4 OPERATION PROCEDURE
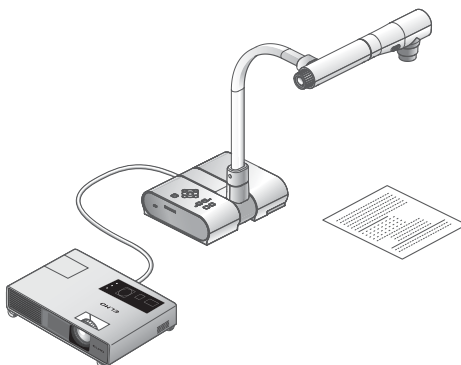
Presentation using printed materials, etc.

■ **Setting the main unit**

Set the main unit as shown in the above figure, connect the main unit to the projector or the PC monitor, and then turn the power switch of the main unit ON.

■ **Adjusting the size**

Place an object, adjust the position of the object with the zoom dial so that the objective part fits the screen size.

■ **Adjusting the focus**

Press the [AF] button to focus the camera on the object.

■ **Adjusting the brightness**

Press the [BRIGHTNESS • ☼ -] and [BRIGHTNESS • ⊖] buttons on the main unit to adjust image brightness.

■ **Turning the illumination lamp ON/OFF**

Move the illumination lamp switch to the left/right to turn it ON/OFF.

Note

• When connecting to other devices, be sure to turn OFF the power of all the devices.

Note

• For best results, we recommend LCD projectors over DLP projectors to be used with TT-02s. A better image may be produced by selecting "Graphics" mode with DLP projector.

Presentation using printed materials, etc. (Using the stage)
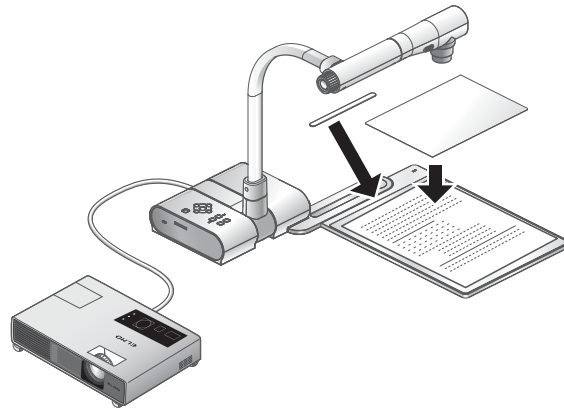
Using the supplied stage, magnetic sheet or anti-glare sheet, effective presentation is possible.

■ **Setting the main unit**

Attach the stage to the specified position as shown in the above figure and connect to the projector or the PC monitor. Then turn the power switch of the main unit ON.

• To prevent the printed materials, etc. from moving, use the supplied magnet sheet to properly fix the printed materials, etc. on the stage.

■ **Adjusting the size**

Place an object on the stage, adjusting the position of the object with the zoom dial so that the objective part fits the screen size.

■ **Adjusting the focus**

Press the [AF] button to focus the camera on the object.

■ **Adjusting the brightness**

Press the [BRIGHTNESS • ☼] and [BRIGHTNESS • ⊜] buttons on the main unit to adjust image brightness.

■ **Turning the lamp ON/OFF**

Slide the lamp switch to the left/right to turn it ON/OFF.

Note

• When shooting glossy documents, etc, the images may be hard to see due to glare, etc. In such cases, place the anti-glare sheet, supplied, over the area where glare is occurring. This will reduce glare and the images will become easier to see.

