

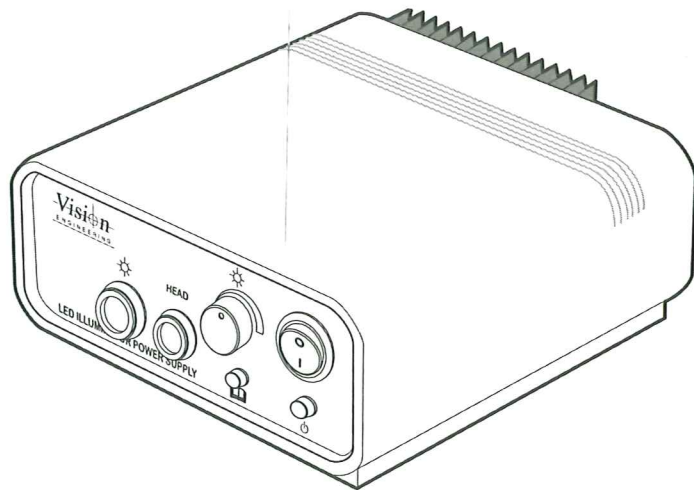
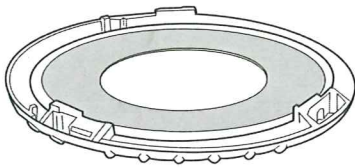
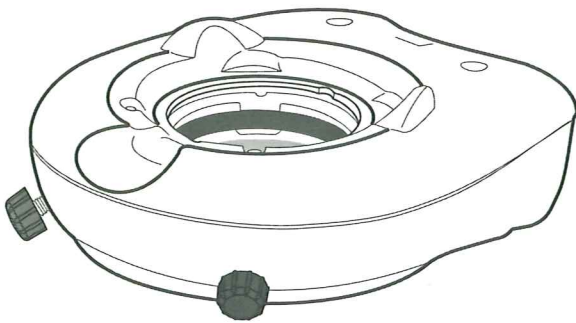
ryf ag



Ryf AG  
Bettlachstrasse 2  
2540 Grenchen  
tel 032 654 21 00  
fax 032 654 21 09

[www.ryfag.ch](http://www.ryfag.ch)

*Vision*  
ENGINEERING



L Y N X®

## User Guide

LED Ringlight for the  
Lynx Stereo Dynascopic Microscope

### LED ringlight for the Lynx stereo dynascopic microscope

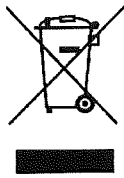
Vision Engineering manufacture a wide range of patented optical systems, offering fatigue-free viewing with superb hand/eye co-ordination, for improved quality and productivity.

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.

## PACKING CONTENTS

---

LED Ringlight	1
---------------	---

## ASSEMBLY

---

LED ringlight attachment	2
Converging lens	2
Control box support arm (boom mount only)	2
Cable connection	3
Attaching the LED ringlight cable	3
Zoom/focus assembly power cable	3
Mains connection	3

## OPERATION

---

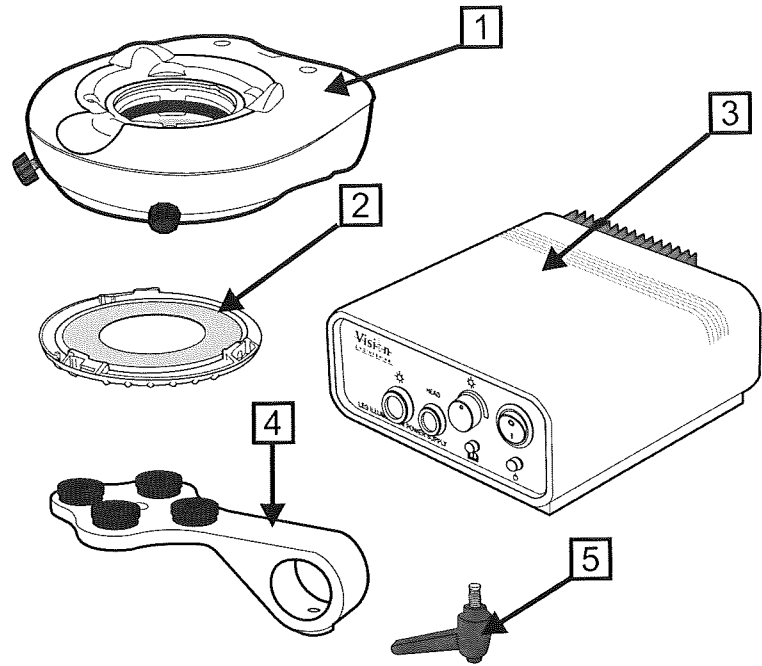
Control box	4
Icons	4
Controls	4
LED illuminator specification	4

