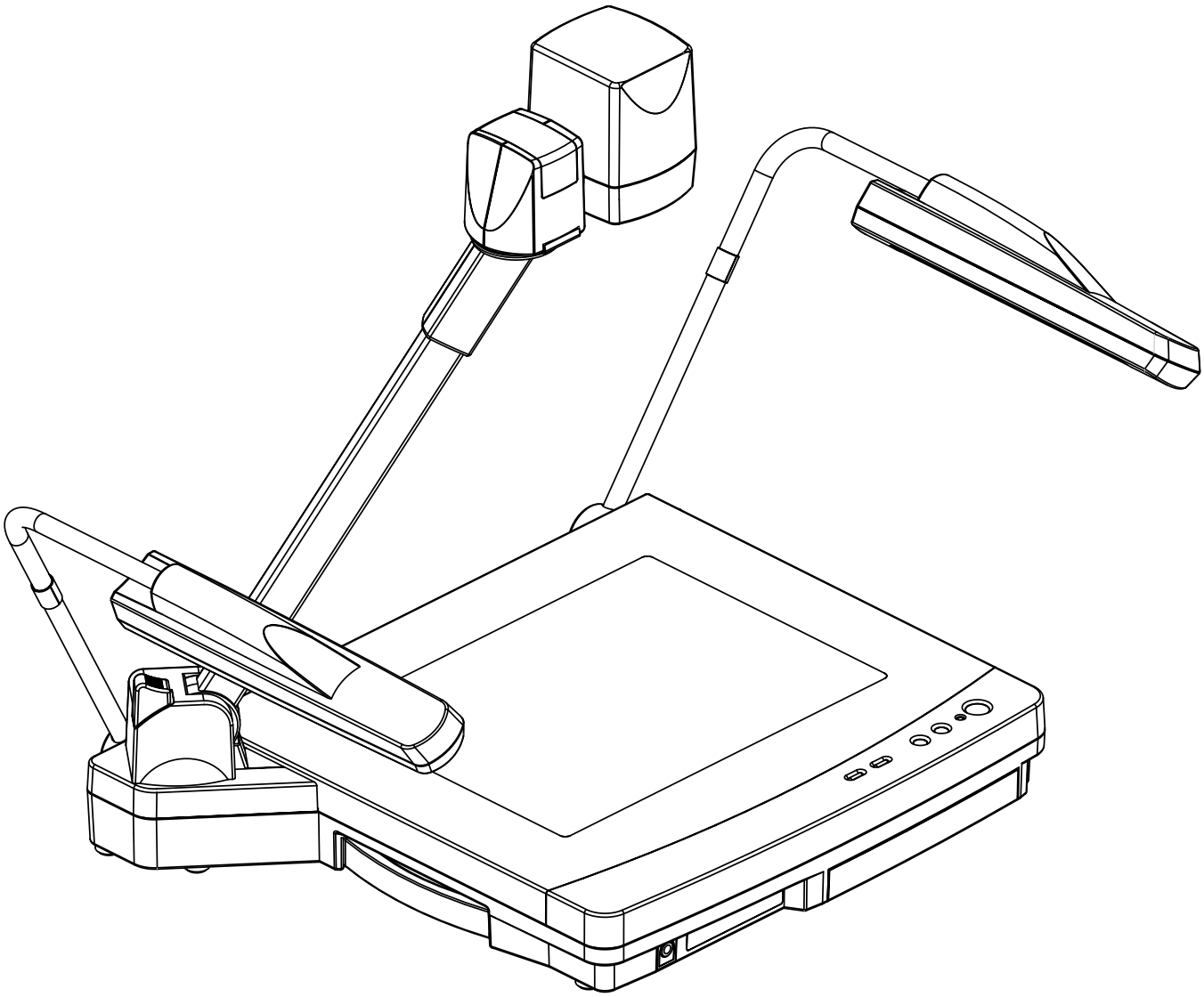
ELMO

VISUAL PRESENTER CEV.FR

EV-4400AF

INSTRUCTION MANUAL



Please read this instruction manual carefully before using this Visual Presenter and keep it for future reference.

CONTENTS

1. PART NAMES AND FUNCTIONS · · · · · 6

Appearance · · · · · 6
Front Panel · · · · · 7
Operation Panel · · · · · 8
Rear Panel · · · · · 9
Wireless Remote Control · · · · · 10

2. WIRELESS REMOTE CONTROL · · · · · 11

Preparation · · · · · 11

3. MOUSE · · · · · 12

4. SETTING UP · · · · · 13

Connection to the monitor TV · · · · · 14
Connection to the composite video-in terminal · · · · · 14
Connection to the S video-in terminal · · · · · 14

5. STORING THE PRESENTER · · · · · 15

6. OPERATION PROCEDURES · · · · · 16

Simple steps for presenting printed material · · · · · 16
Simple steps for showing transparent material, such as overhead transparencies or slide film · · · · · 17
Convenient use of the camera · · · · · 17

7. VARIOUS FUNCTIONS · · · · · 18

Lighting · · · · · 18
Zoom · · · · · 19
Input selection · · · · · 20
Table of Video- and Audio-in/out Terminal Selections · · · · · 20
Electronic enlargement · · · · · 21
Color/B&W selection · · · · · 22
Posi/Nega conversion · · · · · 22
White Balance · · · · · 23
Iris · · · · · 23
Focus · · · · · 24
Auto Focus · · · · · 24
Powered Manual Focus · · · · · 25
About the preset and move operation · · · · · 25
Mouse pointer · · · · · 26
LCD monitor bracket socket · · · · · 27
Connecting to the LCD monitor out terminal · · · · · 27

8. OSD (On-Screen-Display) 28
Color adjustment <CHROMA> 29
Electronic shutter <SHUTTER> 29
Microphone input <MIC> 30
AGC (Auto gain control) 30
Adjusting the detail (Outline-accent function) 30
Setting the color of the mouse pointer 31
Electronic zoom ON/OFF selection 31
Remote setting 31
Selection of preset No. and move No. <MEMORY> 32

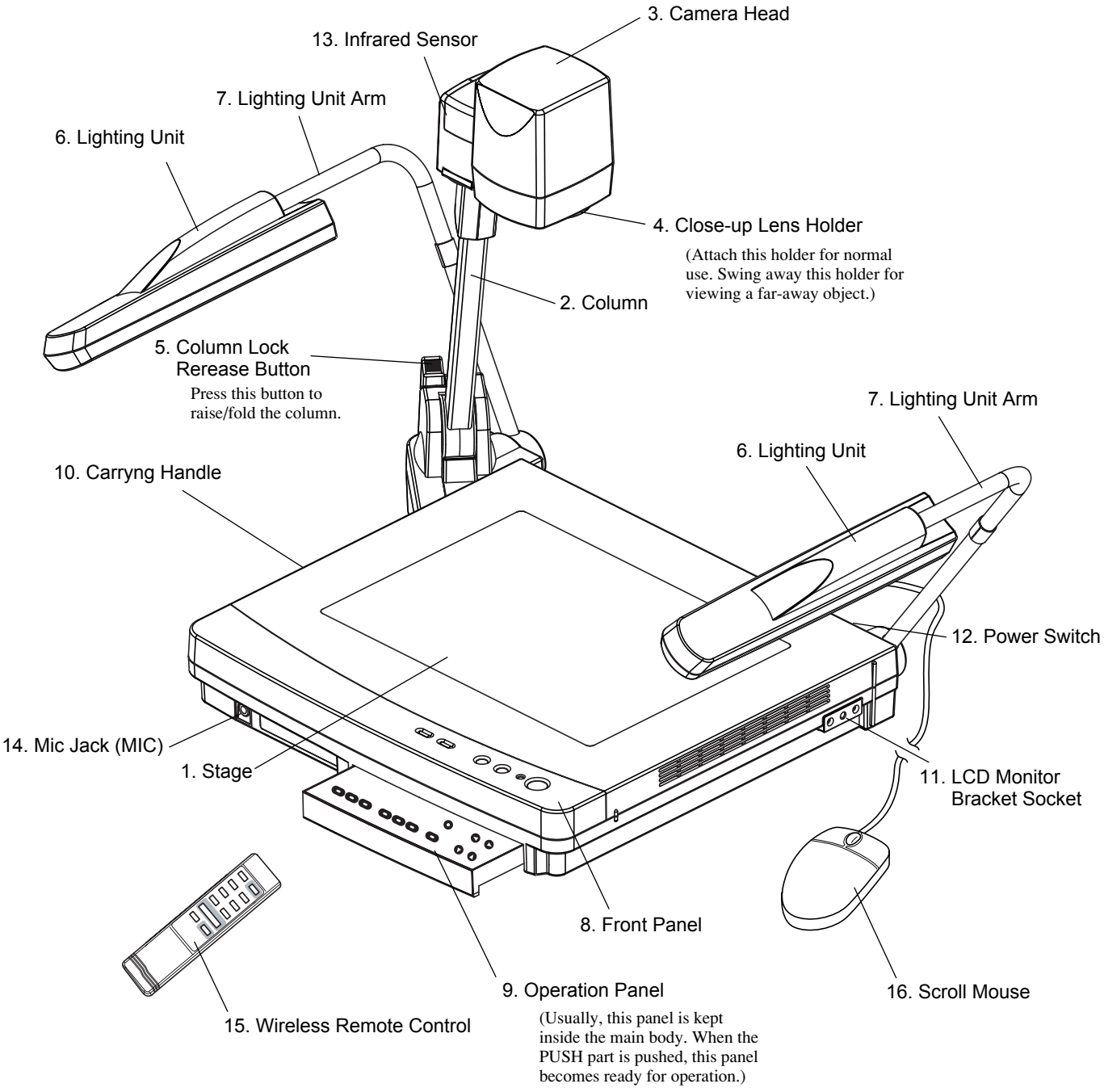
9. RS-232C SPECIFICATIONS 33
Setting up 33
Cable connection 34
RS-232C connector specifications (DSUB-9P) 34
Table of the communication commands 35
Data format specifications 37
Trasnmission Command (PC → Visual Presenter) 37
Responce data format (Visual Presenter → PC) 37
Transmission specifications 38
Connection 38

10. TROUBLESHOOTING HINTS 39
Replacement of fluorescent lamp 39

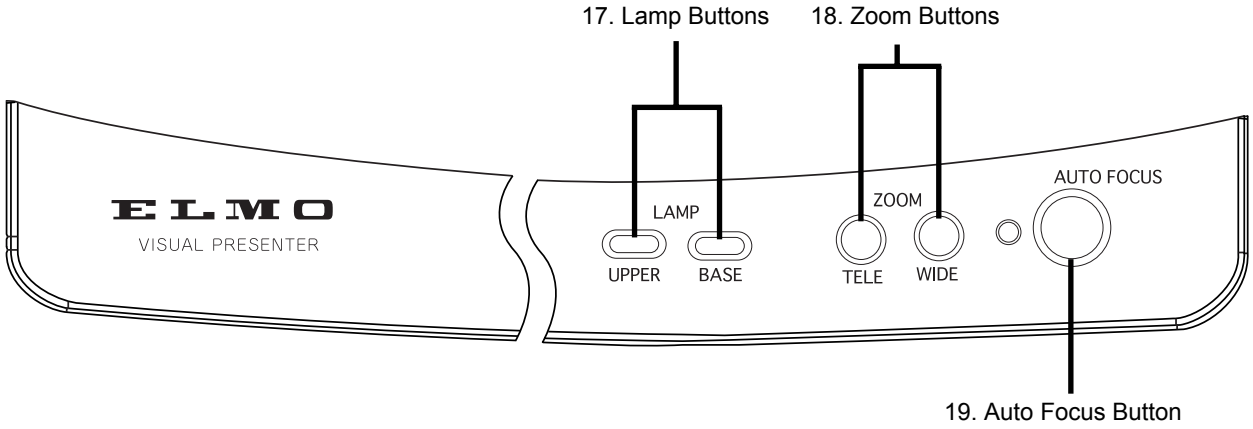
11. SPECIFICATIONS 40
General 40
Main camera 41
Lighting 42
Supplied accessories 42
Options 42

