

## User Guide

LED Ringlight for the  
Lynx Stereo Dynascopic Microscope



## LED ringlight for the Lynx stereo dynascopic microscope

Vision Engineering manufacture a wide range of patented optical systems, offering fatigue-free viewing with superb hand/eye co-ordination, for improved quality and productivity.

The LED ringlight, which can be used with substage illumination, provides above stage illumination and is used for illuminating surface features, blind holes, etc.

The LED ringlight surface illuminator is an accessory for the Lynx stereo dynascopic microscope. The Lynx utilises Vision Engineering's patented Dynascope technology, offering the user advanced ergonomics by removing the need for restrictive eyepieces.

Lynx is used in a wide range of industry applications including general manufacturing, medical devices, electronics, precision engineering, plastics and rubber. The multiple accessories available for the Lynx enable a wide variety of tasks including inspection, manipulation, assembly, dissection, soldering, polishing, finishing and measurement.

## Health & Safety



Vision Engineering and its products conforms to the requirements of the EC Directives on Waste Electrical and Electronic Equipment (WEEE) and Restriction of Hazardous Substances (RoHS).

## Compliance statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has also been tested and found to comply with the requirements of EN61326 (Class A) and IEC60950.



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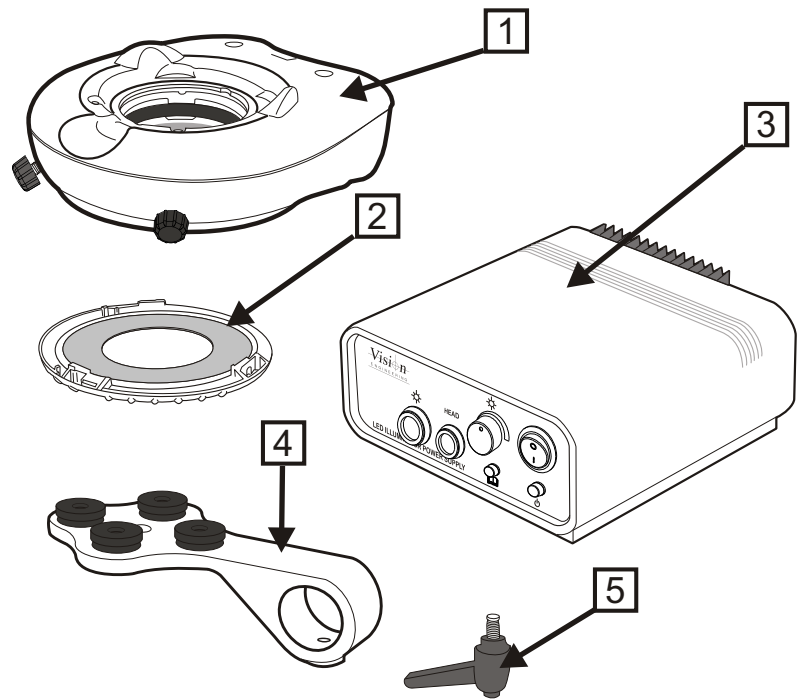
## WARRANTY

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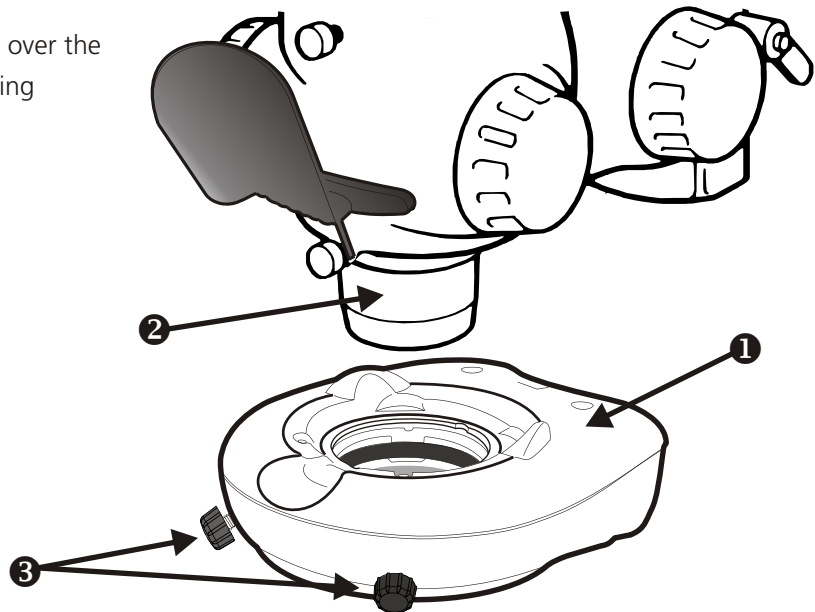
## LED Ringlight

