

LASERLYTE Alignment System

Features

Plug and play system

Available in red and green outputs

Wide range of projections including

- 90° cross from any mounting position
- User adjustable line length (V range)
- Variable intensity dot (V range)
- Line + dot

User adjustable focus control

110 / 240 Vac & 24Vdc powered

Wide range of mounting options and accessories

No technical laser experience required

Applications

Garment manufacturing

Screen printing

Tyre manufacturing

Saw cutting

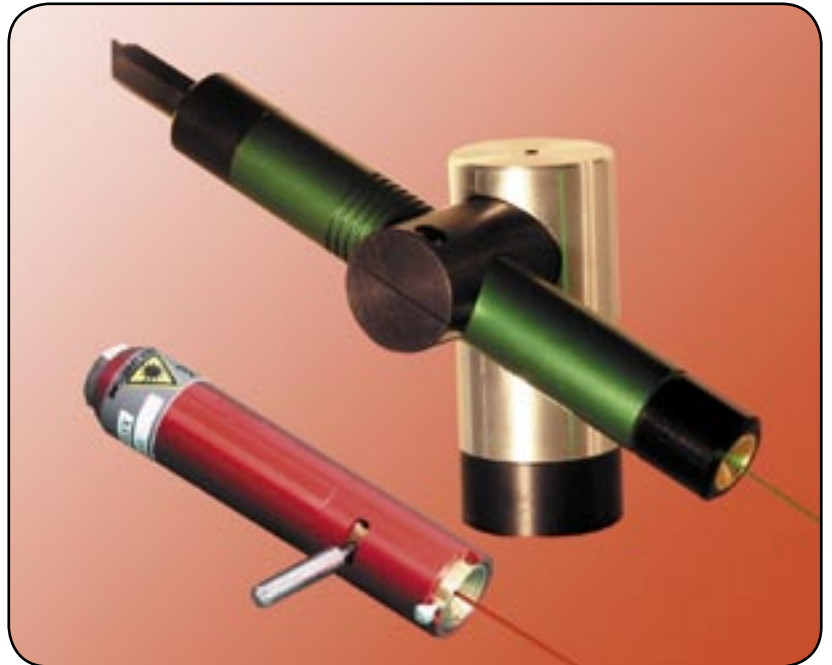
Fabric cutting

Patient positioning

Rotary press alignment

Glass cutting and drill positioning

Graphics alignment

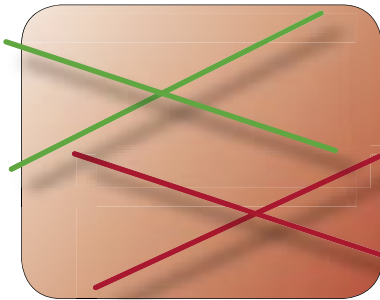


The Laserlyte alignment system is a unique, user adjustable, plug and play laser system suitable for a wide range of applications including alignment and positioning of materials including garments, cloth, paper, wood and metal.

The system has a wide range of projections including variable intensity dot, adjustable line and variable intersecting angle cross. A wide range of colours and intensities are available in order to maximise the visual appearance of the projection even against the darkest materials. The simple and user friendly design allows user adjustable focus at 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.

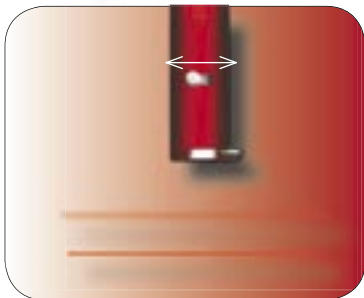


THE LASERLYTE ALIGNMENT SYSTEMS FEATURES



MULTIPLE PROJECTIONS AND BRIGHTNESS

The LaserLyte alignment system has various power and wavelength outputs from the GreenLyte range (532nm, 5mW) to the V red range (635nm, 15mW). Each one of the ranges have different projections from dots to variable intersecting crosses. For a guide on brightness and projections refer to the chart on page 3.