1. PART NAMES AND FUNCTIONS

○ Appearance

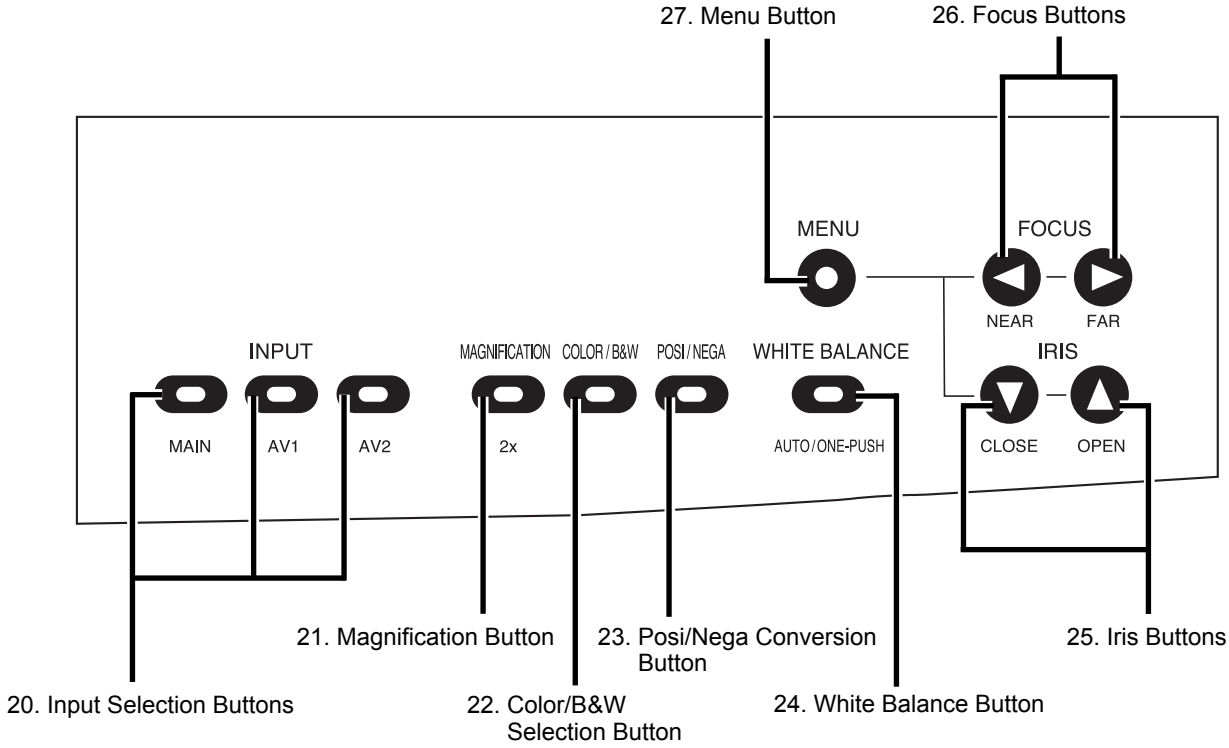


○ Front Panel



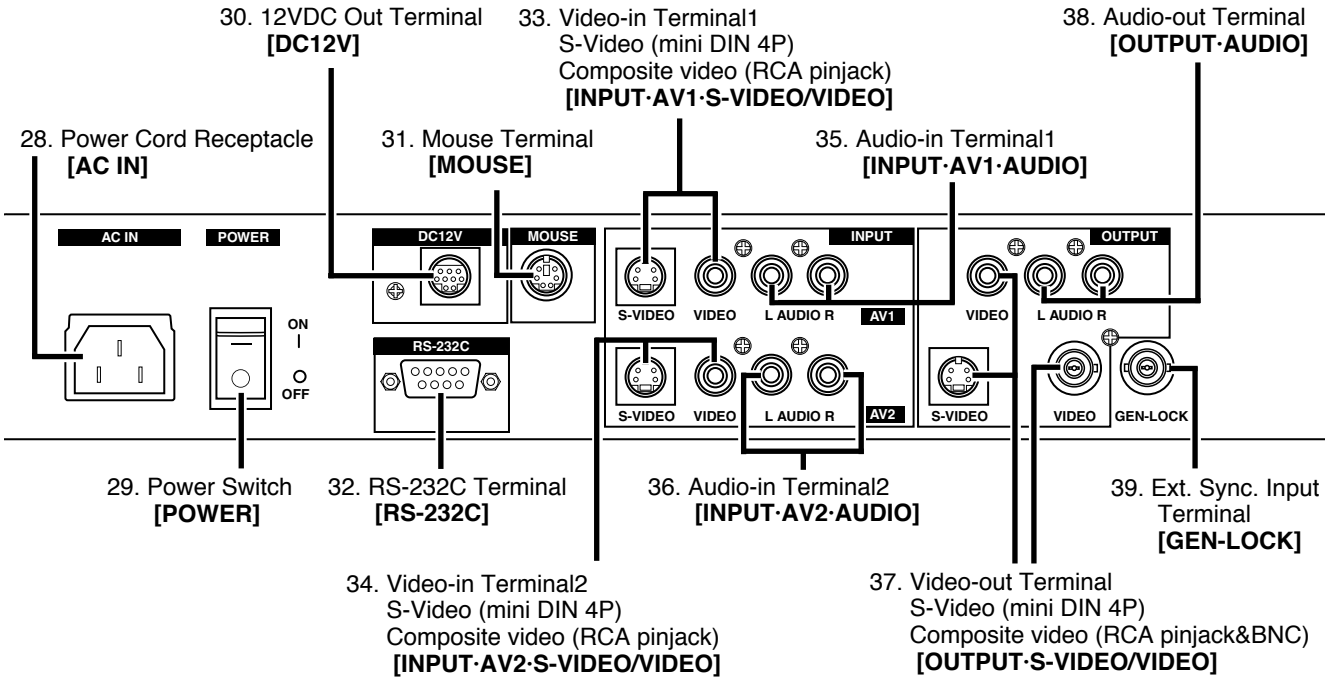
	Name	Function	Reference Page
17	Lamp Buttons	To turn ON/OFF the lighting.	P.17, P.18
18	Zoom Buttons	To change the image size.	P.16, P.19, P.24
19	Auto Focus Button	To focus automatically (One-shot auto focus). (FOCUSFREE)	P.16, P.24

○ Operation Panel



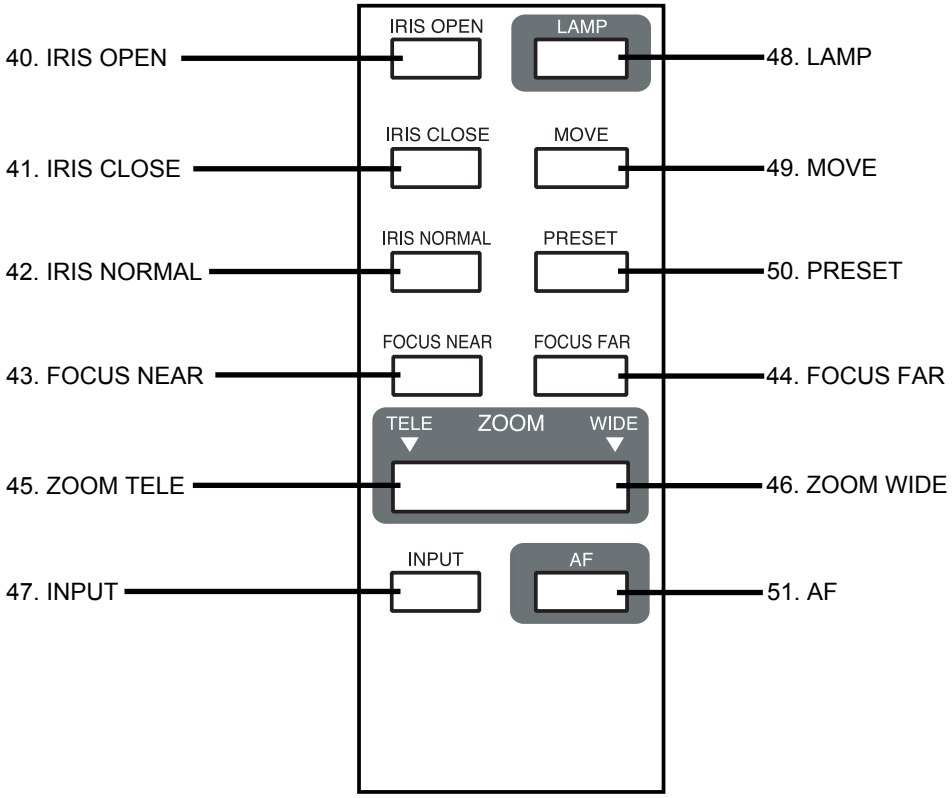
	Name	Function	Reference Page
20.	Input Selection Buttons	To change the input line.	P.20
21.	Magnification Button	To double the image size.	P.21
22.	Color/B&W Selection Button	To present black-and-white material, such as documents.	P.22
23.	Posi/Nega Conversion Button	To show negative films.	P.17, P.22
24.	White Balance Button Auto/One-Push	To change the mode between AUTO and ONE-PUSH.	P.23
25.	Iris Buttons	To adjust the brightness of the screen. When the OSD menu is in display, these buttons function as the direction keys [▼] and [▲].	P.23, P.28
26.	Focus Buttons	To adjust focus (powered). When the OSD menu is in display, these buttons function as the direction keys [◄] and [►].	P.24, P25, P.28
27.	Menu Button	To display the OSD (On-Screen Display) menu.	P.28

