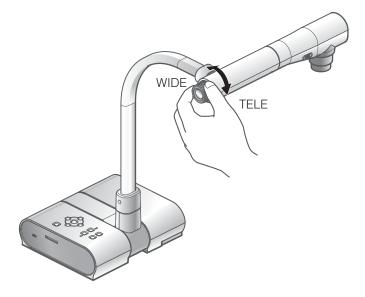


# 5 VARIOUS FUNCTIONS AND OPERATIONS

# Zoom



The display range of the document can be adjusted by rotating the zoom dial.

(Zoom-OUT  $\ensuremath{\mathbf{Q}}$ ) : Object can be shown in small size.

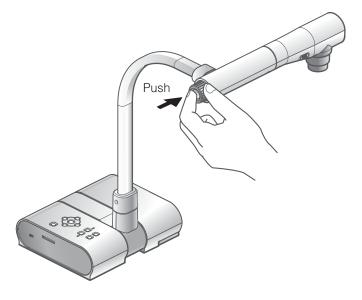
(1) : Object can be shown in large size.



#### Note

- Zoom ratio : Optical 5.2x, Digital 8x
- Within the digital zoom range, the image quality is degraded.
- In the SD mode, SD images can be digitally zoomed (enlarged/reduced).

# **Focus**



#### Auto focus

Press the [AF] button to automatically focus. The unit provides one-shot auto-focus system. Once the camera is focused, the auto focus operation is released, and then focus position is maintained.



# • The objects listed below may not be brought into focus in the auto focus. In such cases, use the manual focus.

- Low contrast object
- Objects with fine repeated patterns, such as lateral stripes and cross stripes
- Objects glittering or reflecting strong light
- Objects with bright background or excessive contrast
- Objects that are entirely dark
- Objects located near and far away at the same time
- Objects in motion
- The focus can be achieved from 50mm to  $\infty$ .
- In the SD mode, the digital zoom settings for SD images can be reset.

# UNCTIONS AND OPERATIONS

### English

#### ■ Manual focus

The position to focus can be changed with  $[\blacktriangle]$   $[\blacktriangledown]$  buttons on the main unit after selecting [Focus] in the OSD menu.

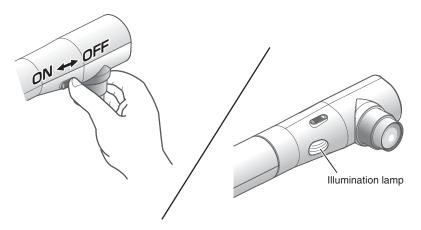
Use the manual focus to focus on any position of a 3-D object.





VARIOUS FUNCTIONS AN OPERATIONS

# Illumination lamp



By sliding the illumination lamp switch, the illumination lamp can be turned ON/OFF.

- [ON] : The illumination lamp lights.
- [OFF] : The illumination lamp goes out.



- 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.)
- This product is equipped with the high-brightness LED lamp. You can safely use the lamp to light objects. However, its brightness will gradually degrade with long-term usage. This is not a malfunction of the lamp, but a feature of the LED performance.
- Do not touch the illumination lamp while it is ON. Its temperature may be higher.

FUNCTIONS AND OPERATIONS

# Adjusting the brightness

Press the [BRIGHTNESS • 💬 ] and [BRIGHTNESS • 🕞] buttons on the main unit to adjust image brightness. Following two adjustment mode can be selected from the OSD menu.



#### Automatic brightness adjustment

([Brightness] → [Auto] in the OSD)

Brightness of the image changes automatically according to the brightness of the object.



## ■ Manual brightness adjustmentt

([Brightness]  $\rightarrow$  [Manual] in the OSD)

Brightness of the image is fixed to the specified level.



VARIOUS FUNCTIONS AND OPERATIONS



- Factory setting is set to [Auto].
- Manual adjustment fixes the brightness and does not follow the change in brightness of the object.
- When the brightness becomes dark, the frame rate slows, and the image may become hard to see.
- By setting [Guide] to [On] in the OSD menu, the setting details is displayed on the screen
- To go back to factory settings, press the [BRIGHTNESS - ☆] and [BRIGHTNESS •
- •] buttons on the main unit at the same time.

# Image selection



VARIOUS FUNCTIONS AN OPERATIONS The camera image is displayed by [CAMERA] button while the input image into the analog RGB input [RGB IN] is displayed by [PC] and the images in SD card is displayed by [SD] button.

The camera image and the image input in the RGB input terminal [RGB IN] can be switched by pressing the [CAMERA] button and the [PC] button respectively.

By using these functions, output images can be switched without disconnecting cables.

# Note

- The [PC] button can not be used when the dip switch is set to VIDEO.
- When using a laptop PC with external output selection equipped, set the output mode of the PC to "external" after pressing the [PC] button on the main unit.
- When the OSD is displayed, the [SD] button functions as [▼ (lower arrow button)].

# **White Balance**

#### ■How to use [Auto]

Adjust the white balance automatically according to the color status of the document.

Factory setting: Auto



#### ■ How to use [One-Push]

To be used when the color balance of the image is lost.

Firstly shoot a sheet of white paper and set the OSD menu [White Balance]  $\rightarrow$  [One-Push]. And then, the white balance for the then color temperature is fixed.

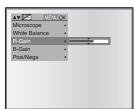


#### How to use [Manual]

Setting to [White Balance]  $\to$  [Manual] for the OSD fixes the white balance to allow [R-Gain] and [B-Gain] for the OSD to be adjustable.



VARIOUS FUNCTIONS AND OPERATIONS





- The automatically followed color temperature ranges from approx. 3000K 8000K.
- By setting [Guide] to [On] in the OSD menu, the setting details are displayed on the screen

### Save/call setting

The operation status of the unit can be saved/called in the memory. The unit saves 4 conditions (1-3, ON setting) and the storable condition are as follows.

- Current zoom angle of view (The range of the optical zoom)
- Brightness
- Mode setting
- Edge enhancement (in Graphics mode)
- Gamma value setting (in Graphics mode)
- Status of image rotation

- Status of white balance
- Intensity of red color (when selecting [White Balance] → [Manual])
- Intensity of blue color  $(\text{when selecting [White Balance]} \rightarrow [\text{Manual]})$
- Posi/Nega setting
- Color/B&W switch setting



• The saved conditions are retained even if the power is turned OFF.

#### How to save setting

Selecting [Preset]  $\rightarrow$  [1]  $\sim$  [3] in the OSD menu saves the current unit condition in the selected number.

Selecting [Preset]  $\rightarrow$  [Power On] in the OSD menu saves the setting to be called when the power switch of the main unit is ON.





- The status of a presentation done with microscope can not be saved.
- The status of image rotation can be saved only to [1] ~ [3]. (Not to [Power ON])
- Zoom angle of view in digital zoom mode can not be saved. When the status saving is done in digital zoom mode, saved zoom angle of view is the maximum TELE position [Zoom-IN ②] of optical zoom.

#### ■ How to call setting

Selecting [Call]  $\rightarrow$  the memory number for the OSD provides the setting for the selected number.

Selecting [Call]  $\rightarrow$  [Power On] for the OSD provides the setting for the power supply ON.

Selecting [Call]  $\rightarrow$  [Default] for the OSD provides the factory setting (excluding the USB mode setting).



FUNCTIONS ANI OPERATIONS