

INSTRUCTIONS

SZ2-ILA

Transmitted illumination attachment

This instruction manual is for the Olympus SZ2-ILA Transmitted Illumination Attachment. To ensure the safety, obtain optimum performance and to familiarize yourself fully with the use of this equipment, we recommend that you study this manual thoroughly before operating the system. Retain this instruction manual in an easily accessible place near the work desk for future reference.

For details of products other than SZX-SDO2, see "1 System chart" (P. 2) and "6 Assembly" (P. 7).

Optical Microscope Accessory

Contents

Correct assembly and adjustments are critical for this unit to manifest its full performance. If you are going to assemble this unit by yourself, please read "6 Assembly" (P. 7). For the assemblies of the modules for which instruction manuals are available, refer to their instruction manuals.

Important	1
1 System chart	2
2 Nomenclature	3
3 Transmitted light observation	4
1 Using the Mirror Rotation/Sliding Knob	4
4 Troubleshooting guide	5
5 Specifications	6
6 Assembly	7
7 Optional modules	8
7-1 Simplified polarization system SZ-POL-2	8



Important

The transmitted illumination attachment enables transmitted light observation when it is placed under the SZ2-ST standard stand for the SZ2 series microscopes.

Safety precautions


1. The illumination light may be pointed downward with certain mirror angles. As this makes the desktop surface hot, do not place an object that is vulnerable to heat or easily flammable below the transmitted light illumination attachment.
2. If water is split on the unit, promptly turn OFF the power of the LED lamp housing and wipe with a dry cloth.

1 Getting ready

1. The transmitted light illumination attachment is a precision instrument. Handle it with care and avoid subjecting it to sudden or severe impact.
2. Do not use the transmitted light illumination attachment where it is subjected to direct sunlight, high temperature and humidity, dust or vibrations. (For the operating conditions, refer to "5 Specifications" (P. 6).

2 Maintenance and storage

1. To clean the lenses and other glass components, simply blow dirty away using a commercially available blower and wipe gently using a piece of cleaning paper (or clean gauze).
If a lens is stained with fingerprints or oil smudges, wipe it gauze slightly moistened with commercially available absolute alcohol.


 **CAUTION** Since the absolute alcohol is highly flammable, it must be handled carefully. Be sure to keep it away from open flames or potential sources of electrical sparks – for example, electrical equipment that is being switched on or off. Also remember to always use it only in a well-ventilated room.

2. Do not attempt to use organic solvents to clean the parts other than the glass components. To clean them, use a lint-free, soft cloth slightly moistened with a diluted neutral detergent.
3. Do not disassemble any part of the equipment as this could result in malfunction or reduced performance.


3 Caution

If the microscope is used in a manner not specified by this manual, the safety of the user may be imperiled. In addition, the microscope may also be damaged. Always use the microscope as outlined in this instruction manual.

