

## Accessories of Stereo Microscope

### 1. Halogen Cold Light Source

#### (1) BSL-150A Series Cold Light Illumination



#### Introduction

BSL-150A Series Cold Light Illumination is designed as an auxiliary lighting device for microscope in order to get better observation results.

#### Feature

1. More stable power supply with CE standard electrical parts.
2. With delay startup design to protect eyes and electrical parts from sudden brightness.
3. Enhancing the security with skillful power off switch.
4. Cooling the illumination better with advanced wind loop design.
5. Reliable with stable structure.
6. Longer working life and lower noisy.

#### Specification

Item	Specification	BSL-150A-1	BSL-150A-2	BSL-150A-O
Power Supplier	Switch Power 110V/ 220V	●	●	●
	T-H Lamp with Reflector 20V/ 150W			
	Brightness Adjustable			
	Multi-coated IR Cutoff Filter for Heat Insulation			
	Fan Cooling			
	Size: 260×120×150mm			
	Weight 3.3 kg			
Single Light Guide	Rigid Flexional Tube, Length 500mm	●		
Dual Light Guide	Rigid Flexional Tube, Length 500mm		●	
Ring Light Guide	Flexible Tube, Length 1000mm, Adapter Ring Size Φ50mm/ Φ60mm			●
Kohler Illumination Attachment	Attached on Single or Dual Light Guide to adjust and obtain Even Illumination	○	○	

Note: ● Standard Outfit, ○ Optional

## (2) BSL2-150A Cold Light Source



Single Rigid Fiber



Double Rigid Fiber



Ring Flexible Fiber

### Introduction

BSL2-150A Cold Light Source is designed as an auxiliary lighting device for stereo and other microscopes to get better observation results. The Cold light source provides high quality illumination, long working life and saves energy.

### Features

1. More stable power supply with CE standard electrical parts and circuit.
2. Reliable with stable structure.
3. Long working life and low noise.
4. Filter holder is available to change the color temperature from 3000K to 5000K.



## Specification

Item	Specification	BSL2-150A-1	BSL2-150A-2	BSL2-150A-O
Power Supplier	Input Voltage: 176V-265V, 50Hz (110V is optional)	●	●	●
	21V/150W, Philips Lamp (Lamp Model No.: 13629)			
	Lamp Life: 500 hours			
	Color temperature: 3000K			
	Illuminance: 100000Lx			
	Brightness Adjustable			
	Optical Fiber Interface: Φ16mm			
	Cooling: Built In Large-area Radiator and Cooling Fan			
	Size: 230mm×101.6mm×150mm			
	Gross Weight: 2.7 kgs (Optical Fiber not included)			
	Net Weight: 2.1 kgs (Optical Fiber not included)			
Single Light Guide	Single Rigid Fiber, length 550mm, diameter 8mm, with Condenser, 5/8" Standard Interface	●		
Dual Light Guide	Double Rigid Fiber, length 550mm, diameter 8mm, with Condenser, 5/8" Standard Interface		●	
Ring Light Guide	Ring Flexible Fiber, length 550mm, diameter 8mm, 5/8" Standard Interface, Adapter Ring Size Φ50mm/ Φ60mm			●
Filter Holder	Used to change the color temperature	●	●	●
Filter	Light Blue	●	●	●
	Navy Blue, Red, Green	○	○	○
Package	1 set/carton, 285mm×230mm×255mm, 3kg	●	●	●
	4 sets/carton, 540mm*320mm*470mm, 12kg	●	●	●

Note: ● Standard Outfit, ○ Optional

## 2. LED Light Source

### (1) BSL-15A LED Light Source



Single Rigid Fiber



Double Rigid Fiber



Ring Flexible Fiber

#### Introduction

BSL-15A LED Light Source is designed as an auxiliary lighting device for stereo and other microscopes to get better observation results. The LED light source provides high quality illumination, long working life and saves energy.

#### Features

1. More stable power supply with CE standard electrical parts and circuit.
2. Reliable with stable structure.
3. Long working life and low noise.