○ Rear Panel



	Name	Function	Reference Page
28.	Power Cord Receptacle **[AC IN]**	Connected to the power cord connector.	–
29.	Power Switch **[POWER]**	To turn ON/OFF the power supply.	P.16
30.	12VDC Out Terminal **[DC12V]**	To output 12VDC. Can be connected to the LCD monitor (LM-5011N) (option) by using the LCD monitor connection cable (attached).	P.27
31.	Mouse Terminal **[MOUSE]**	To connect the mouse (supplied accessory).	P.12
32.	RS-232C Terminal **[RS-232C]**	Controllable from a general-purpose personal computer.	P.33
33.	Video-in Terminal1 **[INPUT·AV1·S-VIDEO/VIDEO]** S-Video (mini DIN 4P) Composite video (RCA pinjack)	Video signal from this terminal is output through the video-out terminal when input selection is set at AV1.	P.20
34.	Video-in Terminal2 **[INPUT·AV2·S-VIDEO/VIDEO]** S-Video (mini DIN 4P) Composite video (RCA pinjack)	Video signal from this terminal is output through the video-out terminal when input selection is set at AV2.	P.20
35.	Audio-in Terminal1 **[INPUT·AV1·AUDIO]**	Audio signal from this terminal is output through the audio-out terminal when input selection is set at AV1.	–
36.	Audio-in Terminal2 **[INPUT·AV2·AUDIO]**	Audio signal from this terminal is output through the audio-out terminal when input selection is set at AV2.	–
37.	Video-out Terminal **[OUTPUT·S-VIDEO/VIDEO]** S-Video (mini DIN 4P) Composite video (RCA pinjack&BNC)	Connected to a TV monitor or the like.	P.14
38.	Audio-out Terminal **[OUTPUT·AUDIO]**	Connected to a TV monitor audio-input terminal or the like.	–
39.	Ext. Sync. Input Terminal **[GEN-LOCK]**	To input external synchronizing signal.	–

○ Wireless Remote Control



	Button Name	Function	Reference Page
40	**IRIS OPEN**	To open the AUTO iris.	P.23
41	**IRIS CLOSE**	To close the AUTO iris.	P.23
42	**IRIS NORMAL**	To reset the AUTO iris to the initial value.	P.23
43	**FOCUS NEAR**	To move the focus near.	P.24, P.25
44	**FOCUS FAR**	To move the focus far.	P.24, P.25
45	**ZOOM TELE**	To zoom in.	P.16, P.19, P.24
46	**ZOOM WIDE**	To zoom out.	P.16, P.19
47	**INPUT**	To change the input system.	P.20
48	**LAMP**	To turn ON/OFF the lamp.	P.17, P.18
49	**MOVE**	To call the operating status of the Presenter saved in **[PRESET]**.	P.25
50	**PRESET**	To save the operating status of the Presenter.	P.26
51	**AF**	To focus automaticaly.	P.16, P.24

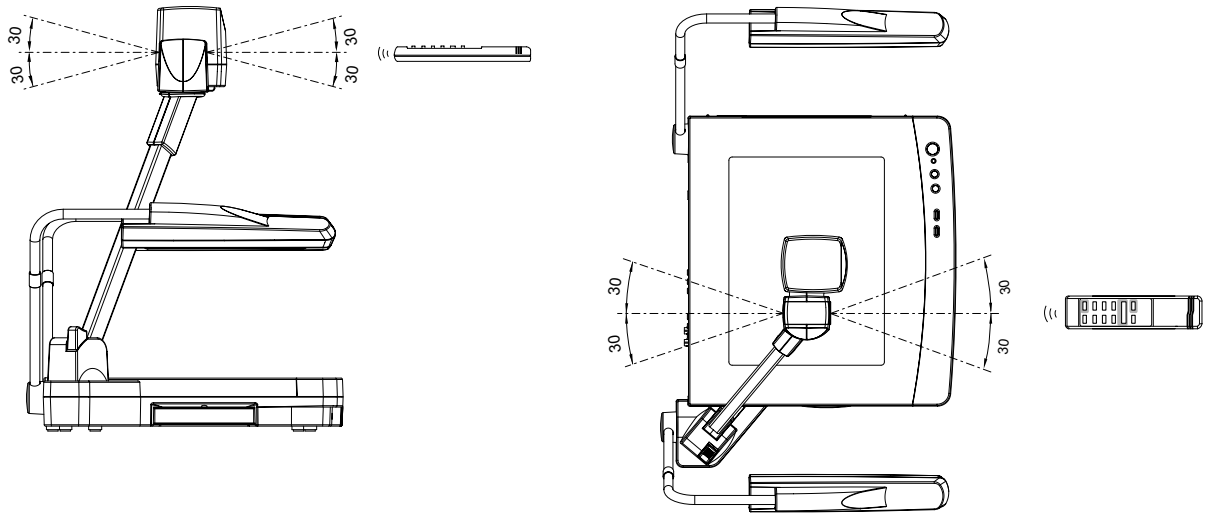
2. WIRELESS REMOTE CONTROL

Point the infrared emitting part of the wireless remote control unit at the infrared sensor of the Visual Presenter, located on the top of the column, and press the button for the desired function.
The receivable range may be narrowed when the Presenter is placed under sunlight, near an inverter fluorescent lamp or in any other unfavorable surroundings. Depending on the conditions of fluorescent lamps, etc. the sensor may fail to receive the infrared light. In such a case, relocate the Presenter, or take other countermeasures.

Receivable range

Distance : Approx. 7 m (23 ft.) or less from the light receiving area to the front of the wireless remote control

Angle : Approx. 30 degrees or less from the light receiving area to the front of the wireless remote control rightward, leftward, upward and downward, respectively



○ Preparation

Remove the battery case cover by pressing downward on the [↓OPEN] mark part in the direction as indicated by the arrow. Install 2 pcs of batteries (type R03, AAA) into the case in the direction as indicated there.

Note: Install the batteries with the right polarity.

Note: Change the batteries once a year.

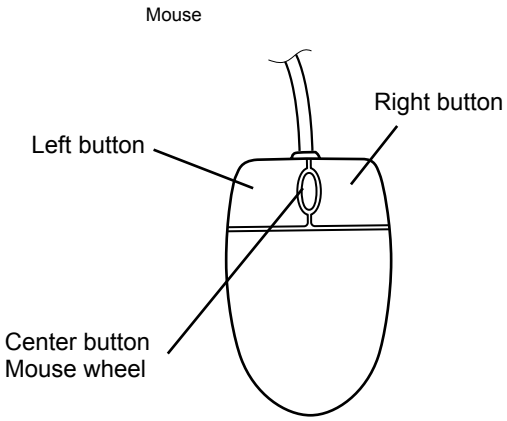
Note: The batteries supplied with the Presenter are only for use in initially confirming the operation of the Presenter. It is not guaranteed that these batteries can work effectively for the indicated period.

3. MOUSE

Connect the mouse to the mouse terminal on the rear panel.
The mouse can control the display and operation of the OSD Menu screen, mouse pointer and the Electronic enlargement.

<About the mouse operation in normal use>

- **Left** button ..... To turn ON/OFF the mouse pointer.
- **Center** button ..... To turn ON/OFF the OSD menu.
- **Mouse wheel** ..... To scroll the enlarged screen up/down in electronic double enlargement.
- **Right** button ..... To turn ON/OFF the electronic double enlargement.



Reference Page

- Electronic enlargement P.21
- Mouse pointer P.26
- Mouse functions in the OSD Menu screen display P.28
- Remote setting P.32

Note: When using the mouse, connect the mouse before turning ON the power supply to the Presenter.
If the mouse is connected after turning ON the power supply to the Presenter, the mouse will not function.

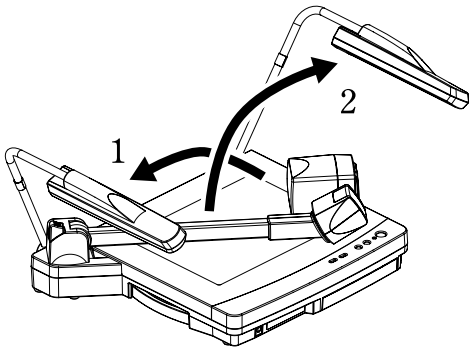
Note: Use the attached mouse.
If a mouse on the market is used, the normal operation cannot be guaranteed.

Note: The mouse pointer and the OSD menu cannot be concurrently turned ON.

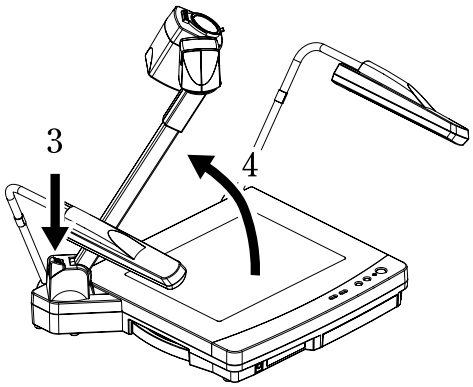
Note: Control by the mouse and control by the PC (via RS-232C) cannot be concurrently used.
To use the mouse, select <MOUSE> in the remote setting of the OSD menu.

4. SETTING UP

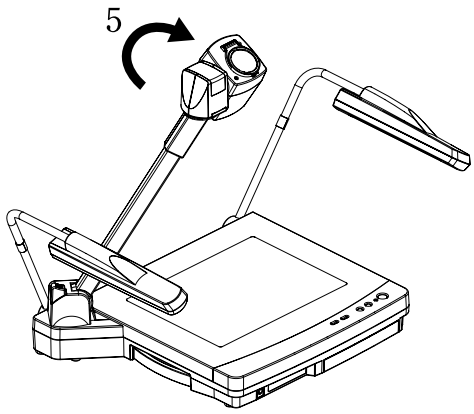
(1) Unfold the lighting unit arms fully until they come to the deadend. Unfold arm 1 and then arm 2 as illustrated.



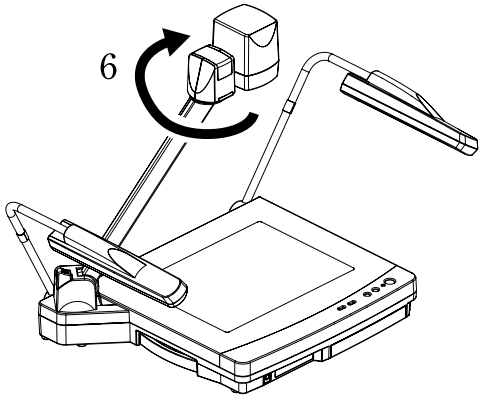
(2) Press the column lock release button, and raise the column until the column lock release button returns to the original position. Make sure that the column has been completely locked.



(3) Turn the main camera head as illustrated until it is stopped.



(4) Turn the main camera head until the lens faces to the stage.



(5) Plug the power cord into the power cord receptacle of the Presenter and the AC outlet.

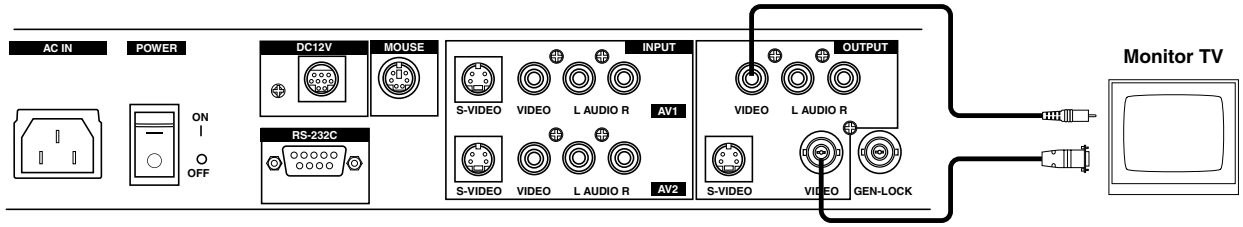
○ Connection to the monitor TV

Note: Be sure to turn OFF the power supply to all equipment before making any connections to protect the Presenter and all the connected equipment.

Note: Hold the cable plug part when connecting or disconnecting the cables.