ADJUSTABLE FOCUS CONTROL

The LaserLyte system has a user adjustable focus control which allows the user to focus the laser at any required distance. A focus key is supplied to enable this.



PLUG AND PLAY SYSTEM

The LaserLyte system was designed to ensure the user can achieve their results, as efficiently and effectively as possible via simple DC connector jack plugs.



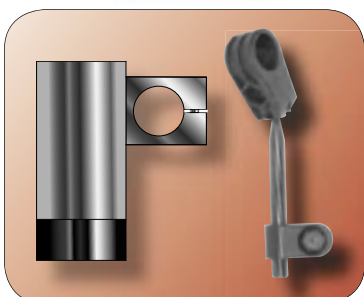
UNIVERSAL POWER SUPPLY

The LaserLyte system has been designed to work with its own universal power supply which runs on 110 - 240Vac. The power supply is available as either a 1 outlet unit to power one laser (PS-1) or as a 4 outlet version which can power up to four lasers (PS-4). Please note the Green range can only be operated from the PS-1 power supply. A 12/24Vdc power adaptor is also available that allows the Laserlyte to be run directly on a machine power source.



ADJUSTABLE PROJECTIONS



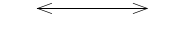

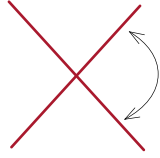













The wide range of Laserlyte modules feature an adjustable projection control, this allows you to vary the intensity of the dot, vary the length of the line and adjust the intersection angle of the cross to produce a 90° cross at any mounted position.





MOUNTING

The LaserLyte system has two types of mounts, the MK1 mount for the V red range of lasers which rotates on a ball headed rod of 64 mm in length and an optional heavy duty mounting clamp which allows the lasers to be securely fixed at any required direction or angle. *(MK-1 is included with the v red range but the heavy duty version may be purchased as an optional extra. In the case of the Greenlyte range the heavy duty clamp is standard)*

MODEL MATRIX AND PROJECTION OPTIONS

					
	Dot (D)	Dot With Variable Intensity (DVI)	Variable Length Line (VLL)	Long Line With Dot (LL+D)	Rotating Axis Crossed Lines (RXL)
V5 Range 650nm 5mW					
V3 Range 635nm 5mW					
V2 Range 635nm 10mW					
V1 Range 635nm 15mW					
Greenlyte Range 532nm 5mW					

KEY:

-  These units project a red output
-  These units project a green output

V5 Range	Standard Power Red
V3 Range	Bright Power Red
V2 Range	Super Bright Red
V1 Range	Ultra Bright Red
Greenlyte Range	Vivid bright Green

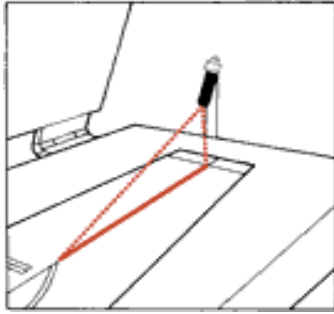
LINE LENGTH TABLE

If you require a variable line please look at the table below to work out which laser you require to give you the correct line at a specified distance. If you require a line projection from further distance than specified below you will need to use the Greenlyte range which produces a high visibility green line. *(The Greenlyte range of lines are not variable in length)*

