866	1500	1788		
	1000	157	1155	2000	2384		
	1250	197	1443	2500	2979		
	1500	236	1732	3000	3575		
	1750	275	2021	3500	4171		
	2000	315	2309	4000	4767		
	2250	354	2598	4500	5363		
	2500	394	2887	5000	5959		
	2750	433	3175	5500	6555		
	3000	472	3464	6000	7151		

Laserlyte-Flex Applications.

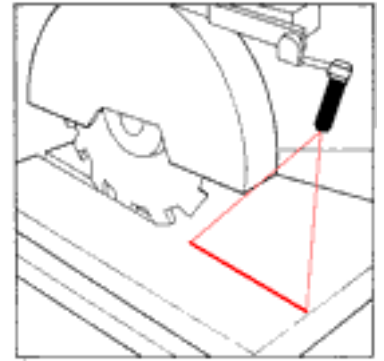
The Laserlyte-Flex Alignment System is suitable for many different applications some of which are below. If you would like to know further information about any other applications please contact your local distributor or contact Global Laser.



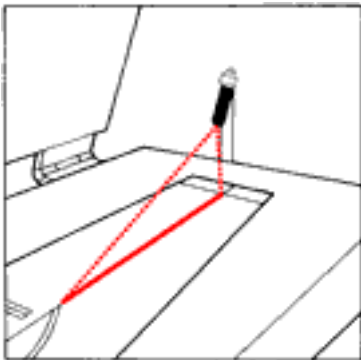
Machine Alignment



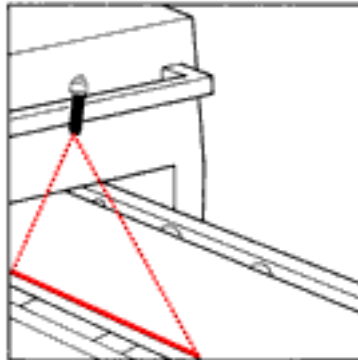
Pattern Alignment



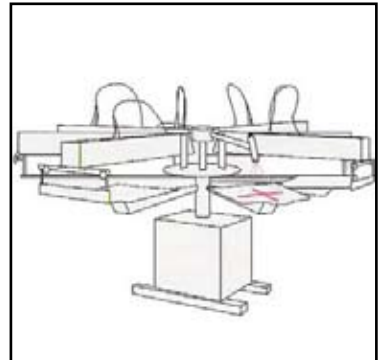
Saw & Cutting Guidance



Positioning



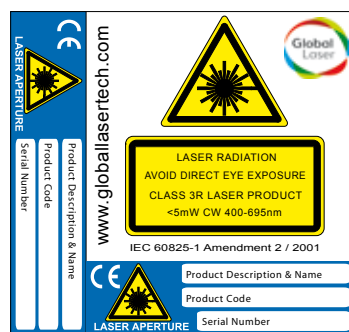
Edge Alignment



Screen Printing

Laser Safety.

Our lasers are compliant to IEC 60825-1 standards. The lasers fall within one of the following classifications depending on power and wavelength.



Class 3R Label

Laserlyte Flex Accessories.

When ordering the Laserlyte-Flex Alignment System the following accessories are included:

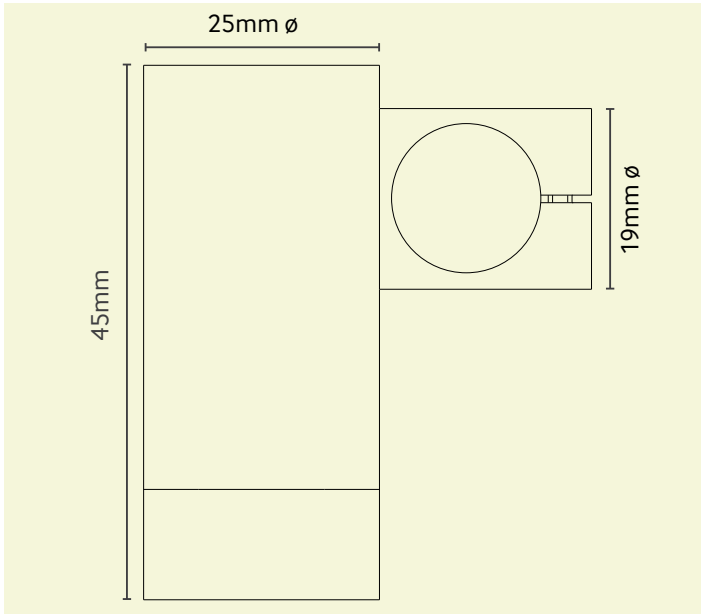
1 off Laser and 1 off focus key. Please note you will need to purchase either a PS-1 (1 way), PS-4 (4 way) or (1 way) 12 / 24Vdc power supply unit separately.

In addition to the above, the following Laserlyte-Flex accessories can be purchased to complement the range.