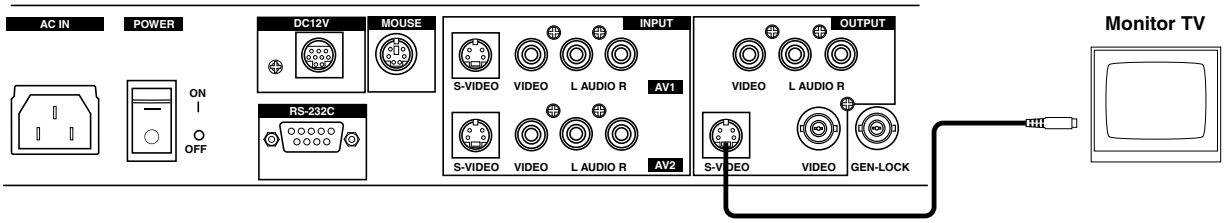
● Connection to the composite video-in terminal

Use the supplied RCA video/audio cable or a BNC cable available on the market. (Either the RCA jack or the BNC jack can be used.)



● Connection to the S video-in terminal

Connect the S video-out terminal (mini DIN 4P) of the Presenter to the S video-in terminal of the TV/video monitor. For the S video mode, use an S video connection cable available on the market. If the equipment to be used is provided with a Y/C separate connector, a conversion adapter is necessary.

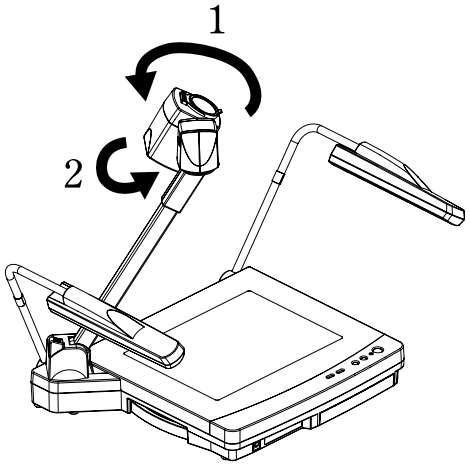


5. STORING THE PRESENTER

(1) Turn OFF the power switch, and unplug the power cord and the video cable.

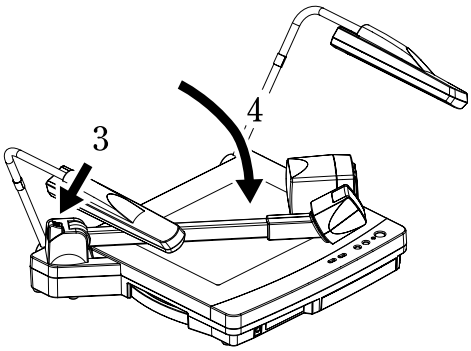
(2) Turn the main camera head as illustrated until it is stopped.

Note: Be sure to set the camera head in the illustrated position before storing. Storing the main camera head in any other position may damage the stage surface or the lens.

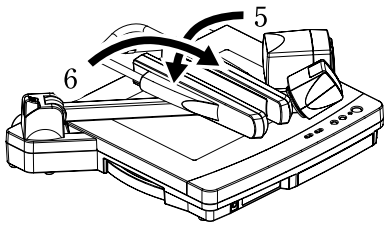


(3) Press the column lock release button, and fold down the main column.

Note: The illustration shows the right storage position of the column. Never apply excessive force to the column.



(4) Fold down the lighting unit arms 5 and 6. Be sure to fold down arm 5 first as per the illustration.



6. OPERATION PROCEDURES

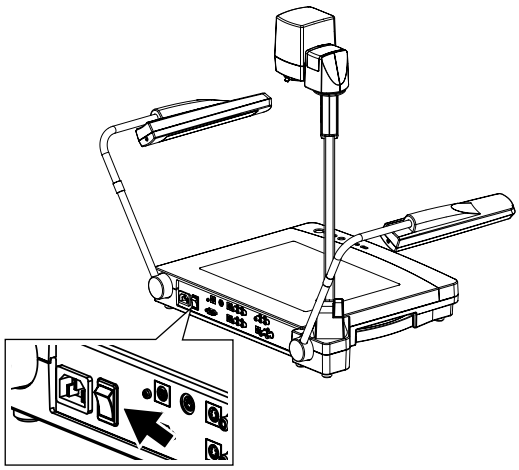
○ Simple steps for presenting printed material

(1) Turn ON the power switch.

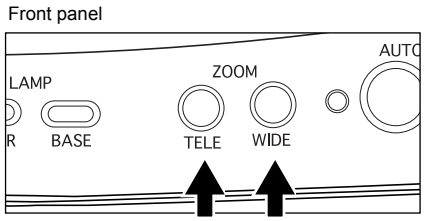
Note: Before turning ON the power switch, connection to the monitor should have been completed.

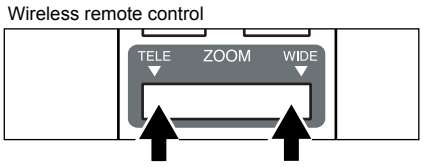
Note: When the power switch is turned ON, the lighting unit lights up.

Note: If the power switch is turned ON immediately after being turned OFF, the Presenter may not operate. For restarting, turn ON the power switch several seconds after turning OFF.



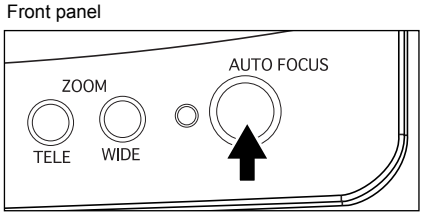
(2) Place the object on the stage. Adjust the image size according to the object size using the zoom buttons (**[TELE]**/**[WIDE]**) on the front panel or the zoom buttons (**[TELE]**/**[WIDE]**) on the wireless remote control, while watching the image on the TV monitor.

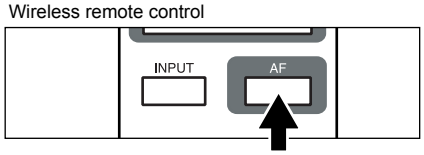




(3) Press the auto focus button **[AUTO FOCUS]** on the front panel or the auto focus button **[AF]** on the wireless remote control.

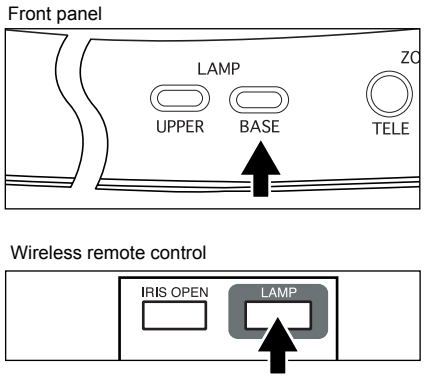
Note: The auto focus function works up to a height of approx. 15cm (5.9 in.) above the stage surface (when the close-up lens is attached).



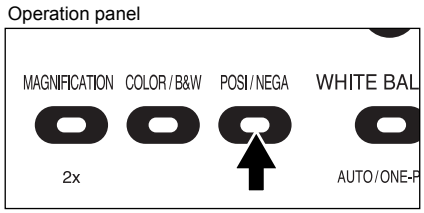


○ Simple steps for showing transparent material, such as overhead transparencies or slide film

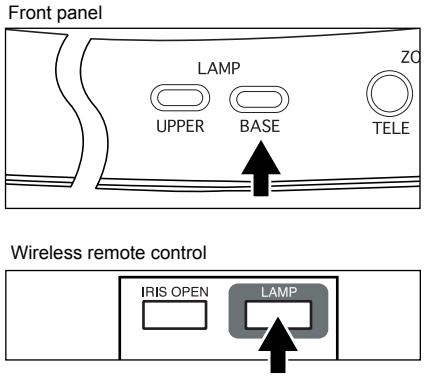
(1) Press the base button **[BASE]** on the front panel or the lamp button **[LAMP]** on the wireless remote control to light up the base light (transparent lighting unit) built in the stage.



(2) To present a nega film, press the posi/nega conversion button **[POSI/NEGA]** on the operation panel to change the mode to [N] (Negative).



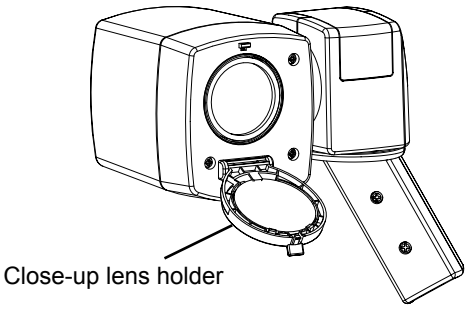
(3) To turn OFF the base light, press the base button **[BASE]** on the front panel or the lamp button **[LAMP]** on the wireless remote control again.



○ Convenient use of the camera

Set the main camera head horizontally to shoot the objects, such as walls and distant views. When the object is far away, open the close-up lens holder to your side.

Reference The focus can be achieved from 0.5m (20 in.) to ∞.

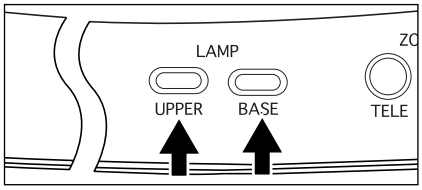


7. VARIOUS FUNCTIONS

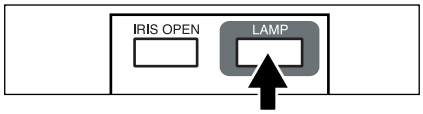
○ Lighting

The upper lighting unit for presenting material such as printed matter and 3-D objects, and the baselight for presenting transparent material, such as slide, and negative films, are built in to the Presenter.
When the lamp button **[LAMP]** (**[UPPER]**/**[BASE]**) on the front panel or the lamp button **[LAMP]** on the wireless remote control is pressed, the fluorescent lamp lights up in 1 to 3 seconds.
Every time the lamp button **[LAMP]** on the wireless remote control is pressed, lighting is switched in a cycle of **the lighting unit lights up → the base light lights up → the base light goes out**.
The lighting unit lights up when the power supply is turned ON.
To turn OFF the lamp, press the button for the respective lamp.

Front panel



Wireless remote control



Note: It is impossible to have the upper lighting unit and the baselight lit up together.

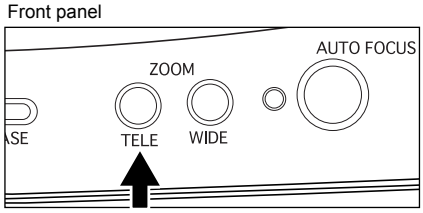
Note: When the lightness of the material surface is not sufficiently high or a 3-D object is presented, a sharp image with good color rendering can be obtained with the upper lighting unit on.

○ Zoom

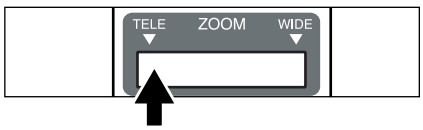
Press the zoom button **[TELE]** on the front panel or wireless remote control, and the image will gradually be enlarged.

Note: The image quality is lower within the electronic zoom range. For some material (objects), horizontal stripes may be conspicuous.