- 1** LED ringlight
- 2** Converging lens (optional)
- 3** Control box / power supply
- 4** Control box support arm  
(optional - boom mount only)
- 5** Locking handle
- 6** Mains lead  
(not shown)
- 7** Ringlight cable  
(not shown)



## LED ringlight attachment

- ▶ Place the LED ringlight **1** into position over the objective lens **2** and tighten the securing screws **3**.

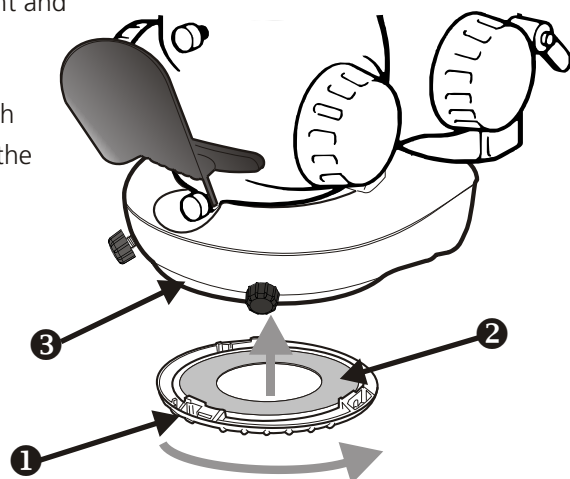


## Converging lens

The objective lens being used determines the required ringlight and converging lens combination (see table below).

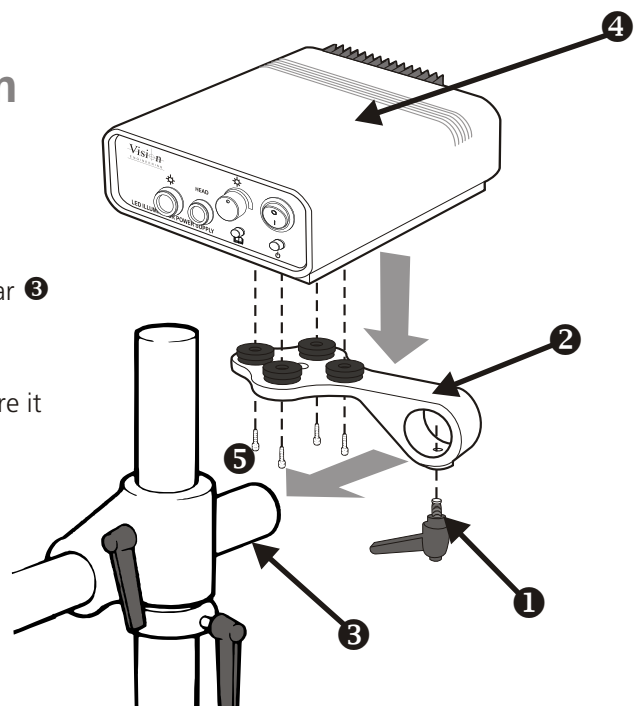
- ▶ Align the marker arrow **1** on the converging lens **2** with the marker **3** on the LED ringlight and twist the lens to the right until it clicks into place.