Presentation using an optional SD card (Option)
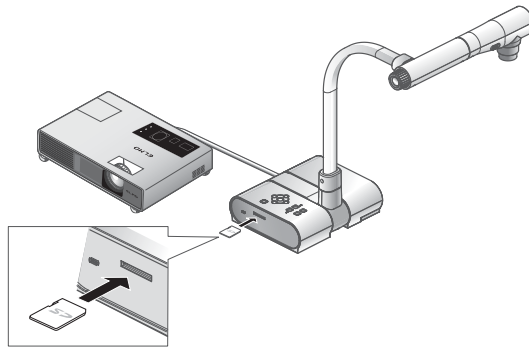
Note

- Before starting the operation, insert an optional SD card (Option) into the SD slot on the side panel. Push the card again to remove the SD card.
- Insert the SD card with the labeled side up. Forcing it in the wrong way may cause a malfunction.
- When loading or unloading the SD card or the power is turned OFF, be sure to select the camera image by pressing the camera button [🗲] on the front operating panel and confirm that the output image has been turned to the camera image beforehand. Otherwise, the SD card contents could be broken or failure could be caused to the camera.
- The SD card is composed of parts vulnerable to static electricity. Therefore, due to static electricity, the SD card could malfunction or its contents could be destroyed. When handling the SD card, take care to avoid static electricity.
- The image data viewable on this product is limited to the image data saved in this product and the image data converted using the conversion function of the software attached to this product.
- If you try displaying the image data whose format is not compatible with this product, a black or gray image will be displayed.
- If you try displaying the image data in the SD card without inserting the SD card, a black image will be displayed. (The message "NO CARD" will appear on the screen.)
- After using the SD card, do not leave it inside this product, but be sure to remove it.
- Panasonic SD card (256MB or 512MB) is recommended. The resolution of the image to be stored is 1024 x 768 (XGA output).
  This product can store images up to 2048 pcs.
- ELMO is not liable for any damage caused by the loss of the data in the SD card or passive damage.
- This product is not compatible with SDHC cards. Use a card recommended for this product.
- When the SD mode is selected, the specific software supplied with this prouct can not be used.

■ **Saving the image**

(1) Press the [⌐] button on the front operating panel to switch the mode to the Camera mode.

(2) Make sure that the OSD is not displayed, and then press the [📷] button on the front operating panel.

(3) When the [📷] mark lights up on the screen, the image saving starts. When this mark goes out, the image saving is completed.

Note

• When an image is saved during digital zooming, the digital zooming operation is canceled and the image is saved at the factory setting zoom ratio.

• The correct date/time is not saved on the image files.

• Be sure to try shooting and confirm the normal saving of the image beforehand. If the image can not be saved normally due to some problem with this camera or the SD card, ELMO is not liable to compensate for such failure.

• The [📷] mark on the screen is displayed only when the [Guide] menu is set to ON.

• When the SD card is write-protected, the image cannot be saved in the SD card.

• When the capacity of the SD card becomes full and no more images can be saved, the [×] mark lights up. Then, delete unnecessary images or use a new SD card.

• When the SD card is in the read/write mode, do not remove the SD card, or failure could occur with this product.

OPERATION PROCEDURE

■ **Displaying the image**

(1) When you make sure that the OSD is not displayed and then press the [**SD**] button on the front operating panel to switch the output image mode to the SD mode, the images saved in the SD card are displayed.

(2) When the direction button [▶] or [▼] on the front operating panel is pressed, the next image is displayed. When the direction button [◀] or [▲] is pressed, the previous image is displayed again.

(3) The image in display can be zoomed in/out by using the zoom dial and the zoomed in/out image can be reset by using the AF button. When the image is zoomed in, the displayed part of the image can be scrolled by using the direction buttons [▲ ▼ ◀ ▶].

■ **Deleting the image**

(1) Make sure that the OSD is not displayed, and then press the [ ] button on the front operating panel to display the images stored in the SD card.

(2) Display the image to be deleted by using the direction buttons [▲ ▼ ◀ ▶] on the front operating panel.

(3) Press the [MENU] button on the front operating panel, and select the [Delete] menu of the OSD. To delete only the image in display, select [Current]. To delete all images, select [All].

When you select [YES] by pressing the [◀┘] button on the front operating panel, the deletion is executed. (To cancel the deletion, select [NO].)

■ **Slide show**

(1) Make sure that the OSD is not displayed, and then press the button [ ] on the front operating panel to switch the output image mode to the SD mode.