Front panel



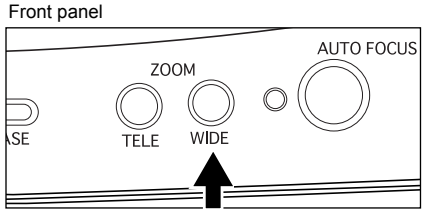
Wireless remote control



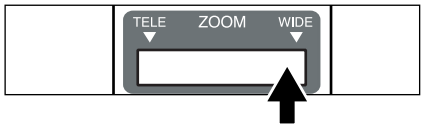
Press the zoom button **[WIDE]** on the front panel or wireless remote control, and the image will gradually be reduced.

Reference Page · Electronic zoom ON/OFF selection P.31

Front panel



Wireless remote control



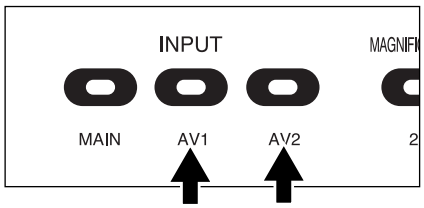
○ Input selection

The respective images from two different AV sources such as a VCR and a video camera can be alternately presented on a monitor by selecting the AV source by pressing the desired input selection buttons without changing cable connections. The input can be switched by pressing the input select button **[AV1]** or **[AV2]** on the operation panel or the input select button **[INPUT]** on the wireless remote control. The lighting of the indicator lamp indicates which input is now selected.

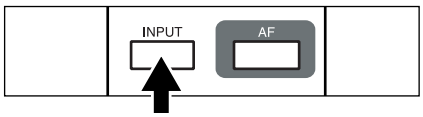
Every time the input selection button **[INPUT]** on the wireless remote control is pressed, input is switched in a cycle of **the Main → AV1 → AV2**.

Input selection is possible as shown in the table on the next page. Signal change, such as "from C-video input to S-video output" is not available.

Operation panel



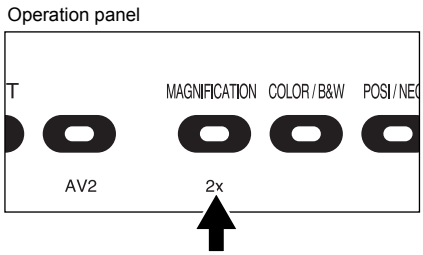
Wireless remote control



● Table of Video- and Audio-in/out Terminal Selections

Output signal / Input	Video-out terminal			Audio-out terminal	
	S-VIDEO terminal	RCA terminal	BNC	L terminal	R terminal
INTERNAL	Main camera S-video signal	Main camera C-video signal	Main camera C-video signal	Main body input microphone audio (monaural)	Main body input microphone audio (monaural)
AV1	AV1 input S-video signal	AV1 input C-video signal	AV1 input C-video signal	AV1 input external audio signal L channel (stereo) + Main body input microphone audio (monaural)	AV1 input external audio signal R channel (stereo) + Main body input microphone audio (monaural)
AV2	AV2 input S-video signal	AV2 input C-video signal	AV2 input C-video signal	AV2 input external audio signal L channel (stereo) + Main body input microphone audio (monaural)	AV2 input external audio signal R channel (stereo) + Main body input microphone audio (monaural)

○ Electronic enlargement



To double the image.
To double the central part of the image, press the button **[MAGNIFICATION]** on the operation panel. When double magnification is selected, the indicator lamp lights up.
The image can be enlarged only within the shooting area of the main camera.
The mouse can be operated as follows:

- **Left** button ..... To turn ON/OFF the scroll of the enlarged screen. When this button is pressed, "+" is displayed in the screen. When the mouse is dragged with this button held down, the enlarged screen scrolls. When the OSD Main menu is in display, the OSD screen is not in display but the mouse pointer is in display.
- **Center** button ..... To turn ON/OFF the OSD Menu screen.
- **Mouse wheel** ..... To scroll up/down the enlarged screen.
- **Right** button ..... To turn ON/OFF the double enlargement.

Note: When the electronic enlargement is tried while the mouse pointer is in display, as the left button of the mouse is limited to the scroll ON/OFF function, the mouse pointer cannot be turned OF/OFF. To turn ON/OFF the mouse pointer, turn OFF the electronic enlargement.

Note: When the electronic zoom is ON and on the maximum telephoto side, even if the electronic enlargement button **[MAGNIFICATION]** is pressed, the image cannot be further enlarged.

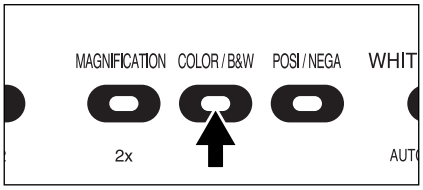
○ Color/B&W selection

To present the B&W (Black&White) material such as documents. Sharper image with no color blur on the monitor can be produced. Set to color mode for normal use.

Press the color/B&W selection button **[COLOR/B&W]** on the operation panel, the indicator lamp lights up and the mode changes to B&W mode.

When the color/B&W selection button **[COLOR/B&W]** is pressed again, the indicator lamp goes out and the normal (COLOR) mode is resumed.

Operation panel



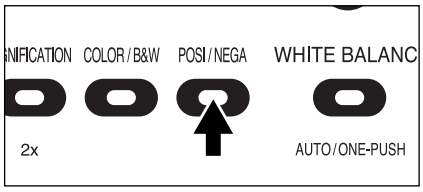
○ Posi/Nega conversion

To show a negative film.

Press the posi/nega conversion button **[POSI/NEGA]** on the operation panel or wireless remote control, the indicator lamp lights up and the image will be converted accordingly.

When the posi/nega conversion button **[POSI/NEGA]** is pressed again, the indicator lamp goes out and the normal mode is resumed.

Operation panel

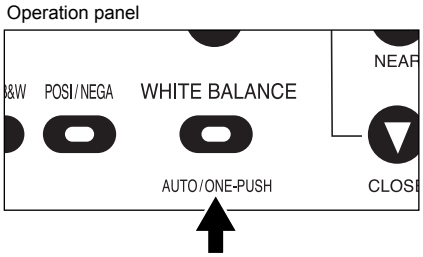


○ White balance

The camera of the Presenter automatically adjusts the shooting color balance (AUTO mode). However, depending on the color arrangement of document or the like, this color balance may be lost. In such case, shoot the stage surface, and press the white balance button **[WHITE BALANCE]** on the operation panel. Then, the indicator lamp blinks and then lights up, the mode is switched to the ONE-PUSH mode, and the white balance is fixed.
When the white balance button **[WHITE BALANCE]** is pressed again, the indicator lamp goes out, and the mode returns to the AUTO mode.

AUTO..... To set the white balance in the auto follow mode (initial setting).

ONE-PUSH ..... To set the push-set white balance. By pressing the button **[WHITE BALANCE]**, the white balance for the then color temperature is fixed.

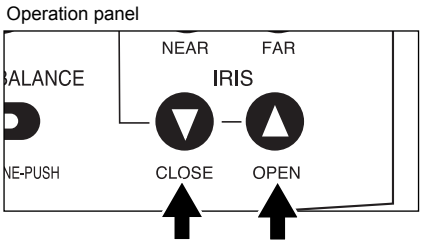


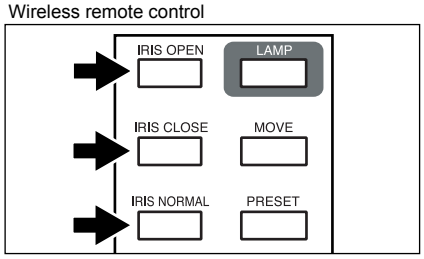
Note: The automatically followed color temperature ranges from approx. 3000k to 8000k.

○ Iris

To adjust the Auto iris level of the lens.
Press the iris button **[OPEN]** on the operation panel or the iris open button **[IRIS OPEN]** on the wireless remote control, and the iris will open.
Press the iris button **[CLOSE]** on the operation panel or the iris close button **[IRIS CLOSE]** on the wireless remote control, and the iris will close.
Press the iris normal button **[IRIS NORMAL]** on the wireless remote control, and the initial setting will be resumed.

Note: If the screen looks dark, press the iris button **[IRIS OPEN]** on the wireless remote control to adjust the brightness of the screen.



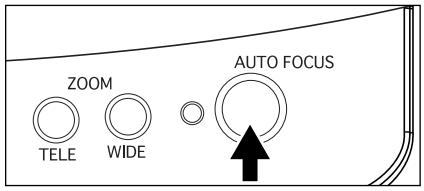


○ Focus

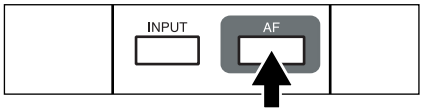
● Auto Focus

Press the auto focus button **[AUTO FOCUS]** on the front panel or the auto focus button **[AF]** on the wireless remote control, and the auto-focus will be activated.
While the auto-focus is in operation, the indicator lamp on the front panel blinks until the object is brought into focus.

Front panel

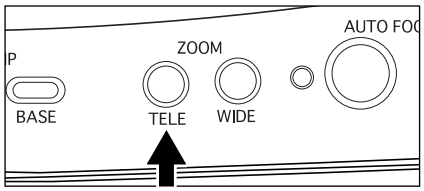


Wireless remote control



The Presenter features a one-push auto focus function. Once focusing is completed, the auto focus function is released, and the focused position maintains unchanged (FOCUSFREE).
To obtain sharper image, zoom in on the object by pressing the zoom button **[TELE]** on the front panel or wireless remote control and press the auto-focus botton.

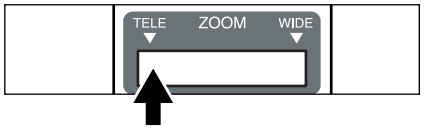
Front panel



However, the objects listed below may not be brought into focus in the auto focus mode. In these cases, use the manual focus mode.

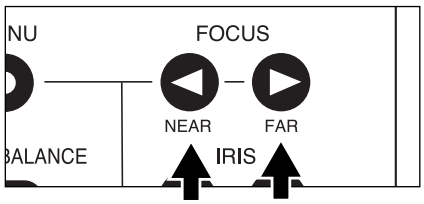
- Objects bearing little contrast
- Objects with fine repeated patterns, such as lateral stripes and cross stripes
- Objects glittering or reflecting strong light
- Objects with bright background, or excessive contrast
- Objects in a dark picture plane
- Objects located near and far away at the same time
- Objects in motion

Wireless remote control



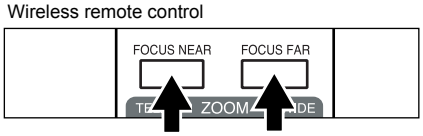
If the focus button **[NEAR]** or **[FAR]** on the front panel or the focus button **[FOCUS NEAR]** or **[FOCUS FAR]** on the wireless remote control is pressed during the auto focus, the auto focus will be released.

Operation panel



Note: The auto focus functions up to approx. 15cm (5.9 in.) above the stage surface (with the close-up lens attached).

Wireless remote control

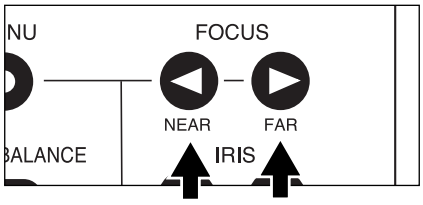


● **Powered Manual Focus**

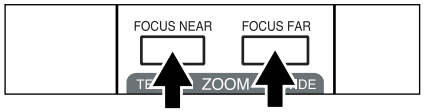
To focus on specific part of the material, such as 3-D material. Press the focus button **[NEAR]** or **[FAR]** on the operation panel or the focus button **[FOCUS NEAR]** or **[FOCUS FAR]** on the wireless remote control.

