

This instruction manual is for the Olympus GX-SLM Scale Slider. To ensure the safety, obtain optimum performance and familiarize yourself fully with the use of this equipment, we recommend 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.

# INSTRUCTIONS

# GX-SLM

## SCALE SLIDER



A X 6 2 9 9

## IMPORTANT

The GX-SLM scale slider has been designed to be compatible with both the GX71 and GX51 microscope frames.

However, the scale glasses to be attached to the scale slider are for exclusive use with either the GX71 or GX51. Be sure to purchase the scale glasses matching your microscope frame.

### 1 Getting Ready

1. The image is focused on the scale glass. Be careful not to leave dirt, stain or fingerprints on the scale glass.

When attaching a scale glass, take special care not to damage it.

2. The correct size cannot be obtained if a scale glass that does not match the current objective magnification is used.
3. Correct size can be obtained by varying zooming with the zooming knob of the GX71. However, in this case, the GX71-SLMGS with 1X magnification should be used.
4. Clean the scale glass and other glasses by wiping gently with gauze. To remove fingerprints or oil smudges, wipe with gauze slightly moistened with a mixture of ether (70%) and alcohol (30%).

**▲ Since solvents such as ether and alcohol are highly flammable, they must be handled carefully. Be sure to keep these chemicals away from open flames or potential source of electrical sparks — for example electrical equipment that is being switched on or off. Also remember to always use these chemicals only in a well-ventilated room.**

## 2 Caution

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

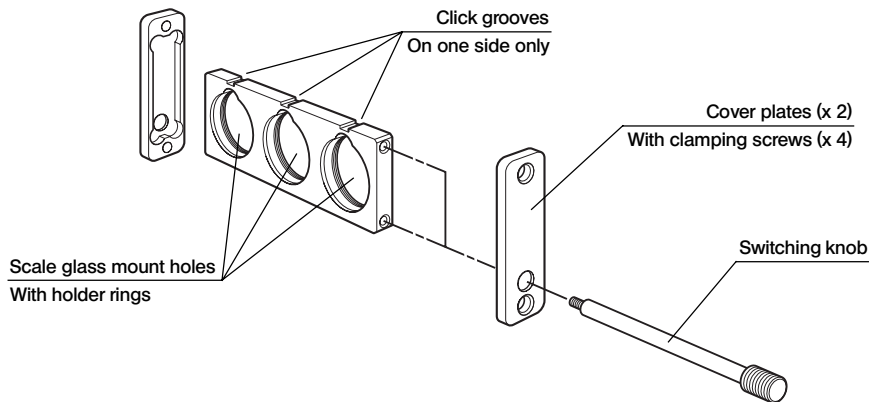
The warning, caution and other notes in this manual use the following symbols.

- ▲ : Warning for preventing injury of the user or damage to the product (including the furniture in the surroundings).
- ★ : Caution for preventing damage to the product.
- ◎ : Reference note or remark (information which is convenient for the operation and/or maintenance)

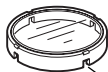
# 1 MODULES AND THEIR SPECIFICATIONS

## Scale Slider GX-SLM

- © It is recommended to attach the switching knob near the side with click grooves with the GX51 or near the side without click grooves with the GX71. But this positioning can be changed according to the circumstances of operation.



**Scale Glass**  
**GX71-SLMG5 to 100**  
**GX51-SLMG5 to 100**

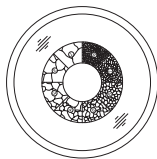


Positioning grooves (x 4)

#### ■ Scale Glass Specifications

Modules for GX71	Modules for GX-51	Applicable Objective	Standard Length in Actual Visual Field
GX71-SLMG5	GX51-SLMG5	5X	200 $\mu\text{m}$
GX71-SLMG10	GX51-SLMG10	10X	100 $\mu\text{m}$
GX71-SLMG20	GX51-SLMG20	20X	50 $\mu\text{m}$
GX71-SLMG40	GX51-SLMG40	40X	10 $\mu\text{m}$
GX71-SLMG50	GX51-SLMG50	50X	10 $\mu\text{m}$
GX71-SLMG100	GX51-SLMG100	100X	10 $\mu\text{m}$

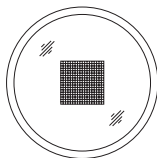
**Grain Size Glass**  
**GX71-SLMGS**  
**GX51-SLMGS**



■ **Specifications**

Applicable objective: 10X  
(The grain size is compliant with ISO and ASTM standards as well as the JIS G0551 standard.)

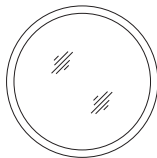
**Graphic Scale Glass**  
**GX71-SLMGH**  
**GX51-SLMGH**



■ **Specifications**

Applicable objective: Any.

**Parfocal Glass**  
**GX-SLMG**



■ **Specifications**

Parfocal glass for light path length compensation.

# 2 ASSEMBLY

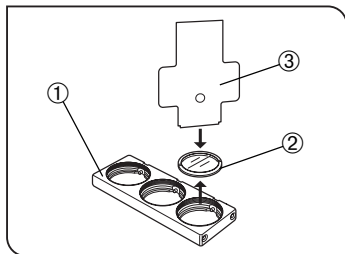


Fig. 1

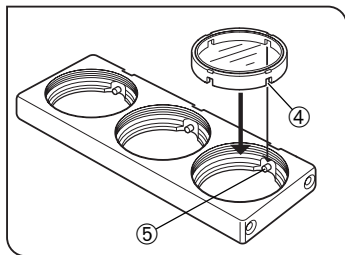


Fig. 2

## 1 Attaching the Scale Glasses

(Figs. 1 & 2)

1. Place the GX-SLM scale slider ① on a desk so that the surface with the scale glass holder rings ② faces upward.
2. Using the holder ring driver ③ provided with the microscope frame, turn one of the holder rings ② counterclockwise to remove it.
- Ⓞ With the scale glass, the up and down surfaces should be distinguished according to the insertion direction of the GX-SLM (i.e. whether the side with click grooves come upside or downside). The present description takes the recommended GX-SLM installation method as described in the next item.
3. Hold the scale glass to be attached so that the positioning groove ④ faces downward, fit it into the scale slider by aligning the groove with the positioning pin ⑤ on the slider, and clamp firmly with the holder ring ②.

### Note on Scale Glass Only

The side with click grooves should come at the top with the GX71 and at the bottom with the GX51. In any case, attach the scale glass so that its GX71 or GX51 indication comes at the top.

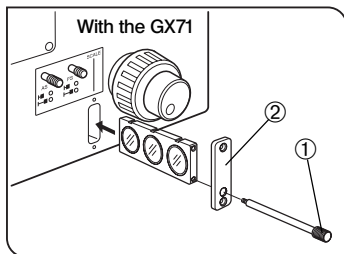


Fig. 3

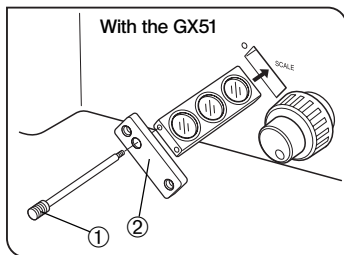


Fig. 4


## 2 Attaching the GX-SLM Scale Slider (Figs. 3 & 4)

1. Attach the cover plate ② to the end of the scale slider and screw in the slider switching knob ① into the specified hole on the scale slider through the cover plate.
2. Insert the scale slider into the scale slider insertion hole on the microscope frame so that the scale glass holder wiring is visible.
3. Clamp the cover plate onto the microscope frame using the provided screws and a Phillips screwdriver. (Be sure to clamp the other side also.)

### Click Effect

- With the GX71, the scale slider is attached in a manner not to utilize the effect of click grooves. With this installation, check the position of the scale through the photo frame and slide the scale slider to the desired position. If it is required to utilize the click effect, insert the scale slider upside down while keeping the scale glass holder ring facing the front direction. At the click position, the scale glass is positioned at the right end and the grain size or graphic scale glass is located at the center.



- 
- With the GX51, the scale slider is attached in a manner to utilize the effect of click grooves. The positioning of the scale, grain size and graphic scale glasses is identical to that with the GX71.

If it is required to disable the click effect, insert the scale slider upside down in the same way as the GX71. However, as the image tends to be cut off when the scale slider is moved too much, be sure to check the scale position through the photo gram on the eyepiece.

# 3 OPERATION

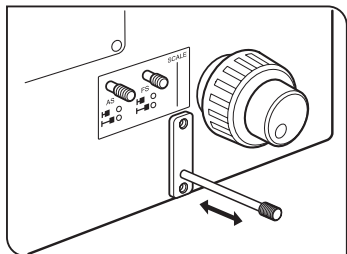


Fig. 5

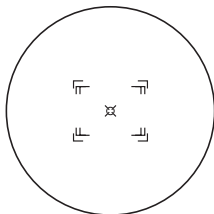


Fig. 6

1. Engage the desired objective in the light path.
  - ⊙ When using the grain size glass, engage the 10X objective in the light path.
2. Push in the scale slider so that the scale glass matching the objective magnification is engaged in the light path.
  - ⊙ The magnification value that is shown in the field of view indicates the magnification of the applicable objective.
  - ⊙ When the GX51 is used, stop the scale slider at the click position.
    - When the GX71 with which magnification can be varied by zooming is used, slide the scale slider so that the scale comes in the photographing mask by observing the photo frame.
- ★ When a grain size glass is used with the GX71, set the zooming knob to 1X and position the grain size glass at the center.
3. If the optional GX-SLMG parfocal glass is to be used without using scale, engage the GX-SLMG in the light path. If a scale, grain size or graphic scale glass has already been attached, slide it away from the field of view or remove it from the scale slider.
  - When the scale slider is not used, be sure to attach the dummy slider, originally attached to the microscope frame, into the insertion hole in order to prevent penetration of dust.

Manufactured by

**EVIDENT CORPORATION**

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

Distributed by

**EVIDENT EUROPE GmbH**

Caffamacherreihe 8-10, 20355 Hamburg, Germany

**EVIDENT EUROPE GmbH UK Branch**

Part 2nd Floor Part A, Endeavour House, Coopers End Road, Stansted CM24 1AL, U.K.

**EVIDENT SCIENTIFIC, INC.**

48 Woerd Ave Waltham, MA 02453, U.S.A.

**EVIDENT AUSTRALIA PTY LTD**

97 Waterloo Road, Macquarie Park, NSW 2113, Australia