#### Specification

Item	Specification	BSL-15A-1	BSL-15A-2	BSL-15A-O
Power Supplier	Input Voltage: 100V-240V/ 50-60Hz			
	15W LED light lamp			
	Lamp Life: 50000 hours			
	The color temperature: 6000K	•	•	•
	Illuminance: 90000Lx			
	Brightness Adjustable			
	Optical Fiber Interface: $\Phi$ 16mm			

	Cooling: Built In Large-area Radiator and Cooling Fan			
	Size: 230mm×101.6mm×150mm			
	Gross Weight: 2.9 kgs (Optical Fiber not included)			
	Net Weight: 2.4 kgs (Optical Fiber not included)			
Single Light Guide	Single Rigid Fiber, length 550mm, diameter 8mm, with Condenser, 5/8" Standard Interface	●		
Dual Light Guide	Double Rigid Fiber, length 550mm, diameter 8mm, with Condenser, 5/8" Standard Interface		●	
Ring Light Guide	Ring Flexible Fiber, length 550mm, diameter 8mm, 5/8" Standard Interface, Adapter Ring Size Φ50mm/ Φ60mm			●
Package	1 set/carton, 285mm×230mm×255mm, 3kg	●	●	●
	4 sets/carton, 540mm*320mm*470mm, 12kg	●	●	●

Note: ● Standard Outfit, ○ Optional

## (2) BSL-3A LED Light Source



BSL-3A is a popular goose neck LED illuminator. It adopts LED as the light source, it has features of low energy consumption and long working life. It is mainly used as an auxiliary lighting source for stereo microscopes or other microscopes.

### Feature

1. Illumination intensity is adjustable, Step-less dimming.
2. Easy change detachable Gooseneck light guide, angle can be adjusted.
3. Adopt high refractive index glass lens, high brightness.

### Specification

LED Qty	2pcs LED lamps
Power Consumption	2*3W
Input Voltage	AC 100-240V, 50-60HZ
Color Temperature	Standard is 6400K, other color temperature can be customized

Goose-neck Length	550mm
Housing Material	Steel metal casing
Lumens	≈300lm
Working life	>10000 hours
Working Temperature	≤50°C
Packing	1pc/carton, 31x30x18cm, 2kg; 3pcs/carton, 32 x 32 x 57cm, 6kg

### (3) BSL-3B LED Light Source



BSL-3B is a popular goose neck LED illuminator. It adopts LED as the light source, it has features of low energy consumption and long working life. It is mainly used as an auxiliary lighting source for stereo microscopes or other microscopes.

#### Feature

1. Illumination intensity is adjustable, Step-less dimming.
2. Easy change detachable Gooseneck light guide, angle can be adjusted.
3. Adopt high refractive index glass lens, high brightness.

#### Specification

LED Qty	2pcs LED lamps
Power Consumption	6.5W
Input Voltage	AC 110-240V, 50-60HZ
Color Temperature	6500K
Goose-neck Length	400mm is standard, 500mm is optional
Housing Material	Steel metal casing
Illuminance	18000Lux (one light guide at 100mm working distance )
Working life	>10000 hours
Working Temperature	≤50°C
Packing	4pcs/carton, 53 x 41 x 23cm, 8kg

### 3. BAL-2, BAL-3 Fluorescent Ring Light



BAL-2B



BAL-2A/2C



BAL-3A



BAL-3B



BAL-3C

With high brightness and even illumination, simple structure and easy to operate, BAL-2, BAL-3 Series fluorescent ring light can be used as incident illumination for various stereo microscopes. The difference of BAL-2A and 2C is the lamp is different.

Model	BAL-2A	BAL-2B	BAL-2C	BAL-3A	BAL-3B	BAL-3C
Voltage	110V/220V					
Power	8w			10w		
Color Temperature	6400K-7000K					
Mounting Diameter	Ø30-Ø60mm					
Light adjustment	No Light adjustment					Light adjustment



## 4. LED Ring Light

### (1) BAL-8 LED Ring Light



With high brightness and even illumination, simple structure and easy to operate, BAL-8 LED ring light is used as incident illuminator for stereo microscopes.

Specification:

LED: 110V or 220V, 54 Pieces LED lamps,  $\Phi 30\text{-}\Phi 60\text{mm}$

### (2) BAL-72 LED Ring Light



#### Application

BAL-72 LED ring light can be used as incident illumination on stereo microscopes and machine vision systems. It has four-zone lighting control separately, long working life and save energy features.

#### Feature

1. Intensity Adjustment, Good Variable Control Permit Gradual Increase in Brightness with Four-zone Lighting Control Separately.
2. Reliability and Durability.
3. Low Power consumption, Super Brightness.
4. Metal Shell and ESD.
5. Reasonable Design, Uniformity Light, Non-flicker & Shadow.

#### Specification

LED Quantity	72LED lamps
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Mounting Diameter	Φ62mm
Input Power	DC12V 600mA
Input Voltage	Universal 100-240V AC
Output Power	7.2W
Color Temperature	6500K
LED Luminance	>15000mcd
LED Lifetime	50,000 hours
Working Distance	95-115mm
Standard Set	BAL-72 LED ring light, Light Control Box, DC12V Power Supply

### (3) BAL-48 series LED Ring Light



BAL-48A



BAL-48B



BAL-48C

BAL-48 series LED ring light are high quality light source featuring high brightness, low temperature and flash free, they can be used as auxiliary illumination for industrial monocular microscopes, stereo microscopes and similar lens.