Objective	0.5	0.7	1.0	1.5	2.0
Ringlight	LWD Red	LWD Red	SWD Blue	SWD Blue	SWD Blue
Red converging lens	■	—	—	—	—
Blue converging lens	—	—	—	■	■



## Control box support arm (boom mount only)

- ▶ Locate the locking handle **1** into the support arm **2**.
- ▶ Slide the control box support arm on to the horizontal bar **3** and secure it with the locking handle.
- ▶ Place the control box **4** on to the support arm and secure it with the 4 screws **5** (supplied).

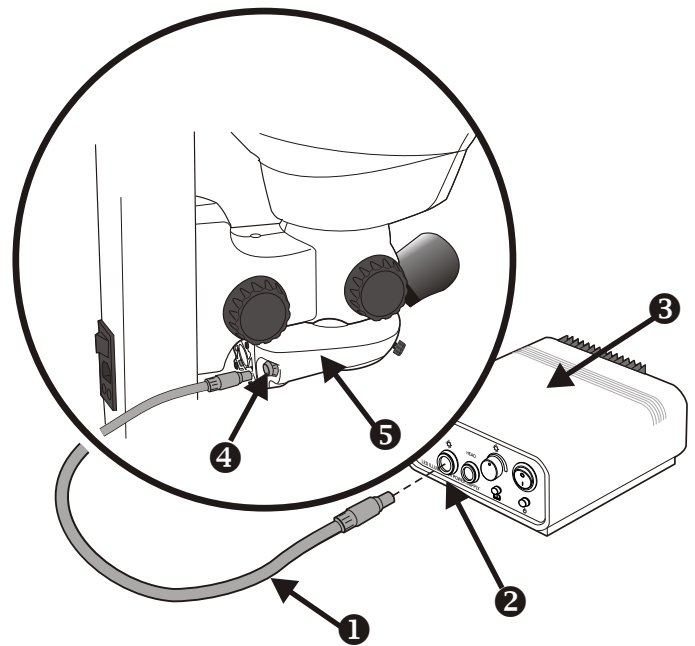




## Cable connection

### Attaching the LED ringlight cable

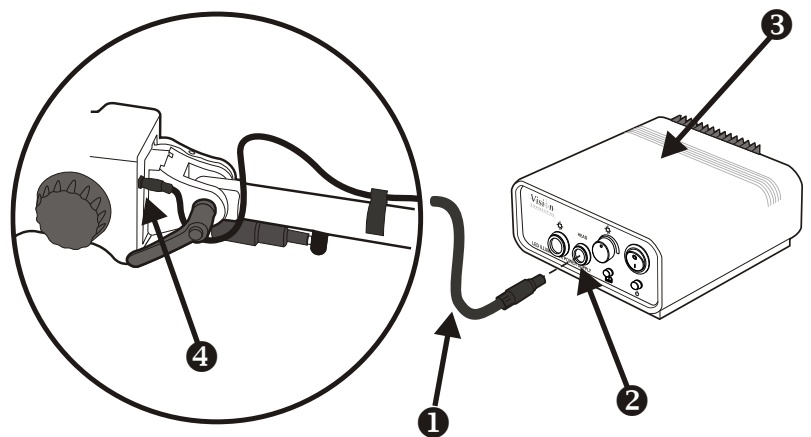
- ▶ Connect the LED ringlight cable **1** to the illuminator socket **2** on the front of the control box **3**.
- ▶ Connect the other end of the cable to the connector **4** on the rear of the LED ringlight **5**.



### Zoom/focus assembly power cable

**Note:** *This procedure is for the boom mount only.*

- ▶ Connect the head power cable **1** to the head connector socket **2** on the front of the control box **3**. Connect the other end of the cable to the head power input connector **4**.