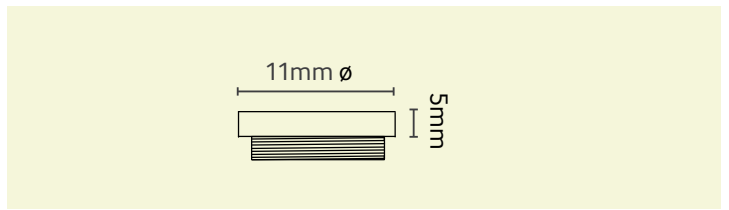
Mounting Accessories		
<p>Heavy duty mounting clamp with optional Magnetic base</p>	<p>Heavy duty mounting clamp for the Laserlyte-Flex alignment system.</p> <p>The magnetic base allows the heavy duty mounting clamp to be magnetically attached to a ferrous surface.</p>	
<p>MK1 Ball joint mount</p>	<p>Simple, cost effective mounting kit.</p>	
<p>Brackets</p>	<p>Brackets are available with holes at regular Intervals.</p> <p>B12 - 30cm/12" B6 - 15cm/6" B4 - 10cm/4" B2 - right angled 10cm/4" BS - one of each</p>	
Electrical Options		
<p>Power Supplies</p>	<p>PS-1 for 1 laser (110/240 Vac) PS-4 for up to 4 lasers (110/240 Vac) 12/24 Vdc for 1 laser (12/24 Vdc) Please state which IEC lead you require when ordering (UK, Euro or US) and if you require a model fitted with a key switch (PS-1 and PS-4 only).</p>	
<p>Extension Power Leads</p>	<p>Extension Power leads are available in the following lengths:</p> <p>1.5m, 3m, 5m, 10m</p> <p>Custom lengths are available upon request.</p>	

Mechanical Drawings.

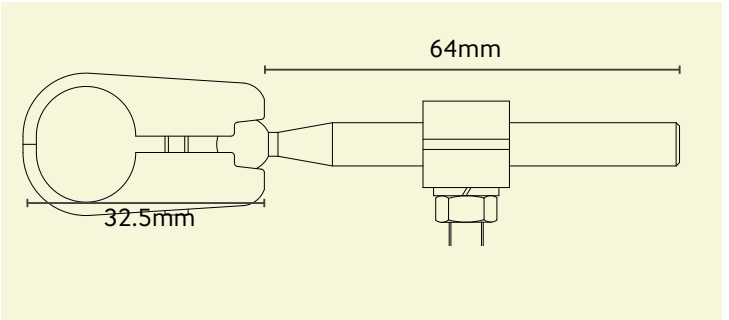
Heavy Duty Mounting Clamp



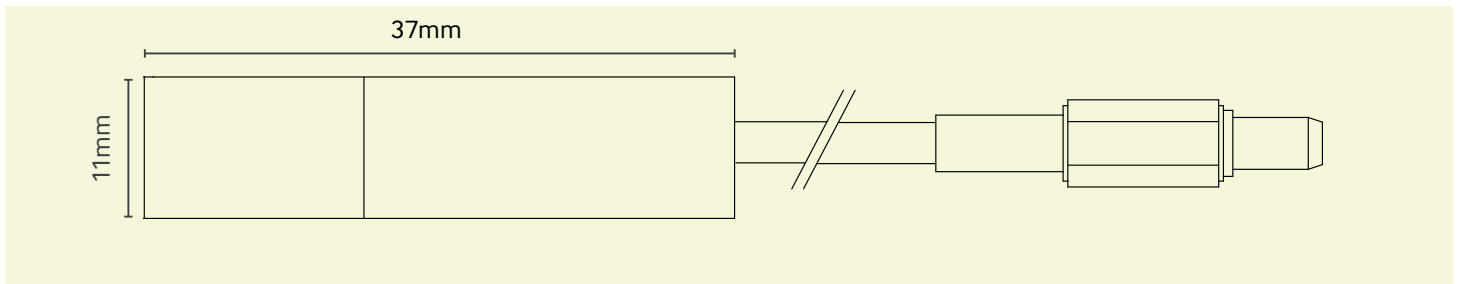
Line/Cross Optics



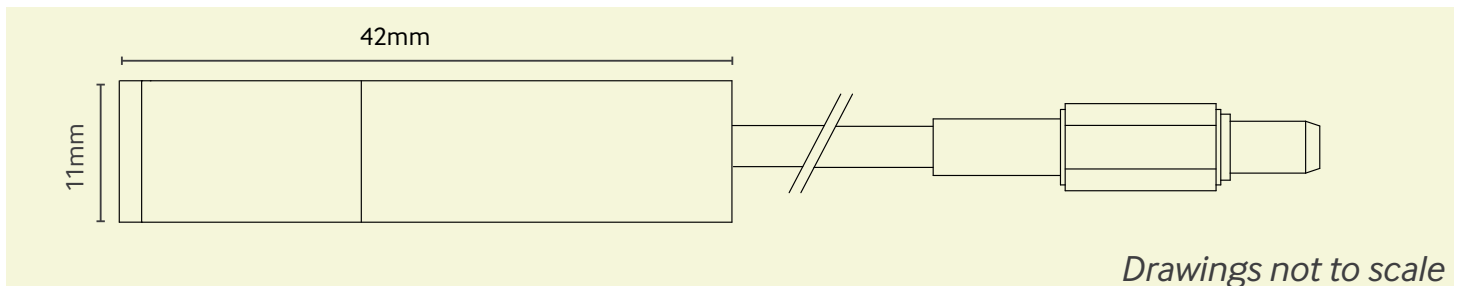
MK1 - Mounting Kit



Laserlyte-Flex Without Line/Cross Optics



Laserlyte-Flex With Line/Cross Optics



Drawings not to scale

Please Note: Global Laser reserve the right to change descriptions and specifications without notice.



For further information about any of our products please contact your local distributor or you can contact Global Laser in the UK. Your Local Distributor Is:

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