#### Specification

Model	BAL-48A	BAL-48B	BAL-48C
Input Voltage	Universal 100-240V AC	Universal 100-240V AC	Universal 100-240V AC
Output Voltage	12V/DC	12V/DC	12V/DC
Current	240mA	240mA	240mA
Mounting Diameter	Φ40mm, Outer Diameter: Φ58mm	Φ62mm, Outer Diameter: Φ100mm	Φ62mm, Outer Diameter: Φ100mm
LED Quantity	48pcs LED lamps	48pcs LED lamps	48pcs LED lamps
LED Lifetime	100,000hrs	100,000hrs	100,000hrs
LED Color	White (Other Colors are Optional )	White (Other Colors are Optional )	White (Other Colors are Optional )
Color Temperature	±7000K	±7000K	±7000K
Luminance	16000-18000mcd	16000-18000mcd	16000-18000mcd
LED Angle	30° (Consistent)	30° (Consistent)	30° (Consistent)
Working Distance	40-90mm	40-90mm	40-90mm
Input Power	3 W	3 W	3 W
Light Control	Brightness Adjustment	Brightness Adjustment	Brightness Adjustment
Light head material	Aluminum	Plastic	Aluminum
Packing	BAL-48A LED ring light, Light Control Box, DC12V Power Supply	BAL-48B LED ring light, Light Control Box, DC12V Power Supply	BAL-48C LED ring light, Light Control Box, DC12V Power Supply

## (4) BAL-60A / 60B / 64 LED Ring Light



BAL-60A



BAL-60B/72B



BAL-64

### Application

BAL-60A/60B/72B/64 LED ring light are simple and compact, they can be used as incident illumination on stereo microscopes and machine vision systems. BAL-60B has four-zone lighting control separately, these LED ring lights have long working life and save energy features.

### Feature

1. Light intensity can be adjusted to get best contrast.
2. BAL-60B has Four-zone lighting control separately to enhance contrast and reduce reflection.
3. Reliability and Durability.
4. Low Power consumption, Super Brightness.
5. Reasonable Design, Uniformity Light, Non-flicker & Shadow.

### Specification

Model	BAL-60A	BAL-60B/72B	BAL-64
LED Quantity	60 LED lamps	60/72 LED lamps	64 LED lamps
Color	Black	Black	White
Mounting Diameter	Φ60mm	Φ60mm	Φ60mm
Light Head Material	Plastic	Aluminum	Plastic
Input Power	DC12V	DC12V	DC12V
Input Voltage	Universal 100-240V AC	Universal 100-240V AC	Universal 100-240V AC
Color Temperature	6500K-7000K	6000K-6500K	6500K-7000K
LED Luminance	0-12000 Lux	0-16000 Lux	0-12000 Lux
LED Lifetime	50,000 hours	50,000 hours	50,000 hours
Brightness	0-100% adjustable	0-100% adjustable, 4 zone control separately	0-100% adjustable
Working Distance	30-120mm	60-120mm	30-120mm
Standard Set	BAL-60A LED ring light, DC12V Power Supply	BAL-60B/72B LED ring light, DC12V Power Supply	BAL-60B LED ring light, DC12V Power Supply

## (5) BAL2A Series LED Ring Light



BAL2A-60/78

BAL2A series LED ring light have features of high brightness, low temperature and flash free, they can be used as auxiliary illumination for industrial monocular microscopes, stereo microscopes and similar lens.

### Feature

1. The power controlling adapter and light head adopt ABS plastic material, simple and smart.
2. Adopt  $\phi$ 5mm LED lamps, with excellent light focus effect and high efficiency.
3. Continues light intensity adjustment can meet different requirement.
4. Reliable circuit board ensures safety and long working life.
5. ESD treatment is optional.