(2) Display the OSD by pressing the [MENU] button on the front operating panel. When [Start?] of the [Start Slide Show] menu is selected, the slide show starts.

(3) When the [◀┘] button on the front operating panel is pressed, the slide show stops.

• [Effect], [Interval] and [Repeat] can be set from the [Slide Show Settings] menu of the OSD.

■ **Formatting the SD card**

When you need to format the SD card, insert the SD card into this product, and execute formatting.

(1) Make sure that the OSD is not displayed, and then press the [ ] button on the front operating panel to switch the mode to the SD mode.

(2) Display the OSD by pressing the [MENU] button on the front operating panel, and select [Format Media].

(3) Select [Format?].

Note

• When [USB Mode] has been set to [Mass Storage] and a USB cable has been connected to the PC, an SD card cannot be deleted, locked, unlocked, formatted, and saved with image data.

Transferring the images from the SD card into the USB-connected PC
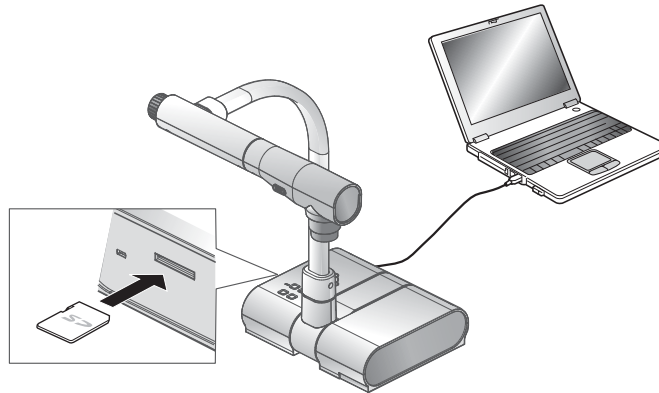
> ☞ **Note**
>
> • Set [USB Mode] to [Mass Storage] on the OSD.
> • Insert the SD card with the labeled side up. Forcing it in the wrong way may cause a malfunction.

When this product is USB-connected to the PC, image data in the SD card can be transferred into the PC.

The Operating System (OS) for the connected PC should be Microsoft Windows 2000 (SP4 or newer)/XP (SP2 or newer).

(1) Turn ON the power supply to this product and to the PC.
(2) Connect this product to the PC with the supplied USB cable.

> ☞ **Note**
>
> • When this product is connected to the PC for the first time, the required drivers are installed automatically due to the plug-and-play function of Windows. For the second time and thereafter, the drivers are no longer installed.
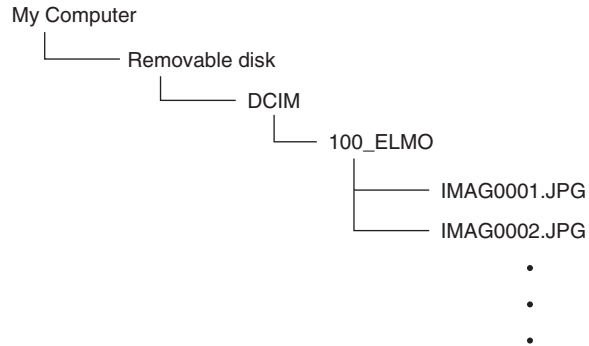
(3) This product is recognized as a removable disk. You can view the image data in an SD on the viewer software for the PC.

The image data are stored in JPEG format in the following folders:

```
My Computer
    └── Removable disk
            └── DCIM
                    └── 100_ELMO
                            ├── IMAG0001.JPG
                            └── IMAG0002.JPG
                                        •
                                        •
                                        •
```

Note

- An SD card set in this product cannot be saved, deleted, locked, unlocked, and formatted with image data from the PC.
- The image data cannot be recorded with the correct date and time.
- When the front operating panel is in operation, do not connect/disconnect the USB cable, or malfunction will be caused to this product.
- Do not switch [USB Mode] on the OSD when this product is in USB-connection.
- The USB2.0 compliant cable is recommended.
- Depending on the USB environment used by the PC or the USB2.0 compliant cable peripheral units, the image transfer could be disturbed.
- This does not guarantee operations in any environment.
- When [USB Mode] has been set to [Mass Storage] and a USB cable has been connected to the PC, an SD card cannot be deleted, locked, unlocked, formatted, and saved with image data by operating the main unit.