## WARRANTY

---

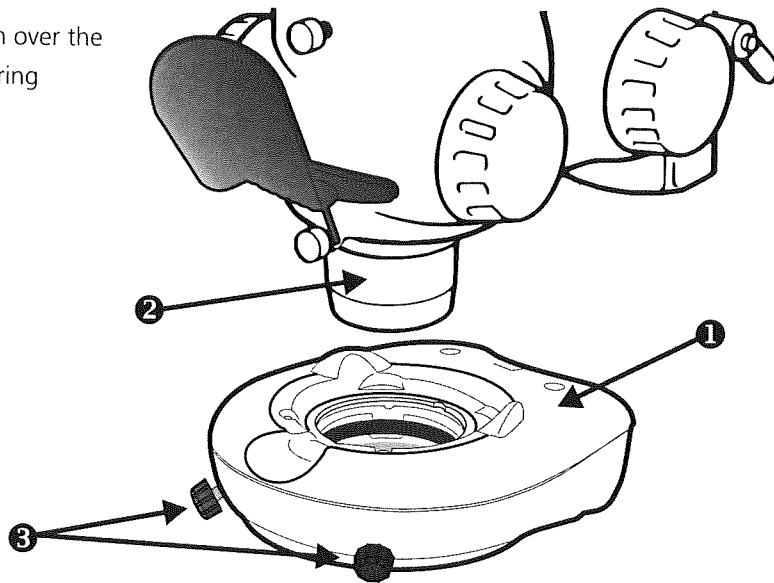
## LED Ringlight

- 1 LED ringlight
- 2 Converging lens (optional)
- 3 Control box / power supply
- 4 Control box support arm  
(boom stand 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**.

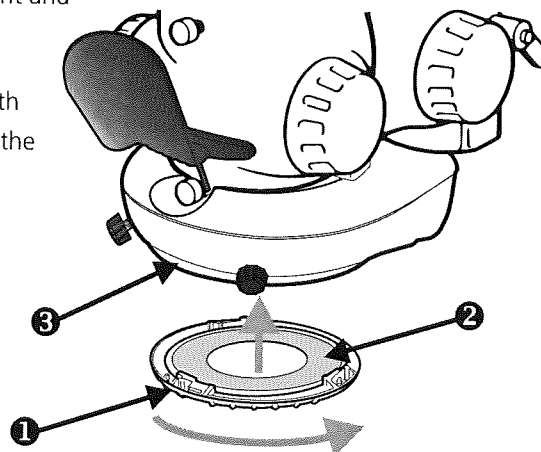


## Converging lens

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

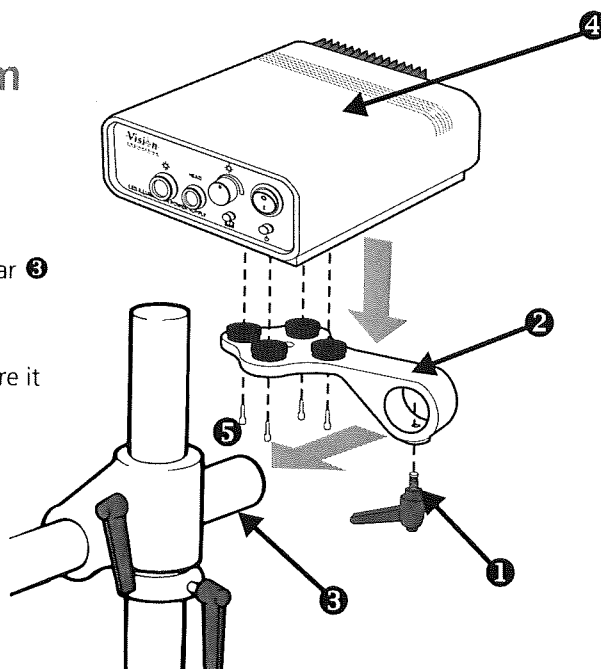
- ▶ Align the marker arrow **1** on the converging lens **2** with the marker **3** on the LED ringlight and twist the lens to the right until it clicks into place.

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)

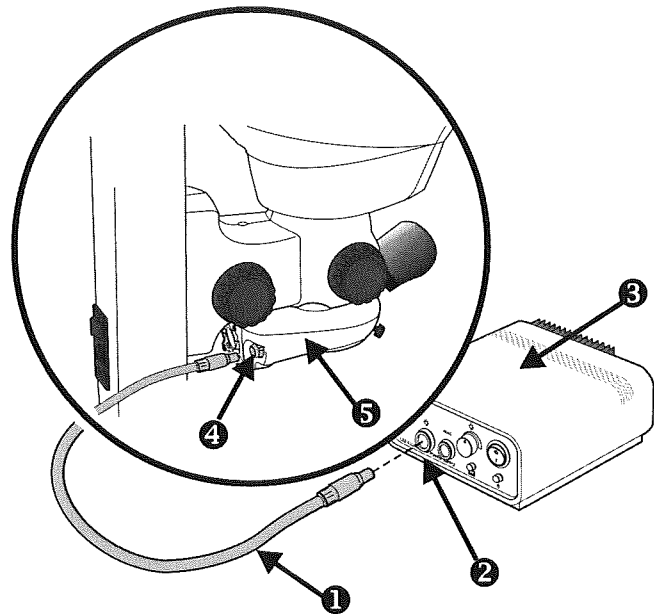
- ▶ Locate the locking handle **1** into the support arm **2**.
- ▶ Slide the control box support arm on to the horizontal bar **3** and secure it with the locking handle.
- ▶ Place the control box **4** on to the support arm and secure it with the 4 screws **5** (supplied).