### Specification

Model	BAL2A-60	BAL2A-78
Input Voltage	Universal 100-240V AC	Universal 100-240V AC
Input Power	6 W	7 W
Mounting Diameter	$\phi$ 60mm	$\phi$ 70mm
LED Quantity	60pcs LED lamps	78pcs LED lamps
LED Lifetime	50,000hrs	50,000hrs
LED Color	White (Other Colors can be customized )	White (Other Colors can be customized )
Color Temperature	6400K, other color temperature can be customized	6400K, other color temperature can be customized
Illuminance@100mm	24000lx	24000lx
Light Control	Brightness Adjustable	Brightness Adjustable
Light head material	ABS Plastic	ABS Plastic
Packing	BAL2A-60 LED ring light head, Light Control Box, Power cable	BAL2A-78 LED ring light head, Light Control Box, Power cable

## (6) BAL2B Series LED Ring Light



BAL2B-60/78

BAL2B series LED ring light have features of high brightness, low temperature and flash free, they can be used as auxiliary illumination for industrial monocular microscopes, stereo microscopes and similar lens.

### Feature

1. The light head adopt ABS plastic material and  $\phi 5\text{mm}$  LED lamps, with excellent light focus effect and high efficiency.
2. The power controlling adapter adopt aluminum case, solid and reliable.
3. Continues light intensity adjustment can meet different requirement.
4. Reliable circuit board ensures safety and long working life.
5. ESD light head treatment is optional.

### Specification

Model	BAL2B-60	BAL2B-78
Input Voltage	Universal 100-240V AC	Universal 100-240V AC
Input Power	5 W	6 W
Mounting Diameter	$\phi 61\text{mm}$	$\phi 70\text{mm}$
LED Quantity	60pcs LED lamps	78pcs LED lamps
LED Lifetime	50,000hrs	50,000hrs
LED Color	White (Other Colors can be customized )	White (Other Colors can be customized )
Color Temperature	6400K, other color temperature can be customized	6400K, other color temperature can be customized
Illuminance@100mm	24000lx	25000lx
Light Control	Brightness Adjustable	Brightness Adjustable
Light head material	ABS Plastic	ABS Plastic
Packing	BAL2B-60 LED ring light head, Aluminum Light Control Box, Power cable	BAL2B-78 LED ring light head, Aluminum Light Control Box, Power cable

## (7) BAL2B-78P Polarizing LED ring light



BAL2B-78P

BAL2B-78P Polarizing LED ring light has features of high brightness, low temperature and flash free, it can be used as auxiliary illumination for industrial monocular microscopes, stereo microscopes and similar lens. It adopts a high extinction ratio polarizing set, can be used to observe or analyse surface of high reflective materials.

### Feature

1. The light head adopt ABS plastic material and  $\phi 5\text{mm}$  LED lamps, with excellent light focus effect and high efficiency.
2. The power controlling adapter adopt aluminum case, solid and reliable.
3. With polarizing set, can reduce the reflective light on the surface of materials, improve the observation result.
4. Continues light intensity adjustment can meet different requirement.
5. Reliable circuit board ensures safety and long working life.
6. ESD light head treatment is optional.

### Specification

Model	BAL2B-78
Input Voltage	Universal 100-240V AC
Input Power	6 W
Mounting Diameter	$\phi 70\text{mm}$
Outside Diameter of light head	$\phi 104\text{mm}$
LED Quantity	78pcs LED lamps
LED Lifetime	50,000hrs
LED Color	White (Other Colors can be customized )
Color Temperature	6400K, other color temperature can be customized

Illuminance@100mm	2500lx
Light Control	Brightness Adjustable
Light head material	ABS Plastic
Polarizing Set	Polarizer and Analyzer (Polarizer is 360°adjustable)
Packing	BAL2B-78 LED ring light head, Aluminum Light Control Box, Power cable, Polarizing set

## (8) LED-56A / 64A / 144A LED Ring Light



LED-56A



LED-56A(Rotatable)



LED-64A



LED-144A

### Application

LED-56A/56A(rotatable)/64A/144A LED ring light are simple and compact, they can be used as incident illumination on stereo microscopes and machine vision systems. LED-56A has a rotatable ring, so easy to change the direction of the LED lamp, these LED ring lights have long working life and save energy features.

### Feature

1. Light intensity can be adjusted to get best contrast.
2. LED-56A(rotatable) has a rotatable ring, easy to change the direction of the LED lamp.
3. Reliability and Durability.
4. Low Power consumption, Super Brightness.
5. Reasonable Design, Uniformity Light, Non-flicker & Shadow.

### Specification

Model	LED-56A	LED-56A(Rotatable)	LED-64A	LED-144A
LED Quantity	56pcs LED lamps	56pcs LED lamps	64 LED lamps	144 LED lamps
Color	White	White	White	White
Mounting Diameter	Φ61mm	Φ58mm/Φ63mm	Φ61mm	Φ61mm
Light Head Material	Plastic	Plastic	Aluminum	Plastic
Input Power	DC12V, 2W	DC12V, 2W	DC12V, 2.2W	DC12V, 4.2W
Input Voltage	Universal 100-240V AC	Universal 100-240V AC	Universal 100-240V AC	Universal 100-240V AC
Color Temperature	8000K	8000K	8000K	8000K
LED Luminance	0-12000 Lux	0-12000 Lux	0-12000 Lux	0-14000 Lux
LED Lifetime	50,000 hours	50,000 hours	50,000 hours	50,000 hours
Brightness	0-100% adjustable	0-100% adjustable	0-100% adjustable	0-100% adjustable
Working Distance	30-150mm	30-150mm	30-150mm	30-150mm
Standard Set	LED-56A LED ring light, DC12V Power Supply	LED-56A LED ring light, DC12V Power Supply	LED-64A LED ring light, DC12V Power Supply	LED-144A LED ring light, DC12V Power Supply



## 5. Stand and other accessories



<p><b>BSZ-F1 Stand</b> Column height: 400mm, <math>\Phi</math>38mm Column for focus Arm: <math>\Phi</math>30mm</p>	<p><b>BSZ-F2 Stand</b> Column height: 454mm, <math>\Phi</math>29.5mm Base size: 396*276mm Column for focus Arm: <math>\Phi</math>30mm</p>	<p><b>BSZ-F3 Stand</b> Column height: 490mm, <math>\Phi</math>38mm Base size: 253*253mm, Cross bar length: 446mm, Column for focus Arm: <math>\Phi</math>30mm</p>
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<p><b>BSZ-F4 Stand</b> Column for focus Arm: <math>\Phi</math>30mm</p>	<p><b>BSZ-F9 Stand</b> Column height: 280mm Glass plate: <math>\Phi</math>100mm Microscope mount: <math>\Phi</math>76mm</p>	<p><b>BSZ-F10 Stand</b> Column height: 280mm Glass plate: <math>\Phi</math>140mm Microscope mount: <math>\Phi</math>76mm</p>
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<p><b>BSZ-F11 Stand</b> Column height: 280mm Glass plate: <math>\Phi</math>100mm Microscope mount: <math>\Phi</math>76mm</p>	<p><b>BSZ-F12 Stand</b> Halogen incident and transmitted illumination Microscope mount: <math>\Phi</math>76mm</p>	<p><b>BSZ-F13 Stand</b> Clamp Size: 103*77*115mm Max. Table thickness: 52mm Length of Horizontal Arm: 507mm Microscope mount: <math>\Phi</math>76/<math>\Phi</math>40/<math>\Phi</math>45mm</p>
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<p><b>BSZ-F14 Stand</b> Base Size: 382*260*24mm Column height: 408mm, <math>\Phi</math>32mm Microscope mount: <math>\Phi</math>76/<math>\Phi</math>40/<math>\Phi</math>45mm</p>	<p><b>BSZ-F15 Stand</b> Base Size: 382*260*24mm Column height: 408mm, <math>\Phi</math>32mm Cross bar Length: 408mm Microscope mount: <math>\Phi</math>76/<math>\Phi</math>40/<math>\Phi</math>45mm</p>	<p><b>BSZ-F16 Stand</b> Base Size: 318*308*16mm Column height: 326mm Focusing Range: 160mm Microscope mount: <math>\Phi</math>76/<math>\Phi</math>40/<math>\Phi</math>45mm</p>
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<p align="center"><b>BSZ-F17 Stand</b></p> <p>Base Size: 318*308*16mm          Column height: 326mm          Focusing Range: 160mm          Microscope Arm: <math>\Phi 76/\Phi 40/\Phi 45</math>mm</p>	<p align="center"><b>BSZ-F18 Stand</b></p> <p>Base Size: 318*308*16mm          Column height: 500mm          Focusing Range: 160mm          Microscope Arm: <math>\Phi 76/\Phi 40/\Phi 45</math>mm</p>	<p align="center"><b>BSZ-F19 Stand(For Camera)</b></p> <p>Base Size: 318*308*16mm          Column height: 326mm          Focusing Range: 160mm</p>
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<p align="center"><b>BMS-302 X-Y Stage</b></p> <p>Stage Size: 180×155×26mm,          Moving Rang: X-75mm, Y-55mm,          Accuracy: 0.1mm</p>	<p align="center"><b>BMS-304 X-Y Stage</b></p> <p>Stage size: 254×203×25mm,          Moving Range: 100mm×100mm,          Glass Stage: <math>\Phi 140</math>mm</p>	<p align="center"><b>BMS-311 Measuring Stage</b></p> <p>Stage Size: 160×123×21mm,          Moving Rang: X-75mm, Y-50mm, Accuracy:          0.1mm</p>
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