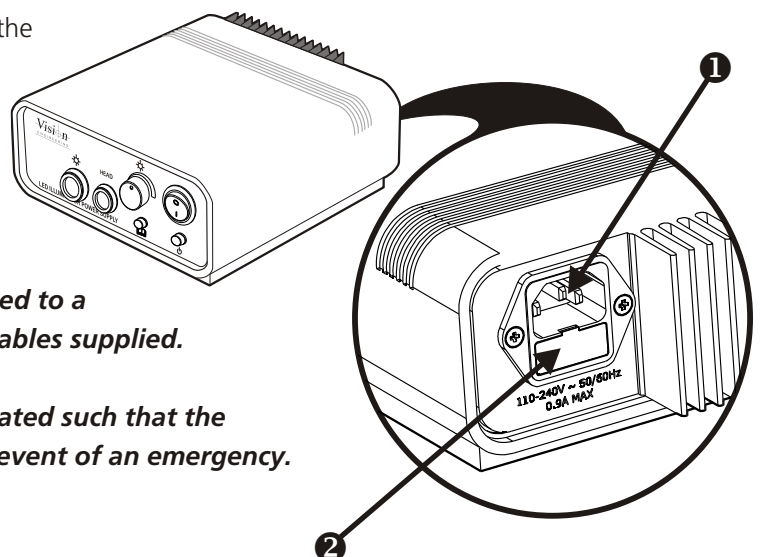
### Mains connection

The mains input connector is located on the rear of the control box and is comprised of the input socket **1**, and fuse **2**.

**Notes:** *If replacing, ensure the correct fuse is fitted for your supply voltage.*

*Mains cables should only be connected to a supply that has an earth, using the cables supplied.*






*The power supply unit should be located such that the mains lead can be unplugged in the event of an emergency.*



## Control box

### Icons

The icons on the front panel of the control box symbolise the following:

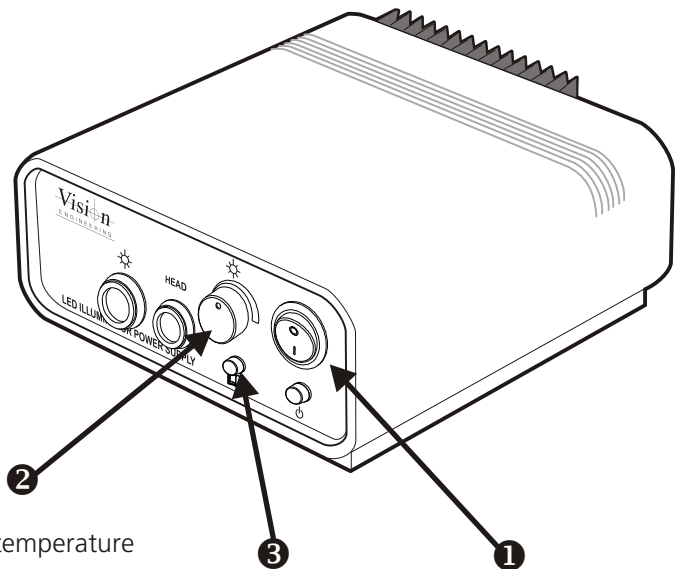
-  On/Off switch
-  Power on indicator
-  Illuminator intensity control
-  Ringlight connection point
-  Refer to manual

**HEAD** Power for viewing unit (boom mount only)

### Controls

The LED ringlight, which can be used with substage illumination, provides above stage illumination and is used for illuminating surface features, blind holes, etc.

- ▶ Switch the unit on **1** and adjust intensity by rotating the dimmer control **2**.
- ▶ The LED illuminator is provided with a temperature protection system **3** to ensure long term LED performance is not compromised by overheating.
- ▶ If the temperature protection indicator illuminates, the power to the LED's will gradually reduce until the temperature stabilises. If the indicator remains illuminated, remove the illuminator and ensure neither the air inlet around the objective, nor the fan outlet are obstructed.



## LED illuminator specification

The LED illuminator unit has an integral power supply with the following specification:

**Input voltage:** 110 to 240v ~ 50/60Hz 0.9A max

**Fuse rating:** 110v 1.0A anti-surge type T1ALH250V  
230v 0.5A anti-surge type T1ALH250V

The fuse is located in the IEC mains connector on the rear of the control box (see page 3).