## Cable connection

### Attaching the LED ringlight cable

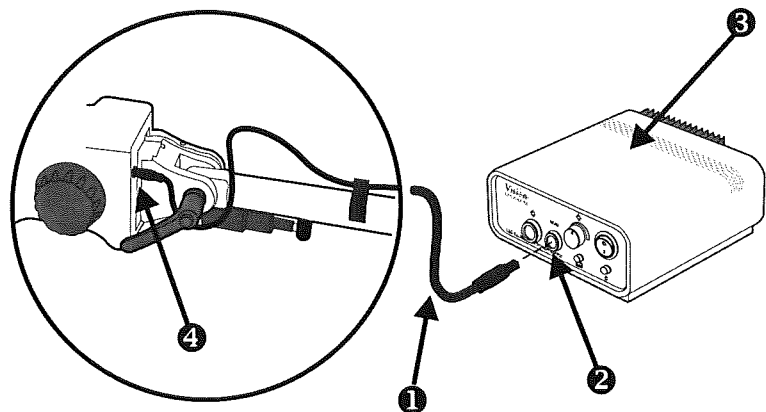
- ▶ Connect the LED ringlight cable ❶ to the illuminator socket ❷ on the front of the control box ❸.
- ▶ Connect the other end of the cable to the connector ❹ on the rear of the LED ringlight ❺.



### Zoom/focus assembly power cable

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

- ▶ Connect the head power cable ❶ to the head connector socket ❷ on the front of the control box ❸. Connect the other end of the cable to the head power input connector ❹.



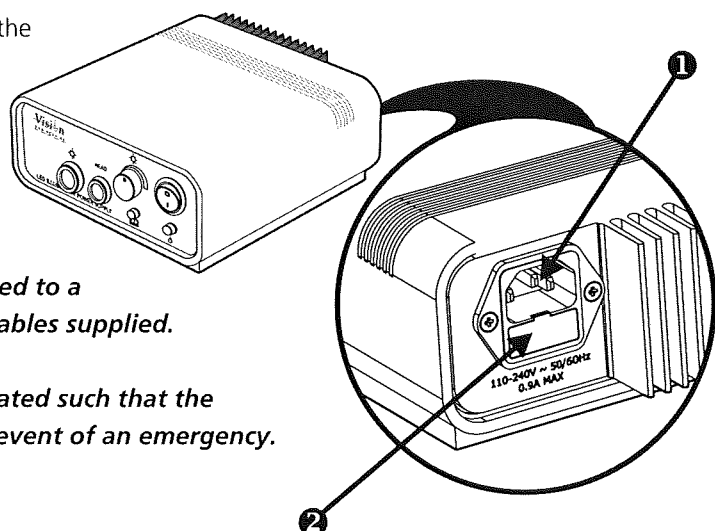
## Mains connection

The mains input connector is located on the rear of the control box and is comprised of the input socket ❶, and fuse ❷.

**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.*








## OPERATION

### Control box

#### Icons

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

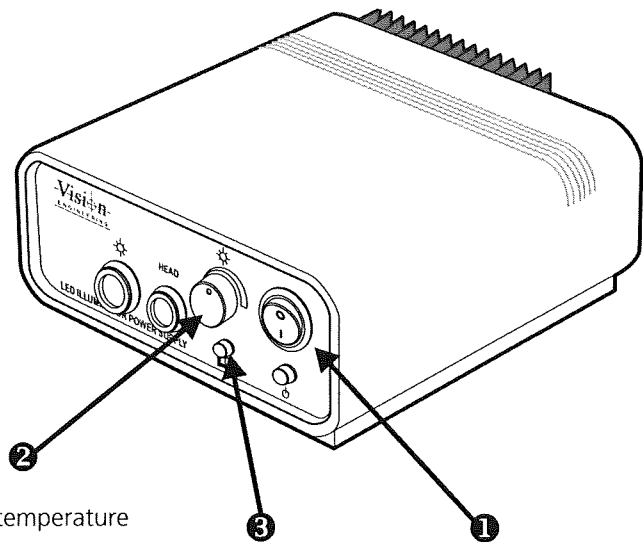
-  On/Off switch
-  Power on indicator
-  Illuminator intensity control
-  Ringlight connection point
-  Refer to manual

**HEAD** Power for viewing unit (bench stand 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).