Note: The manual focus works up to approx. 15cm (5.9 in.) above the stage surface (with the close-up lens attached).

Operation panel



Wireless remote control



○ About the preset and move operation

The Presenter has a function of saving its operation status (Preset).

The preset function is available in 2 ways read by the move button **[MOVE]** and 1 way automatically read upon turning ON the power supply for startup.

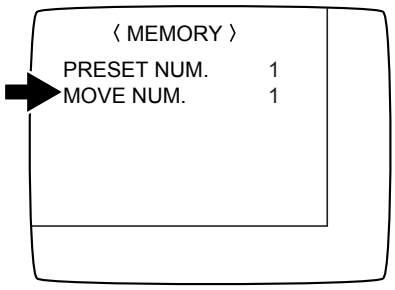
The operation status that can be saved includes:

- Present zoom angle of view
- Adjustment status of AUTO iris level
- White balance mode
- Lighting status
- Posi/Nega selection status
- Color/B&W selection status
- Electronic enlargement ON/OFF status
- Screen scroll position when electronic enlargement is selectedP

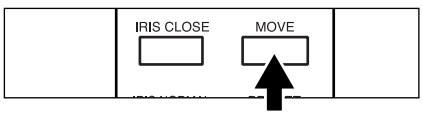
1. How to move

Display the OSD, select <MAIN MENU> → <MEMORY> → <MOVE NUM.> in this order, and select "1" or "2" whichever you want to read. Close the status or the OSD and press the move button **[MOVE]** on the wireless remote control, and the Presenter will be set to the status saved in the selected number. No. "1" has been selected on the status of factory setting.

Monitor screen



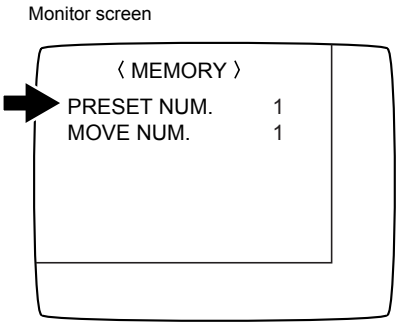
Wireless remote control



2. How to preset

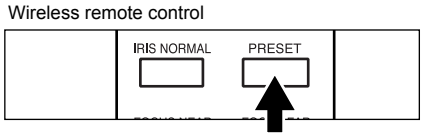
<Presetting by reading by pressing the move button **[MOVE]** on the wireless remote control>

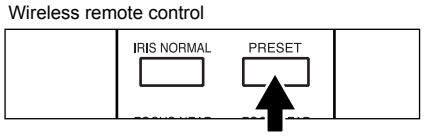
Display the OSD, select <MAIN MENU> → <MEMORY> → <PRESET NUM.> in this order, and select "1" or "2" whichever you want to save. Close the status or the OSD and then press the preset button **[PRESET]**, and the present operating status will be saved in the selected No. "1" has been selected on default.



<Presetting by automatically reading upon turning ON the power supply>

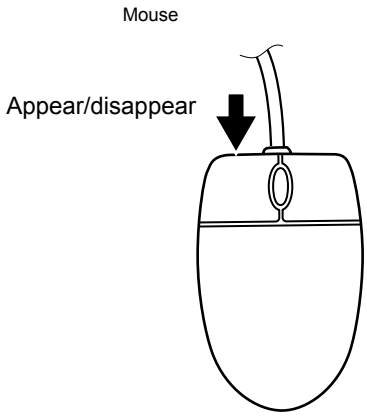
In the same way as "Presetting by reading by pressing the move button **[MOVE]** on the wireless remote control", open the OSD menu, and select "0." Close the status or the OSD and press the preset button **[PRESET]** on the wireless remote control, and the present operating status of the Presenter will be saved, and called upon turning ON the power supply next time.





○ Mouse pointer

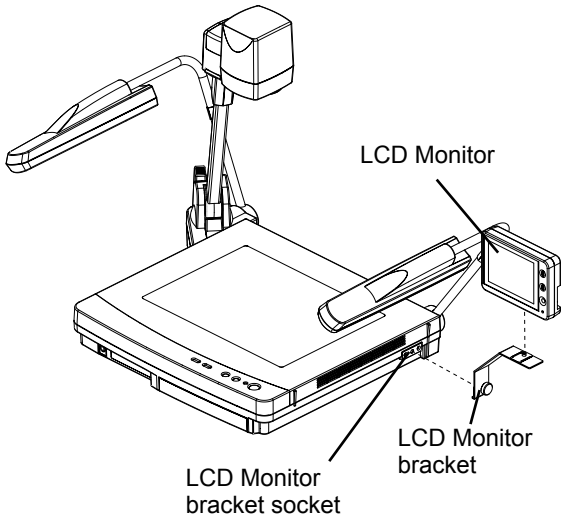
When the left button on the mouse is clicked, the mouse pointer appears.
When the mouse is moved, the mouse pointer moves accordingly.
When the left button on the mouse is clicked while the mouse pointer is on the screen, the mouse pointer disappears.



○ LCD monitor bracket socket

The LCD monitor bracket socket is used for attaching an LCD monitor (optional) with an LCD monitor bracket (optional).
For the connection method refer to the instruction manual of the LCD monitor.

Note: This Presenter (EV-4400AF) is not accompanied by the LCD monitor or the LCD monitor bracket. These are available on option.



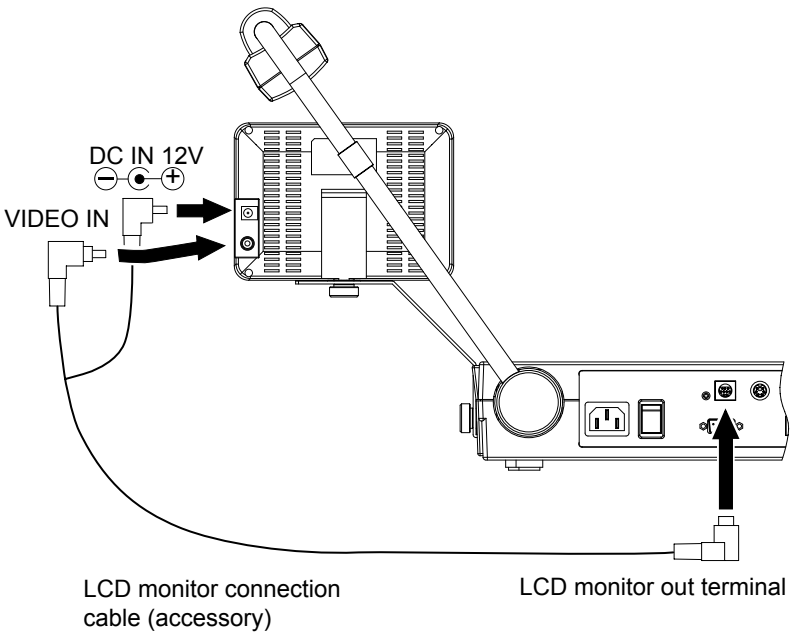
○ Connecting to the LCD monitor out terminal

The LCD monitor (LM-5011N) can be connected by using the LCD monitor out terminal of the Presenter.

Note: When connecting to the LCD monitor out terminal, confirm the right connection direction.

Note: When using the LCD monitor connection cable, do not use the AC adapter or video cable attached to the LCD monitor (LM-5011N).

Note: The LCD monitor (LM-5011N) and the LCD monitor bracket are available on option, and not attached to this Presenter (EV-4400AF).



8. OSD (On-Screen Display)

When the menu button **[MENU]** on the front panel or the center button of the mouse is pressed, the OSD Setting Main menu **<MAIN MENU>** is displayed.
Choose the item of each function in the main menu.

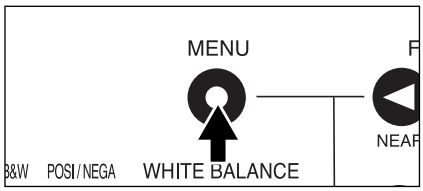
<How to adjust the OSD on the operation panel>

1. Select the menu to be adjusted by using the **[▲]** and **[▼]** buttons, and fix the selection by using the **[►]** button. Then, the Sub menu is displayed.
2. Select the item to be adjusted by using the **[▲]** and **[▼]** buttons, and adjust the value by using the **[◄]** and **[►]** buttons.
3. After adjustment, press the menu button **[MENU]** to return to the Main menu **<MAIN MENU>**. Then, press the menu button **[MENU]** again, and the OSD screen will close.
   The adjusted value is saved when the main menu **<MAIN MENU>** closes, and reflected on the next rebooting. (To return the adjusted value to the default value, select **[DEFAULT]** in the Main menu **<MAIN MENU>**, and press the **[►]** button.)

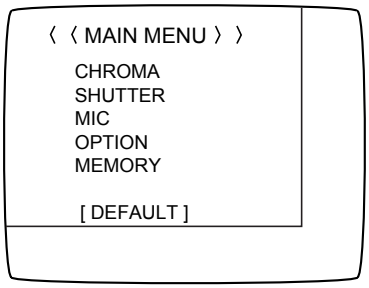
<Mouse functions in the OSD Menu screen display>

- **Left** button ..... Equivalent to the **[◄]** button on the operation panel (ADJUST function).
  When the Main menu is in display, the OSD screen is not in display but the mouse pointer is in display.
- **Center** button ..... Equivalent to the menu button **[MENU]** on the operation panel (END function).
- **Mouse wheel** ..... Equivalent to the **[▲]** and **[▼]** buttons on the operation panel (SELECT function).
- **Right** button ..... Equivalent to the **[►]** button on the operation panel (ENTER and ADJUST functions).

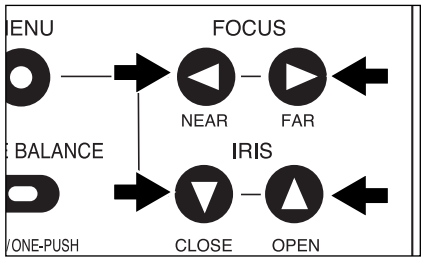
Operation panel



Main menu (in the monitor)



Operation panel

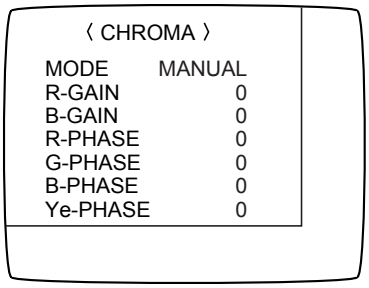


○ Color adjustment <CHROMA>

· Menu sequence <MAIN MENU> → <CHROMA>

To adjust the color of the video output image of the main camera.
Switching of AUTO ⇔ MANUAL is available.
(Initial setting : <AUTO>) (Adjustable range : Initial value <0>)

Monitor screen



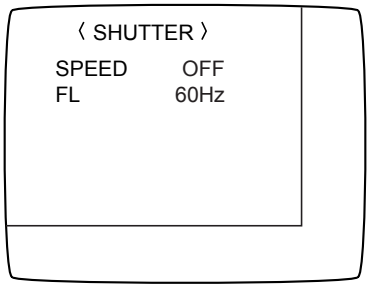
Menu displayed	Functions	Adjustable range
R-GAIN	To adjust color gain (color depth) of the red component.	-128 to 127
B-GAIN	To adjust the color gain of the blue component.	-128 to 127
R-PHASE	To adjust the hue (tint) of the red component.	-128 to 127
G-PHASE	To adjust the hue (tint) of the green component.	-128 to 127
B-PHASE	To adjust the hue (tint) of the blue component.	-128 to 127
Ye-PHASE	To adjust the hue (tint) of the yellow component.	-128 to 127

○ Electronic shutter <SHUTTER>

· Menu sequence <MAIN MENU> → <SHUTTER>

To set the shutter speed.