		Line length required (meters)															
		0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5
Distance from object (meters)	0.5		V5VLL	V5VLL													
	1.0		V5VLL	V5VLL	V5VLL												
	1.5		V5VLL	V5VLL	V3VLL	V3VLL	V3VLL	V3VLL	V3VLL								
	2.0		V3VLL	V3VLL	V3VLL	V3VLL	V3VLL	V3VLL	V3VLL	V3VLL							
	2.5		V3VLL	V3VLL	V3VLL	V3VLL	V3VLL	V3VLL	V3VLL	V3VLL	V2VLL	V2VLL					
	3.0		V3VLL	V3VLL	V3VLL	V3VLL	V3VLL	V3VLL	V3VLL	V3VLL	V2VLL	V2VLL	V2VLL	V2VLL	V1VLL		
	3.5		V3VLL	V3VLL	V3VLL	V3VLL	V2VLL	V2VLL	V2VLL	V2VLL	V2VLL	V2VLL	V2VLL	V1VLL	V1VLL	V1VLL	
	4.0		V2VLL	V2VLL	V2VLL	V2VLL	V2VLL	V2VLL	V2VLL	V2VLL	V2VLL	V2VLL	V1VLL	V1VLL	V1VLL		
	4.5		V2VLL	V2VLL	V2VLL	V2VLL	V2VLL	V2VLL	V1VLL	V1VLL	V1VLL	V1VLL	V1VLL	V1VLL			
	5.0		V1VLL	V1VLL	V1VLL	V1VLL	V1VLL	V1VLL	V1VLL	V1VLL	V1VLL						
	5.5		V1VLL	V1VLL	V1VLL	V1VLL	V1VLL										
	6.0																

LASERLYTE APPLICATIONS

The Laserlyte alignment system has many applications some of which are below. If you would like to know further information about any other applications please either contact your local distributor or contact Global Laser via the details on page 7.

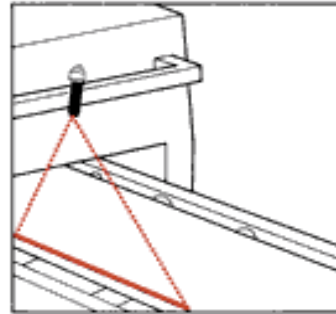


EDGE ALIGNMENT

For edging alignment and positioning of material on floatation tables.

Recommended LaserLyte product:

V3 Series (Variable Line Projection V3VLL)

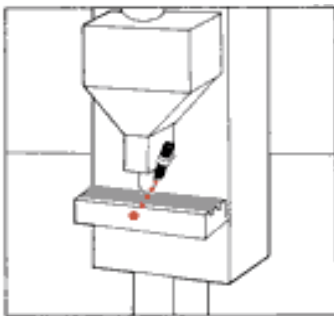


GARMENT POSITIONING

For positioning of garments for pressing or heat sealing of motifs or embroidery

Recommended LaserLyte product:

V3 Series (Variable Line Projection V3VLL)

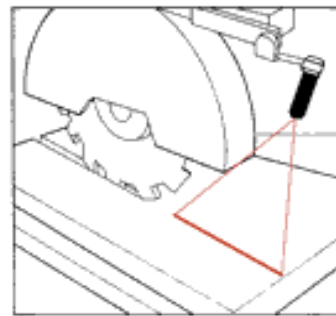


MACHINE ALIGNMENT

On snap, or rivet machines

Recommended LaserLyte product:

V5 Series (Dot Projection V5D)

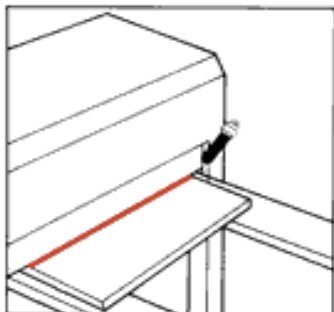


CUTTING GUIDANCE

Saw and blade guidance

Recommended LaserLyte product:

V3 Series (Variable Line Projection V3VLL)

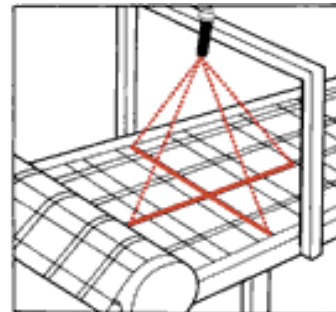


WELDING & SCREEN PRINTING

On RF or HF welding machines, screen printing equipment or guillotines.

Recommended LaserLyte product:

V3 Series (Variable Line Projection V3VLL)



PATTERN ALIGNMENT

For pattern matching, material inspection and fabric spreading.