## **WARRANTY**

This product is warranted to be free from defects in material and workmanship for a period of one year from the date of invoice to the original purchaser.

If during the warranty period the product is found to be defective, it will be repaired or replaced at facilities of Vision Engineering or elsewhere, all at the option of Vision Engineering. However, Vision Engineering reserves the right to refund the purchase price if it is unable to provide replacement, and repair is not commercially practicable or cannot be timely made. Parts not of Vision Engineering manufacture carry only the warranty of their manufacturer. Expendable components such as fuses carry no warranty.

This warranty does not cover damage in transit, damage caused by misuse, neglect, or carelessness, or damage resulting from either improper servicing or modification by other than Vision Engineering approved service personnel. Further, this warranty does not cover any routine maintenance work on the product described in the user guide or any minor maintenance work which is reasonably expected to be performed by the purchaser.

No responsibility is assumed for unsatisfactory operating performance due to environmental conditions such as humidity, dust, corrosive chemicals, deposition of oil or other foreign matter, spillage, or other conditions beyond the control of Vision Engineering.

Except as stated herein, Vision Engineering makes no other warranties, express or implied by law, whether for resale, fitness for a particular purpose or otherwise. Further, Vision Engineering shall not under any circumstances be liable for incidental, consequential or other damages.

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Vision Engineering Ltd.  
**(Manufacturing)**  
Send Road, Send, Woking,  
Surrey, GU23 7ER, England  
Tel: +44 (0) 1483 248300  
Fax: +44 (0) 1483 223297  
Email: generalinfo@visioneng.com

Vision Engineering Inc.  
**(Manufacturing & Commercial)**  
570 Danbury Road, New Milford,  
CT 06776 USA  
Tel: +1 (860) 355 3776  
Fax: +1 (860) 355 0712  
Email: info@visioneng.com

Vision Engineering Ltd.  
**(Central Europe)**  
Anton-Pendele-Str. 3,  
D-82275, Emmering, Germany  
Tel: +49 (0) 8141 40167-0  
Fax: +49 (0) 8141 40167-55  
Email: info@visioneng.de

Vision Engineering Ltd.  
**(France)**  
1 Rue de Terre Neuve, ZA Courtaboeuf,  
91967 Les Ulis Cedex, France  
Tel: +33 (0) 164 46 90 82  
Fax: +33 (0) 164 46 31 54  
Email: info@visioneng.fr

Vision Engineering Ltd.  
**(Commercial)**  
Monument House, Monument Way West,  
Woking, Surrey, GU21 5EN, England  
Tel: +44 (0) 1483 248300  
Fax: +44 (0) 1483 248301  
Email: generalinfo@visioneng.com

Vision Engineering Inc.  
**(Commercial West Coast USA)**  
745 West Taft Avenue, Orange,  
CA 92865 USA  
Tel: +1 (714) 974 6966  
Fax: +1 (714) 974 7266  
Email: info@visioneng.com

Nippon Vision Engineering  
**(Japan)**  
272-2 Saedo-cho, Tsuduki-ku,  
Yokohama-shi, 224-0054, Japan  
Tel: +81 (0) 45 935 1117  
Fax: +81 (0) 45 935 1177  
Email: info@visioneng.jp

Vision Engineering Ltd Italia  
**(Italy)**  
Via Cesare Cantù, 9  
20092 Cinisello Balsamo MI, Italy  
Tel: +39 02 6129 3518  
Fax: +39 02 6129 3526  
Email: info@visioneng.it

Vision Engineering Ltd  
**(China)**  
11J, International Ocean Building,  
720 Pudong Avenue, Shanghai,  
200120, P.R. China  
Tel: +86 (0) 21 5036 7556  
Fax: +86 (0) 21 5036 7559  
Email: info@visioneng.com.cn

Vision Engineering  
**(India)**  
Tel: +91 (022) 2613 0699  
Fax: +91 (022) 2610 3845  
Email: info@visioneng.co.in

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