Monitor screen



Menu displayed	Functions
<SPEED>	To change the shutter speed to: OFF ⇔ 1/100s ⇔ 1/500s ⇔ 1/1000s (Initial setting : <OFF>)
<FL>	60Hz⇔50Hz In the areas with power frequency of 50Hz, flicker phenomenon may occur when the Presenter is used with the mode **<60Hz>** lighting of discharging tubes, such as fluorescent lamps and mercury lamps. Set to the mode **<50Hz>** before use. In areas with power frequency of 60Hz, leave the Presenter in the mode **<60Hz>**. (Initial setting : <60Hz>)

Note: In the mode **<SPEED>**, flickering or color shimmering may occur.
In this case, select slower shutter speed.

○ Microphone input <MIC>

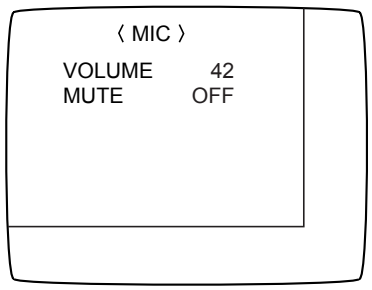
· Menu sequence <MAIN MENU> → <MIC>

To set the volume of sound from the Mic Jack.

Menu displayed	Functions
VOLUME	To set the volume of monaural sound from the Mic Jack. (0 to 64) (Initial value : <42>)
MUTE	To set the volume of sound from the Mic Jack to zero. (Initial setting : <OFF>)

Note: If the input selection is set to anything other than **[MAIN]**, the sound will be output from the Mic audio output terminal.

Monitor screen



○ AGC (Auto gain control)

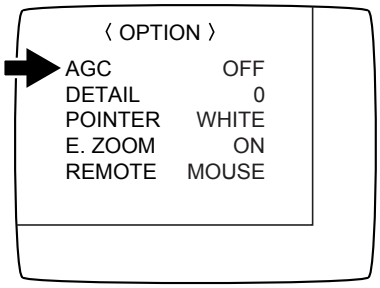
· Menu sequence <MAIN MENU> → <OPTION> → <AGC>

To set the auto gain control.

When the object is dark, The AGC can gain up the image of the object to be lighter. (Initial setting : <AUTO>)

Menu displayed	Functions
<OFF>	No gain-up (initial setting)
<3dB, 6dB, 10dB>	To select gain-up from among 3 levels

Monitor screen



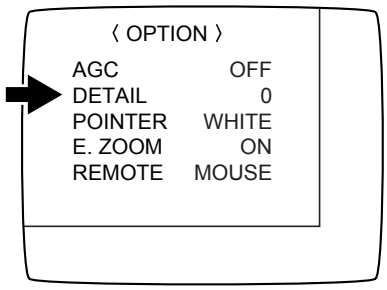
○ Adjusting the detail (Outline-accent function)

· Menu sequence <MAIN MENU> → <OPTION> → <DETAIL>

To adjust the contour intensity in a range from -5 to 5.

(Initial setting : <0>)

Monitor screen

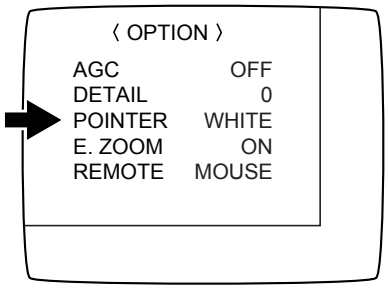


○ Setting the color of the mouse pointer

· Menu sequence <MAIN MENU> → <OPTION> → <POINTER>

In **<POINTER>**, the color of the pointer is changed by using the direction button **[◄][►]**.
(2 colors: WHITE ⇔ BLACK) (Initial setting : <WHITE>)

Monitor screen

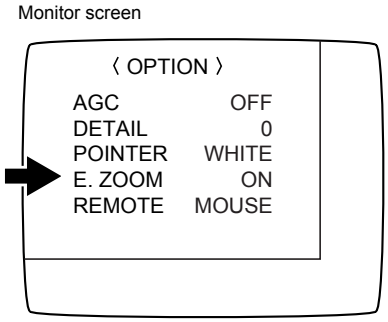


○ Electronic zoom ON/OFF selection

· Menu sequence <MAIN MENU> → <OPTION> → <E. ZOOM>

The ON/OFF status of the electronic zoom can be changed.
(Initial setting : <ON>)

Monitor screen



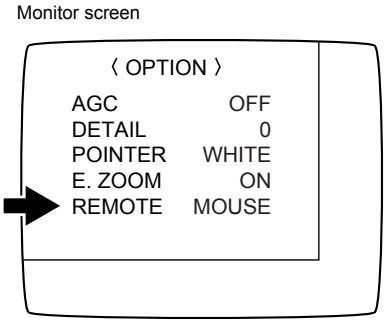
○ Remote setting

· Menu sequence <MAIN MENU> → <OPTION> → <REMOTE>

Select which equipment, the mouse <MOUSE> or the PC <PC>, should be used for controlling the Presenter.
(Initial setting : <MOUSE>)

Note: The setting becomes effective upon closing the OSD menu.
It is not yet effective as of selection.

Monitor screen

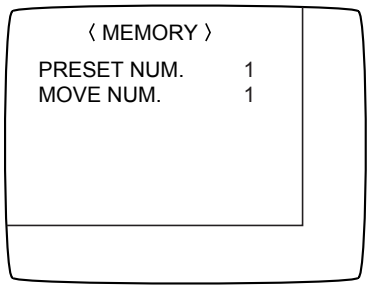


○ Selection of preset No. and move No. <MEMORY>

· Menu sequence <MAIN MENU> → <MEMORY> → <PRESET NUM.>

Select the No. in which you want to save the operation status of the Presenter in PRESET.

Monitor screen



· Menu sequence <MAIN MENU> → <MEMORY> → <MOVE NUM.>

Select the No. from which you want to call the operation status of the Presenter in MOVE.

Reference Page · About the preset and move operation P.25

9. RS-232C SPECIFICATIONS

The Presenter can be controlled by a PC connected to the Presenter through the RS-232C terminal **[RS-232C].**

○ Setting up

(1) Open the OSD menu, select the <PC> setting by opening <MENU> → <OPTION> → <REMOTE> in this order, and close the Menu screen.

Note: Upon selection, the mouse is no longer operable.

(2) Connect the Presenter to a PC with an RS-232C connection cable.

Note: When using an RS-232C cable available in the market, make sure of the connection shown the next page.

Note: To protect the Presenter and the PC, be sure to turn OFF all the power switches of all equipment before connecting.

(3) Start the PC, and set the communication mode of the RS-232C to the communication mode of the Presenter.

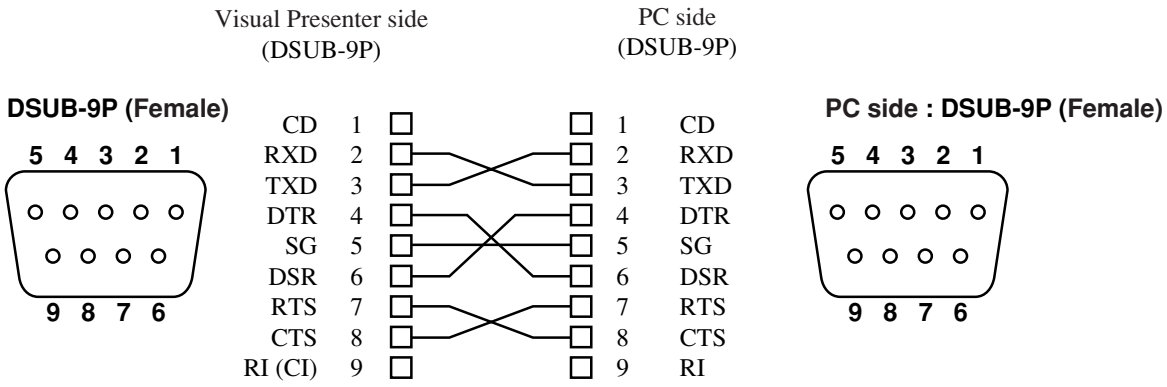
Note: For the information how to set the communication mode of the RS-232C, refer to the instruction manual of the PC.

(4) Start the PC program to operate the Presenter.

(5) Control through the RS-232C will start.

Note: For communication control, be sure to take the above steps for setting.

○ Cable connection



○ RS-232C connector specifications (DSUB-9P)

Pin No.	Code	Name	Direction of data Visual Presenter PC	Comments
1	CD	Carrier Detect	—	CD : Carrier Detect
2	RXD	Received Data	←	RXD : Received Data
3	TXD	Transmitted Data	→	TXD : Transmitted Data
4	DTR	Data Terminal Ready	→	DTR : Data Terminal Ready
5	SG	Signal Ground	—	SG : Signal Ground
6	DSR	Data Set Ready	←	DSR : Data Set Ready
7	RTS	Request To Send	→	RTS : Request To Send
8	CTS	Clear To Send	←	CTS : Clear To Send

○ Table of the communication commands

Function	Command	Parameter	Data	Comments
Auto Focus	AF	0	■■	Command to execute the one-step Auto Focus.
Focus adjustment	FO	+ (NEAR) – (FAR) 0 (STOP)	■■	Command to adjust the Focus.
Zoom adjustment	ZO	+ (TELE) – (WIDE) 0 (STOP)	■■	Command to adjust the Zoom.
Iris adjustment	IR	+ (OPEN) – (CLOSE) 0 (STOP) 1 (NORMAL)	■■	Command to adjust the Iris.
Lighting selection	PL	0 (OFF) 1 (BASE) 2 (UPPER)	■■	Command to select the Lighting.
Input selection	AV	0 (MAIN) 1 (AV1) 2 (AV2)	■■	Command to select the Input.
Posi/Nega conversion	NP	0 (POSI) 1 (NEGA)	■■	Command to convert Posi/Nega.
Color/B&W selection	CB	0 (COLOR) 1 (B&W)	■■	Command to select Color/B&W.
Mouse Pointer display	PO	0 (OFF) 1 (ON)	■■	Command to turn ON/OFF the Mouse pointer display.
Mouse pointer movement	PM	0 (STOP) 1 (→) 2 (←) 3 (↑) 4 (↓) 5 (↗) 6 (↖) 7 (↘) 8 (↙)	■■	· **When the mouse pointer is ON** The mouse pointer moves. · **When the image enlargement is ON** The enlarged image moves. 1: To the right side. 2: To the left side. 3: To the upper side. 4: To the lower side. 5: To the upper right. 6: To the upper left. 7: To the lower right. 8: To the lower left.
Image enlargement	MA	0 (OFF) 1 (ON)	■■	Command to enlarge the image to double the area around the mouse pointer position.

Function	Command	Parameter	Data	Comments
Local lockout	LL	0 (OFF) 1 (ON)	■■	Command to invalidate the switches on the front panel, operation panel and wireless remote control.
Default	DF	0	■■	Command to reset to the initialized mode.
Status request	QS	0	■■	Command to inquire the status of the equipment.
ROM version	QR	0	■■	Command to refer to the ROM version.
Acknowledge check	SA	0 (OFF) 1 (ON)	■■	Command to select the command acknowledge for each operation command. Default is ON.
Add CR command	SC	0 (OFF) 1 (ON)	■■	Command to add CR [0Dh] to the end of the acknowledge data. Default is OFF.

Note: "■■" in the data column means that SPACE [20H] should be transmitted twice.

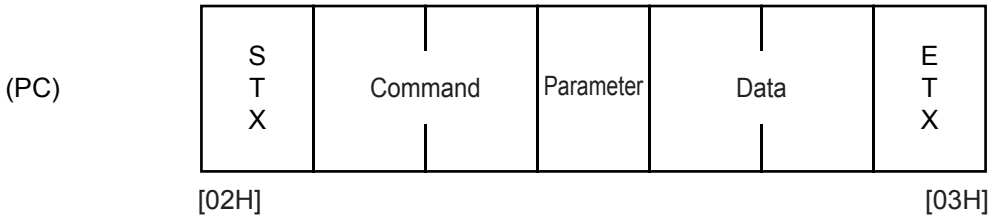
○ Data format specifications

This command is executed in the form of 1-command/1 packet. The next command is not accepted until the previous processing is completed.

- The communication command always starts with STX (Start of Text) [02H], and ends with ETX (END of Text) [03H].
- If the communication format or command name is wrong, NAK (Negative Acknowledgement) [15H] will be sent from the Presenter as a result of failing to receive correctly.
- When the communication format is correctly received, the Presenter sends ACK (Normal Acknowledgement) [06H].

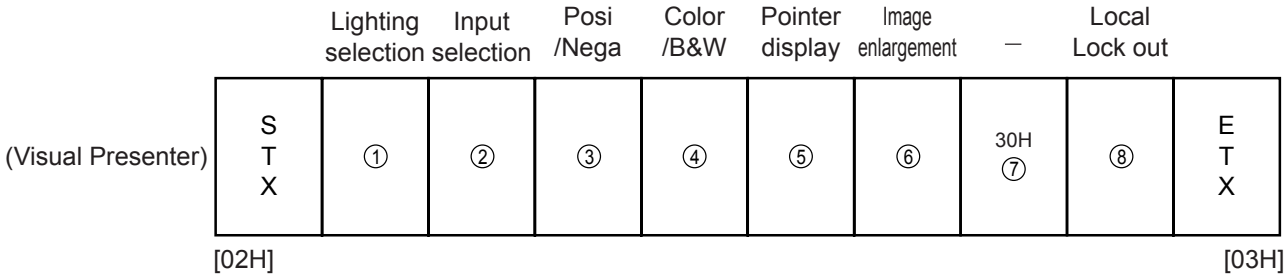
● Transmission Command (PC → Visual Presenter)

Each operation command is executed in ASCII code, and transmitted in a set of 7 bytes as follows:

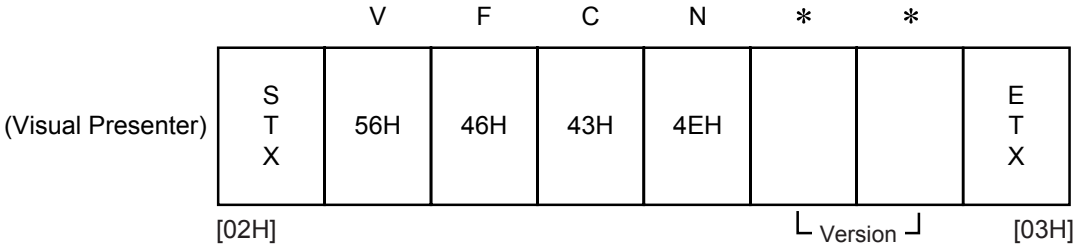


● Response data format (Visual Presenter → PC)

• Status request format (Parameter 0)



• ROM version



○ Transmission specifications

- Full duplex start-stop sync. mode
- Start bit : 1 bit
- Data bit : 8 bits
- Stop bit : 1 bit
- Parity bit : None
- X parameter : None
- Baud rate (Communication speed) : 9600bps

○ Connection

If the RS-232C cable is not correctly connected between the Presenter and the PC, no acknowledgement is transmitted. Connect the RS-232C cable correctly, and fix it firmly with the connector set screws before the operation.

10. TROUBLESHOOTING HINTS

Symptom	Possible cause/countermeasure
No Images on TV monitor	· Cable is not properly connected to the video-in terminal of monitor. · The power cord is disconnected from the wall AC outlet. · The plug is disconnected from the power cord receptacle of the Presenter. · The power switch is not turned ON. · Zoom is set at TELE to display only white/black part of the material. · The power switch is turned ON immediately after it is turned OFF. In this case, the Presenter may not start. Wait several seconds after turning OFF the power switch, and then turn ON the power switch.
Out of focus	· The object is too close to the lens. Check if it does not stand higher than 15cm (5.9 in.) above the stage surface. · Zoom is set at TELE after focusing at WIDE angle. Focus on the point of max. TELE. · In the auto-focus, focusing is difficult in some cases.
The lamp is not quickly turned ON.	· For protection purposes, the lamp is turned ON after preheating for 2 seconds. This is not a fault.
Image is too dark.	· The intensity of illumination is not sufficient. Press the upper button **[UPPER]** on the front panel or the lamp button **[LAMP]** on the wireless remote control and turn ON the upper lamp. · The AUTO iris level is on the "CLOSE" side. Press the open button **[OPEN]** on the operation panel or the iris open button **[IRIS OPEN]** on the wireless remote control.
Input selection can not be made.	· Inputting to S-video while connecting output of C-video to the monitor or vice versa. (Refer to the "Table of Video -and Audio-in/out Terminal Selections" on P.20.)
The image of printed matter is striped.	· This is caused by the interference between the dots of printed matter and the scanning line.
The image flickers.	· The light from the discharge tube (50Hz) does not come to the screen. When <SHUTTER> is changed to <FL> and <50Hz> is selected in the OSD menu, the image flickering may be mitigated. (Refer to P.29.)

If the trouble still remains after checking the above, consult your dealer or an authorized ELMO service center.

○ Replacement of fluorescent lamp

The lighting lamps (fluorescent lamps) are expendables. When any of them begins to shimmer or be less bright, replace it.

Note: For the replacement of the lamp, consult your dealer from whom you have purchased your Visual Presenter or an authorized ELMO service center.

11. SPECIFICATIONS

● General

Item	Specifications		
Power source	AC100V-240V 50Hz/60Hz		
Power consumption	0.5A-0.3A		
Outside dimensions	533mm (W) X 449mm (D) X 190mm (H) (21.0 X 17.7 X 7.5 in.) - When folded 766mm (W) X 449mm (D) X 602mm (H) (30.2 X 17.7 X 23.7 in.) - When set up		
Weight	10 kgs (main body only)		
Television system	NTSC compatible		
Input selection	Internal/External 2 systems		
Output terminal	C-video output	RCA pinjack/75Ω unbalanced	1
		BNC connector/75Ω unbalanced	1
		LCD monitor connection terminal (Mini DIN 9P)	1
	S-video output	Mini DIN 4P connector/75Ω unbalanced	1
	Audio output (stereo)	RCA pinjack/applicable impedance 10kΩ or more, -10dB	1 pair
Input terminal	S-video input	Mini DIN4P connector/75Ω unbalanced	2
	C-video input	RCA pinjack/75Ω unbalanced	2
	Ext. sync. input	BNC connector/75Ω unbalanced	1
	Audio input (stereo)	RCA pinjack/applicable impedance 10kΩ or more, -10dB	2 pairs
	Mic. input (monaural)	6.3mm jack/applicable impedance 600Ω -65dB	1
Ext. control terminal	RS-232C	DSUB 9P connector male	1
	Mouse	Mini DIN 6P connector	1

● Main camera

Item	Specifications
Lens	f=4.7-84.6mm (Optical 18-time zoom) F2.1-2.4
Shooting area	420mm X 310mm (16.5 X 12.2 in.) max., 26mm x 20mm (1.0 X 0.8 in.) min. (13mm X 10mm (0.5 X 0.4 in.) when digitally zoomed)
Limit of focus adjustment	at the range of stage surface~150mm from the stage surface 0.5m-∞ (with the camera facing sideways and with no close-up lens)
Zooming	36-time zoom (continuous zoom mode with automatic switching from the 18-time optical zoom plus electronic zoom with 2X function)
Focusing	Auto/manual (powered)
Iris	Auto (with level adjustment)
Image pick-up element	Interline-transfer 1/3" size color CCD
Effective picture element	768 (H) x 494 (V)
Total picture elements	811 (H) x 508 (V)
Image signal processing	Digital signal processing (DSP)
Sync. system	Internal/External sync. (automatic selection)
Resolution	More than 470 TV lines (Y signal with horizontal) More than 350 TV lines (Vertical)
S/N ratio	48 dB (with adjusting the detail min.)
Output signal	C-video VBS 1.0 V (p-p)/75Ω unbalanced
	S-video Y 0.714 V (p-p)/75Ω unbalanced C 0.286 V (p-p)/75Ω unbalanced
Ext. sync. frequency range	SYNC H 15.734kHz ± 50ppm
Ext. sync. input condition	VBS: (75Ω unbalanced) SYNC: 0.3V ± 0.1V, Burst: 0.3V ± 0.1V
White balance	Full auto/One push
Color gain control	Provided
Color phase adjustment	Provided
Electronic shutter speed	FLC mode (60Hz ⇔ 50Hz)/SPEED (OFF ⇔ 1/100s ⇔ 1/500s ⇔ 1/1000s)
Posi/Nega conversion	Provided (C-video, Output to monitor, S-video)
Color/B&W selection	Provided (C-video,Output to monitor, S-video)
AGC	Selectable (OFF/3dB/6dB/10dB)
Detail adjustment	Provided
Status preset	Provided (Readable - 2 ways, Upon turning ON power supply for startup - 1 way)
Electronic enlargement	Provided (double, can be scrolled)
Pointer	Controllable by mouse or RS-232C. 2 selectable colors

● Lighting

Item	Specifications
Upper	High frequency lighting mode, 3-wave-length type fluorescent lamp 6W (Model:FHL6EX-N)
Base	High frequency lighting mode, 3-wave-length type fluorescent lamp Area size: 296mm (W) x 216mm (H) (11.7 x 8.5 in.)

● Supplied accessories

Name	Quantity
Power cord (2.5m)	1
Video-audio cable (2m)	1
Scroll mouse	1
Infrared wireless remote controller (RCW-632)	1
Batteries (Type R03, AAA)	2
LCD monitor connection cable	1
Instruction manual for EV-4400AF	1

● Options

· 5" TFT LCD color monitor (Type LM-5011N), LCD monitor bracket (MS-500), preparation projector (MG-600)

Note: For the TRCA pin, use a pin plug conformable to EIAJ RC-6703.

Note: The specifications are subject to change without notice.

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