Recommended LaserLyte product:

V3 Series (Variable Cross Projection V3RXL)

LASERLYTE ACCESSORIES

The following accessories are included with the complete LaserLyte system:

V Red range: 1 off Laser, 1 off MK-1 mounting clamp, 1 off 1.5 metre electrical lead and 1 off focus key. Please note the V red range you will need to purchase a PS-1 (1 way), PS-4 (4 way) or (1 way) 12 / 24Vdc power supply separately.

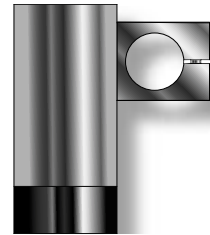
Greenlyte range: 1 off Laser (which produces all projections listed on page 3), 1 off heavy duty clamp, 1 off focus key, 1 off 3 metre electrical lead, 1 off PS-1 power supply and plug.

In addition to the above, the following LaserLyte accessories can be purchased to complement the range.

Mounting Accessories

Heavy duty mounting clamp

Heavy duty mounting clamp allows the Laserlyte alignment system to be securely fixed at any required direction or angle. The base plate has a series of threaded holes which allows the clamp to be fixed directly onto a machine or workbench. (Two versions are available one for the V range and one for the Greenlyte Range)



Brackets

Brackets are available with holes at regular intervals.
B12 - 30cm/12"
B6 - 15cm/6"
B4 - 10cm/4"
B2 - right angled 10cm/4"
BS - one of each



Power Options

Power Supply

PS-1 for 1 laser
PS-4 for up to 4 lasers
24Vdc for 1 laser

3 power supplies are available. The PS-1 & PS-4 power supplies comply with the legal requirements of LED on/off indicator. Both are fully Radio and High Frequency protected as is the rest of the system.



Power Leads

Power leads are available in the following lengths:
1.5m, 3m, 5m, 10m



TECHNICAL INFORMATION

MECHANICAL SPECIFICATIONS

	V Range	Greenlyte Range
Dimensions	14 mm dia x 69 mm	17 mm dia x 128 mm
Housing	Red anodized aluminium	Green anodized aluminium
Isolated body	No	Yes

OPTICAL SPECIFICATIONS

Beam power	1mW to 15mW *	5mW
Wavelength	650 - 635nm *	532nm
Intensity distribution	Gaussian	Gaussian
Focus range	6mm to infinity	500mm to infinity (150mm without line or cross optics)
Warm up time to 75% of full power	< 1 second	<30 seconds
Delivery Set Focus	300 mm (user adjustable)	300 mm (user adjustable)

ENVIRONMENTAL SPECIFICATIONS

Operating temperature	5°C to +40°C	5°C to +35°C
Storage temp	-10°C to +85°C	-10°C to +85°C
Operating humidity (%RH)	90	90
MTTF at 25°C	25,000 hours	5,000 hours

ELECTRICAL SPECIFICATIONS

Connector type	DC Power jack	DC Power Jack
Reverse - polarity protection	Yes	Yes

* = *Varies with model*

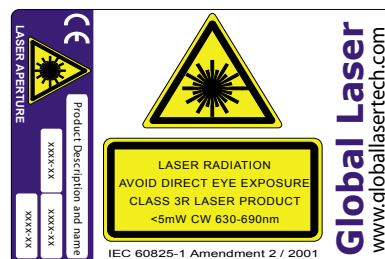
Specifications are typical at 25°C unless otherwise stated

LASER SAFETY

Our lasers are compliant to IEC 60825-1 standards. The lasers fall within one of the following classifications depending on power, wavelength and fan angle. The labels supplied with the units are shown below.