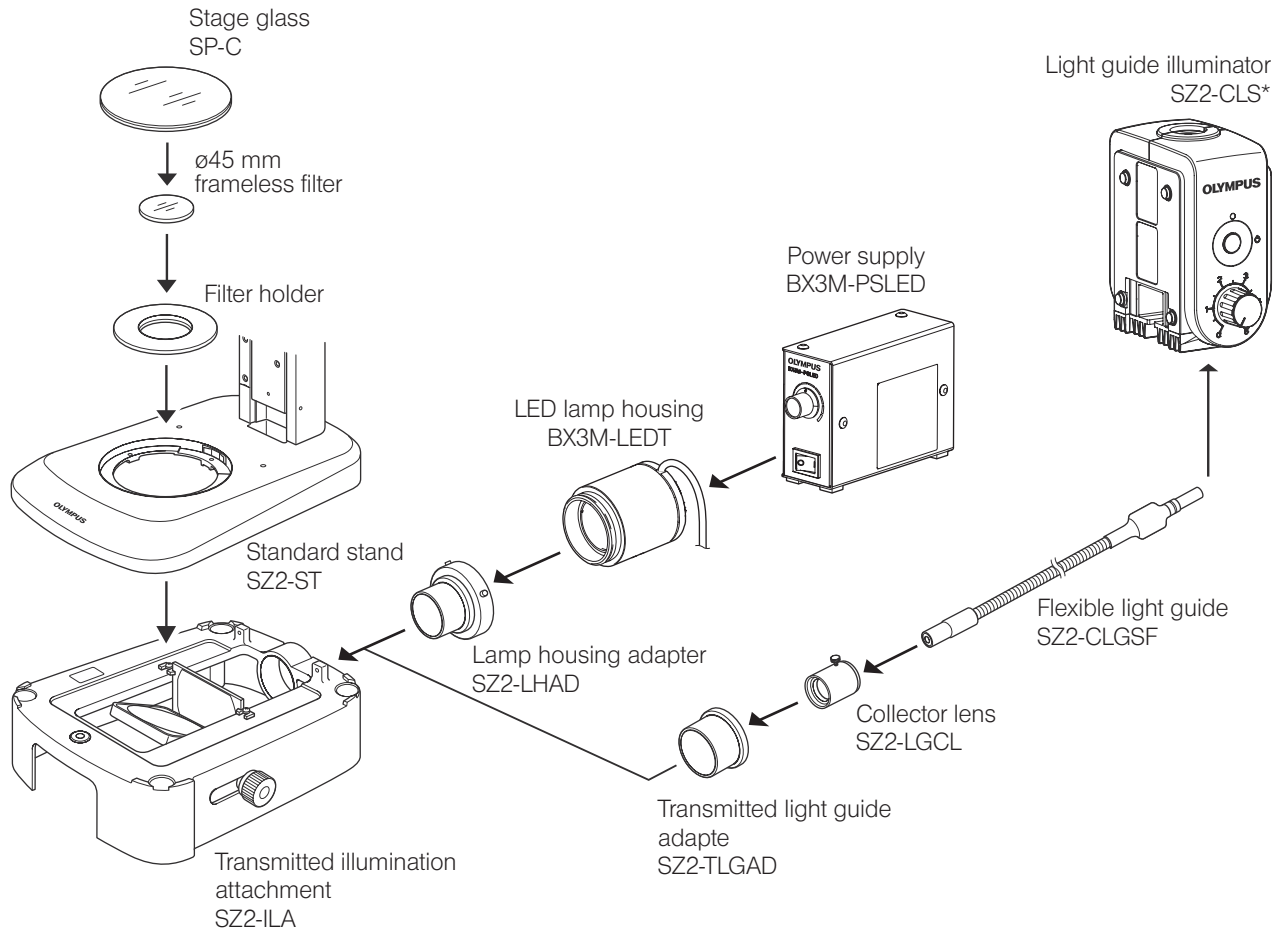
The following symbols are used to set off text in this instruction manual.

 **CAUTION** : Indicates that failure to follow the instructions in the warning could result in bodily harm to the user and/or damage to equipment (including objects in the vicinity of the equipment).

 **NOTE** : Indicates that failure to follow the instructions could result in damage to equipment.

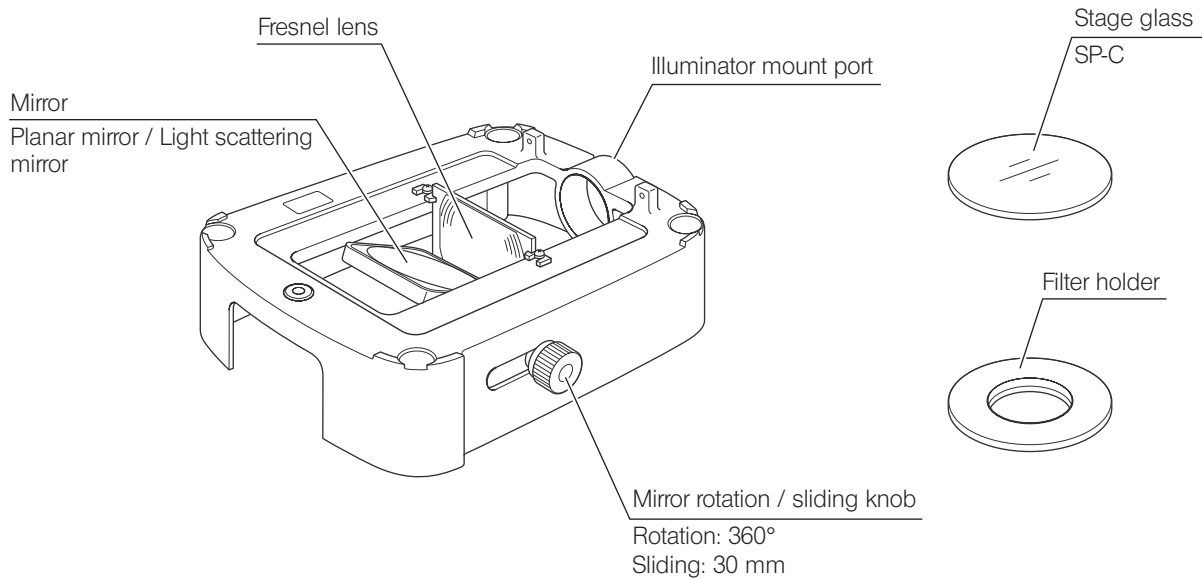
 **TIP** : Indicates commentary (for ease of operation and maintenance).

1 System chart



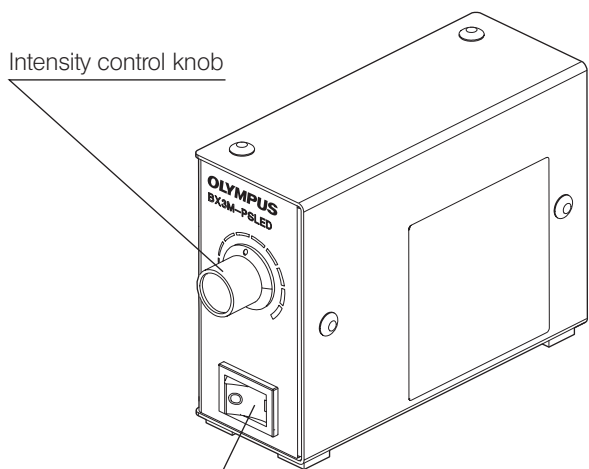
2 Nomenclature

Transmitted illumination attachment
SZ2-ILA



Power supply
BX3M-PSLED

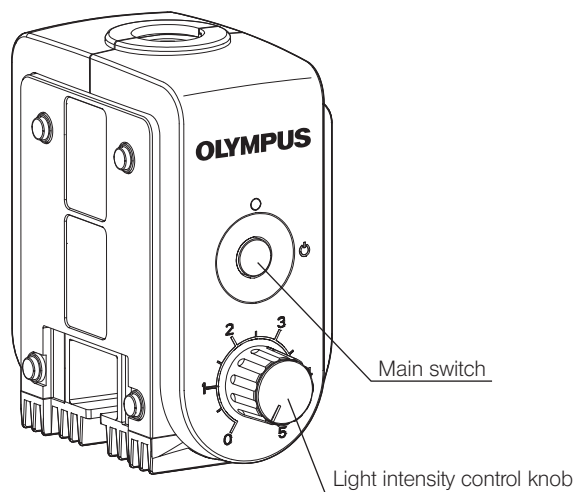
For details, refer to the separate instruction manual.



Main switch
"I"(ON) / "O"(OFF)

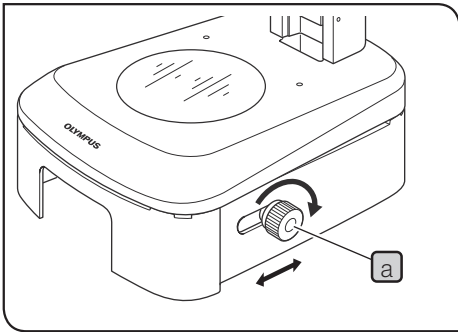
Light guide illuminator
SZ2-CLS

For details, refer to the separate instruction manual.



3 Transmitted light observation

If you have not assembled the transmitted illumination attachment yet, please read "6 Assembly" (P. 7).



1 Using the Mirror Rotation/Sliding Knob

- 1 Set the main switch of the power supply to "I" (ON) and adjust the brightness with the intensity control knob.

TIP For details of the power supply, see the instruction manual provided separately.

- 2 Adjust the illumination by rotating or sliding the mirror rotation/sliding knob **a**.

TIP Usages of the planar and light scattering mirrors

- Planar mirror: Bright illumination.
- Light scattering mirror: Illumination with little light irregularities.

- 3 With a standard transmitted light illumination, slide the mirror rotation/sliding knob **a** to the deep part of the slide stroke and then rotate the knob **a** for an illumination with highest brightness and least irregularities.

Oblique Illumination

While looking through the eyepieces, adjust the image contrast by sliding and rotating the knob **a** gradually toward you.

TIP When observing the specimen by shading on it, use oblique illumination by rotating and sliding the knob **a**.

4 Troubleshooting guide

Under certain conditions, performance of the unit may be adversely affected by factors other than defects. If problems occur, please review the following list and take remedial action as needed. If you cannot solve the problem after checking the entire list, please contact Olympus.

Problem	Cause	Remedy	Page
1. Optical system			
Illumination is too bright or too dark.	The intensity is adjusted improperly.	Adjust the light intensity optimally.	-
	A wrong ND filter is in use.	Adjust the light intensity optimally.	-
Illumination irregularities are noticeable.	The lamp bulb is attached improperly.	Mount it properly.	7
	The angle and/or position of the mirror are set improperly.	Rotate and/or slide the mirror.	4
	The stage glass is dirty.	Clean thoroughly.	1
Dirt or dust is noticeable in the field of view.	The stage glass is dirty.	Clean thoroughly.	1
	The mirror is dirty.		
	The eyepiece and/or objective are dirty.		
2. Electrical system			
The lamp turns on and off intermittently.	Connectors are connected imperfectly.	Connect connectors firmly.	-

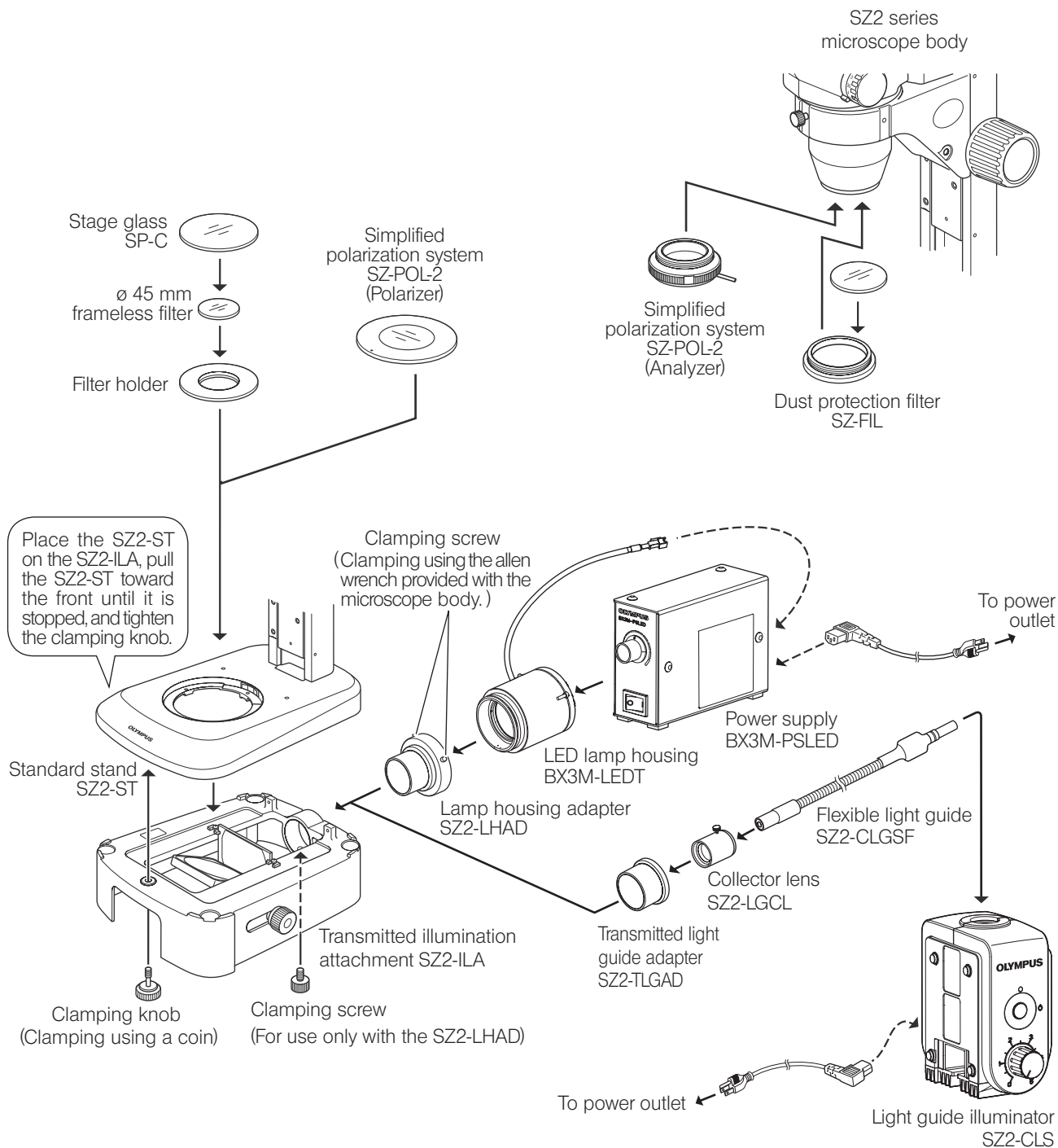
5 Specifications

Item	Specifications
Effective field	Diameter 33 mm
Filter	45 mm frameless filter usable (Filter with thickness up to 5 mm can be accommodated in the filter holder.)
Lighting types	Rotation/sliding of the planar and light scattering filters. Oblique illumination possible.
Combined stand	SZ2-ST (Standard Stand) Combined stage height: 92.5 mm
Weight	Approx. 1.1 kg (SZ2-ILA only)
Illumination system	See the instruction manual provided separately.
Power source	
Power consumption	
Other	<ul style="list-style-type: none"> • Various stages applicable. • Simplified Polarization System (SZ-POL-2) mountable.
Operating environment	<ul style="list-style-type: none"> • Indoor use • Altitude: Max. 2000 m • Ambient temperature: 5° to 40°C (41°F to 104°F) • Maximum relative humidity: 80% for temperatures up to 31°C (88°F), decreasing linearly through 70% at 34°C (93°F), 60% at 37°C (99°F), to 50% relative humidity at 40°C (104°F) • Supply voltage fluctuations: ±10% • Pollution degree: 2 (in accordance with IEC60664) • Installation (overvoltage) category: II (in accordance with IEC60664)

6 Assembly

The modules shown in the following figure are merely the typical examples. For other applicable modules that are not given below, please consult your Olympus representative or the latest catalogues.

NOTE When assembling the microscope, make sure that all parts are free of dust and dirt, and avoid scratching any parts or touching glass surfaces.



TIP For the connection of cables and power cord, and the assembly of light guide illumination system, see the instruction manual provided separately.

7 Optional modules

TIP For the mounting methods, see "6 Assembly" (P. 7).

7-1 Simplified polarization system SZ-POL-2

Cross-nicol adjustment and observation

- 1** Drop the polarizer below the stage glass so that the index dot (●) can be viewed horizontally.
- 2** Turn on the transmitted light source, look through the eyepieces and rotate the analyzer so that the field of view is darkest (cross-Nicol condition).
- 3** Place a polarized observation specimen and observe it by rotating it or the stage glass.

- NOTE**
- Polarized light observation is possible without problem with any auxiliary objective, except for the 2X auxiliary objective with which the peripheral part of image may be cut off.
 - It is not possible to mount a filter holder, etc., in the same position as the polarizer.

Memo

Memo

This product is manufactured by **EVIDENT CORPORATION** effective as of Apr. 1, 2022.
Please contact our "Service Center" through the following website for any inquiries or issues related to this product.

EVIDENT CORPORATION

6666 Inatomi, Tatsuno-machi, Kamiina-gun, Nagano 399-0495, Japan

(Life science solutions)

Service Center

<https://www.olympus-lifescience.com/support/service/>



(Life science solutions)

Our Website

<https://www.olympus-lifescience.com>



(Industrial solutions)

Service Center

<https://www.olympus-ims.com/service-and-support/service-centers/>



(Industrial solutions)

Our Website

<https://www.olympus-ims.com>