Presentation using the supplied software with the USB-connected PC
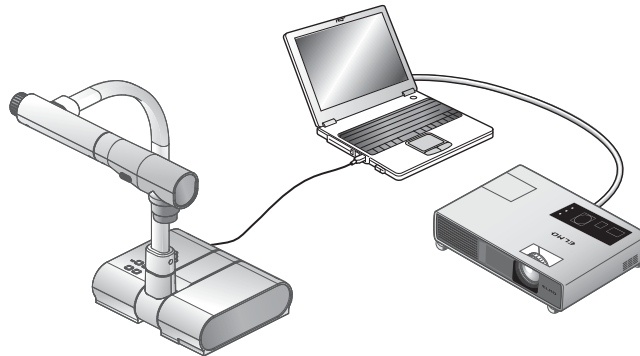
> ✎ **Note**
>
> • Set [USB Mode] to [Application] on the OSD.

"Utility Software" is in the supplied CD-ROM.

"Utility Software" contains the PC link software "Image Mate for Presentation" and the TWAIN driver "ELMO TWAIN DS (VHO)" for the following operations:

   • Transfer of moving/still images to the PC

   • Operation of this product from the PC

For details on the operating environment and the Operating System (OS) for the connected PC and how to use the PC link software etc., refer to the "Utility Software" Installation Manual and the "HELP Folder" in the CD-ROM.

> ✎ **Note**
>
> • When the SD mode is selected, the specific software supplied withthis prouct can not be used. Do not switch to the SD mode during operations using the specific software, as this may cause a malfunction.
>
> • When the operating button is in operation, do not connect/disconnect the USB cable, or malfunction will be caused to this product.
>
> • The USB cable compliant with USB2.0 is recommended.
>
> • When the DIP switch is set to the VIDEO, the image cannot be output from the USB. Refer to "OUTPUT (DIP switch)" on page 12 to switch the image output to the RGB.
>
> • Depending on the USB environment used by the PC or peripheral units, the image transfer could be disturbed.
>
> • This does not guarantee operations in any environment.

Presentation using a Microscope
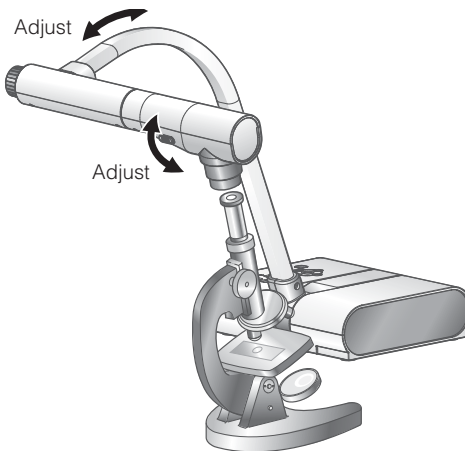
Adjust

Adjust

■ **Setting a microscope**

Place an object such as a prepared slide on a microscope. Adjust focus by checking with eyes at the microscope side.

■ **Setting the main unit**

Connect the main unit to a projector or a PC monitor. Then turn the power switch of the main unit ON.

■ **Changing to the Microscope mode**

Change the Microscope mode to [Set] from the OSD menu. Then connect the main unit to a microscope as shown in the above figure.

Note

• Pay attention to prevent the lens from knocking on a microscope.

• When being changed to the microscope mode, [Graphics] is automatically selected as [Mode].

■ **Adjusting the focus**

Adjust the focus on the microscope. At this time, please take care to ensure that the eyepiece does not come into contact with the lens of the main unit, and that the objective lens does not damage the prepared slide.
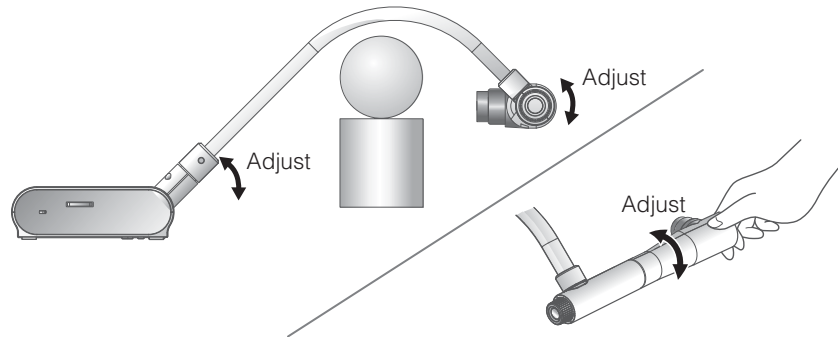
■ **Adjusting the brightness**

Press the [BRIGHTNESS • ⊕] and [BRIGHTNESS • ⊖] buttons on the main unit to adjust the image brightness.

Note

• When using the document camera successively after the use of microscope, set [Set] → [Off] in the OSD.

• When setting [Set] → [Off] in the OSD, [Mode] gets back to the selected [Mode] just before being changed to the microscope mode.

Shooting a 3-D object

By adjusting angle of the camera column and the camera head, a 3-D object can be shot from the side.

■ **Setting the main unit**

Connect the main unit to a projector or a PC monitor.

Then turn the power switch of the main unit ON. Adjust angle of the camera column and the camera head as shown in the above figure to shoot a 3-D object.

■ **Adjusting the size**

Adjust the position of the object with the zoom dial so that the objective part fits the screen size.

■ **Adjusting the focus**

Press the [AF] button to focus the camera. In a case when the object can not be brought into focus with the [AF] button, adjust focus with the manual focus by selecting [Focus] in the OSD menu.
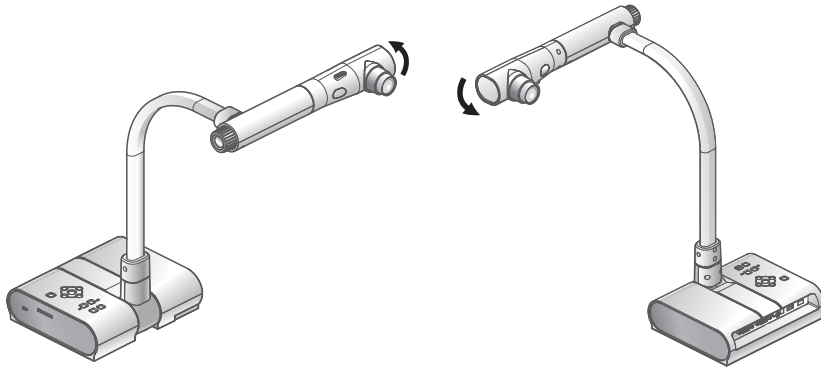
Note

• The focus can be achieved from 50mm to ∞.

■ **Adjusting the brightness**

Press the [BRIGHTNESS • ☼] and [BRIGHTNESS • ⊖] buttons on the main unit to adjust image brightness.

■ **Turning the illumination lamp ON/OFF**

Move the illumination lamp switch to the left/right to turn it ON/OFF.

Shooting wall surface or distant view

Forward shooting   Backward shooting

When the camera head is set horizontally, wall, distant view, etc, can be shot.

Note

- To shoot forward of the main unit, set to [Image Rotation] → [On] in the OSD to rotate the image by 180°.
- Camera head rotation angle
  Forward shooting : 110° from the normal downward shooting position
  Backward shooting : 110° from the normal downward shooting position
- The focus can be achieved from 50mm to ∞.

Note

- To take shots of people, turn the illumination lamp switch OFF.
- Make sure that the light from the illumination lamp does not shine directly into their eyes.