Class 2 Laser Label



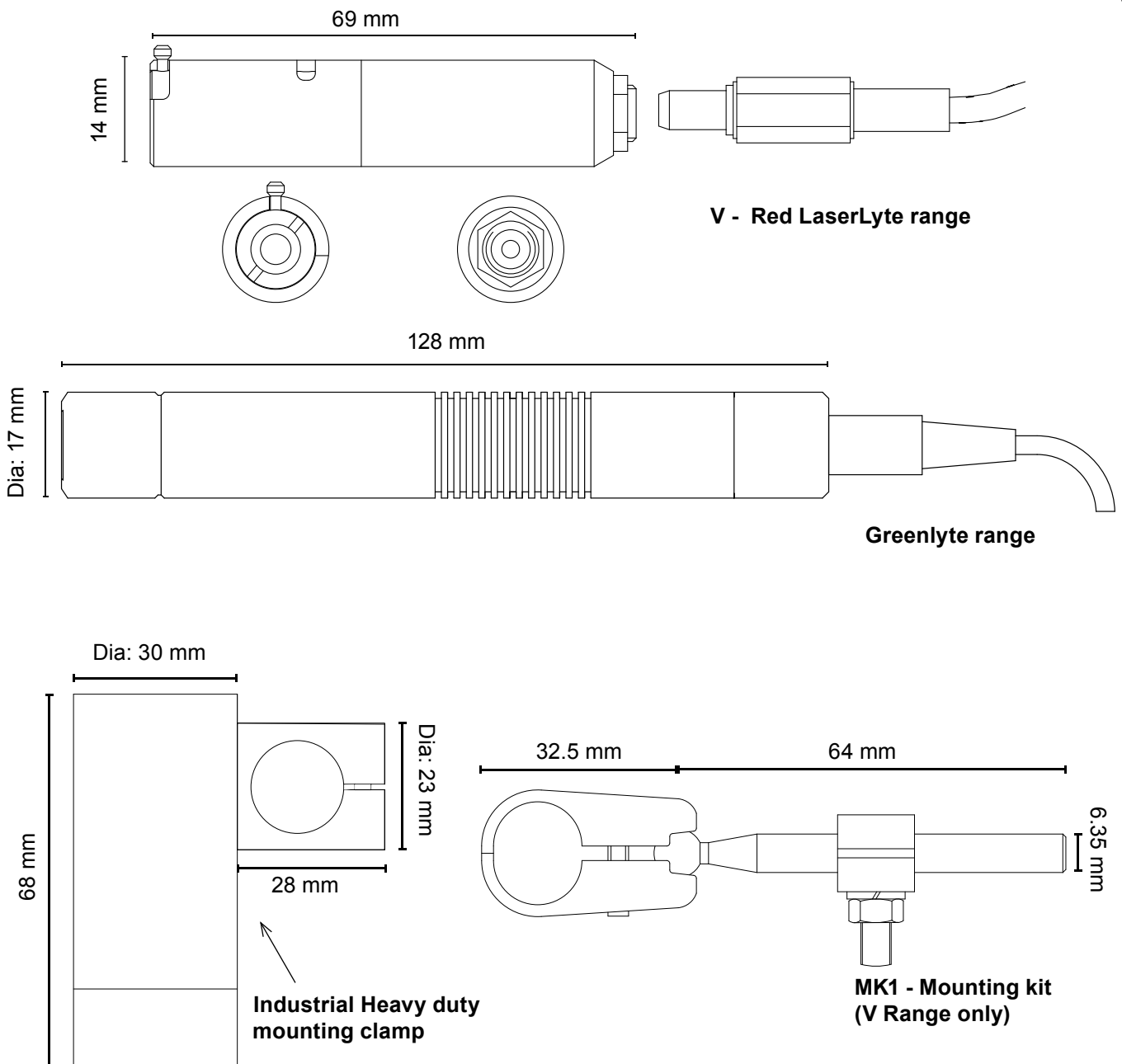
Class 3R Laser Label

QUALITY & WARRANTY

The LaserLyte is supplied with a 12 month parts and labour warranty. Our manufacturing operations are certified to ISO9001.



DIMENSIONS



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



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For further information about the Laserlyte you can contact your local distributor or you can contact Global Laser in the UK.

Your Local Distributor Is: