

SAMSUNG

TECHWIN

SDP-900

HIGH RESOLUTION DIGITAL PRESENTER User's Manual



Before attempting to operate this product, please read the instructions carefully.

www.samsungpresenter.com

Special features

- Thank you for purchasing this product.
This product is a high resolution video presenter that can project all kinds of data on a PC monitor, a TV, or a projector with simple manipulations.

12X zoom lens

(can be used for the materials with sizes from B4 to film)

By adopting 12X super optic angle zoom lens, it is possible to shoot all materials from the size of a film to B4 size.

Adopted 850,000 pixel CCD

By adopting 1/2 inch PS type CCD, high resolution and excellent color reappearance are realized.

Can control USB and RS-232

By using USB, it is possible to view or store the image in a PC and control the functions of the set. Also it is possible to control the set by using RS-232C port.

Output modes from VGA to XGA

It supports various output modes from XGA to VGA that it can be connected to all kinds of projectors.

remote controller is a standard feature

remote controller is supplied as a standard feature for the product so that it can be manipulated from a distance. Thus it is very convenient during a conference.

TV output mode

By adopting TV output mode, monitoring and conference data can be recorded through VTR.

Features

Various image control

Digital features on your Video Presenter provide useful and various image controls including:

- Negative/Positive image conversion
- Brightness and R/B color control
- Image save/recall
- Image freeze
- Image divide

Input source selection

You can quickly switch between your computer presentation and your document presentation with the INT/EXT button on the control panel or on the remote controller.

Custom user settings

To avoid any interruption of presentation to reset the video presenter, you can preset up to 4 customized settings in the memory and simply recall it during the presentation.



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Safety precautions

Follow these safety instructions when setting up and using your Video Presenter:

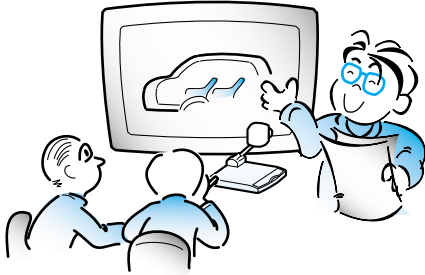
1. Do not place the presenter on an unstable cart, stand, or table
2. Do not use the presenter near water or sources of heat.
3. Use the type of power source indicated on the presenter. If you are not sure of the power available, consult your dealer or power company.
4. Place the presenter near a wall outlet where the plug can be easily unplugged.
5. Take the following precautions for the plug. Failure to comply with these precautions could result in sparks or fire:
Do not insert the plug into an outlet with dust present. Insert the plug firmly into the outlet.
6. Do not overload wall outlets, extension cords, or integral convenience receptacles. This can cause fire or electric shock.
7. Do not place the presenter where the cord can be walked on. It may result in fraying or damage to the plug.
8. Unplug the presenter from the wall outlet before cleaning. Use a damp cloth for cleaning. Do not use liquid or aerosol cleaners.
9. Do not block the slots and openings in the presenter case. They provide ventilation and prevent the presenter from overheating. Do not put the presenter on a sofa, rug, or other soft surface or in a built-in installation, unless proper ventilation is provided.
10. Never push objects of any kind through cabinet slots. Never spill liquid of any kind into the presenter.
11. Except as specifically explained in this User's Manual, do not attempt to service this product yourself. Refer all servicing to qualified service personnel. Opening or removing covers may expose you to dangerous voltages and other hazards.
12. Unplug the presenter during lightning storms or when it will not be used for extended periods.
13. Do not place the presenter and remote controller on top of heat-producing equipment or in a heated place, such as a car.
14. Unplug the presenter from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - When the power cord or plug is damaged or frayed.
 - If liquid has been spilled into the presenter, or it has been exposed to rain or water.
 - If it does not operate normally when you follow the operating instructions, or if it exhibits a distinct change in performance, indicating a need for service.
 - If it has been dropped or the cabinet has been damaged.

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

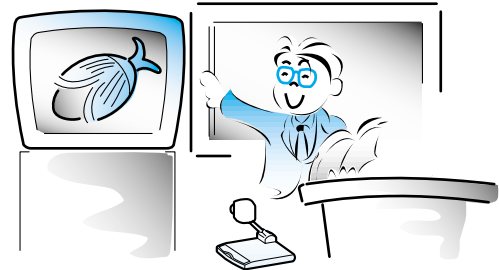
Uses of video presenter

Conference



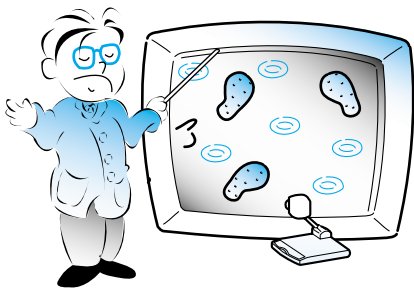
Detailed information in a report, form, table, etc. as well as a three dimensional object, such as a model, can be projected on a screen clearly that all the participants can focus on the same topic during a conference. Thus it is very helpful for an effective progress of a conference.

Education



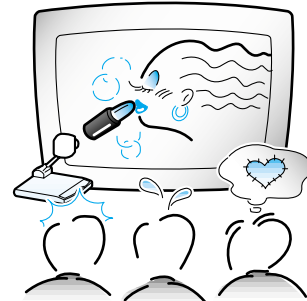
It can be used as an audiovisual tool for printed materials, such as text books, as well as audiovisual materials, educational materials, and especially for students' art works.

Medicine and science areas



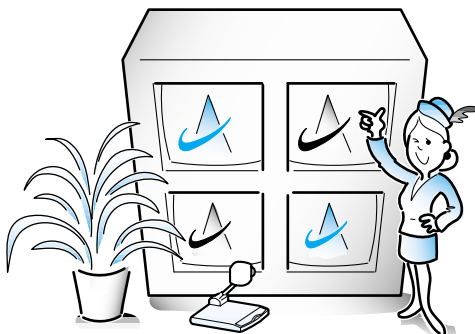
It is possible to present various visual data including slides and X-ray film etc. at a medical conference or a doctors' association in the order of file.

Advertisement and design areas



It is useful in design area where visualization is necessary. It is possible to project catalogs and slides, thus the effect of a job can be checked easily.

Demonstration or exhibition



By connecting to a large projector, it can produce dynamic images at a new product demonstration, an exhibition, or an event.

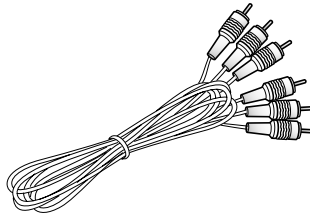
Supplied accessories

■ When you unpack your Digital Presenter, make sure that you have all these components.

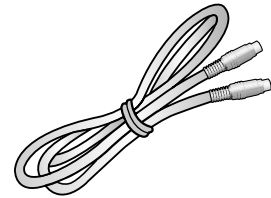
User's Manual



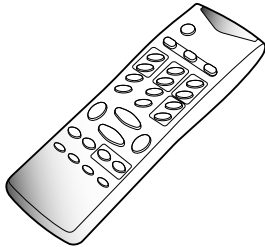
Audio & C-Composite cable



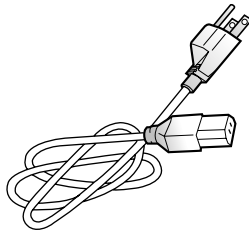
S-video cable



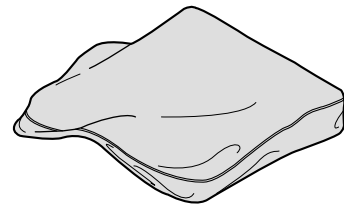
remote controller



Power cable



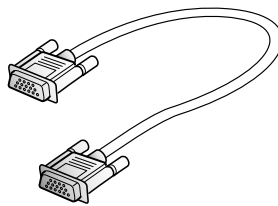
Dust cover



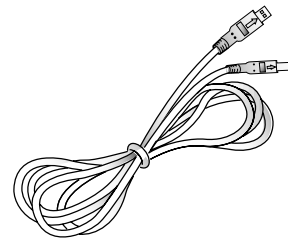
Adaptor lens and Lens cap



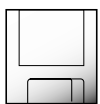
PC Monitor cable



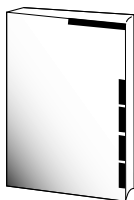
USB Cable



SDP-900 program

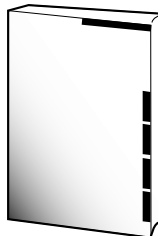


Diskette

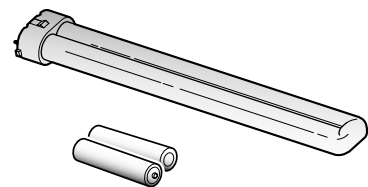


Program Manual

RS-232C Reference

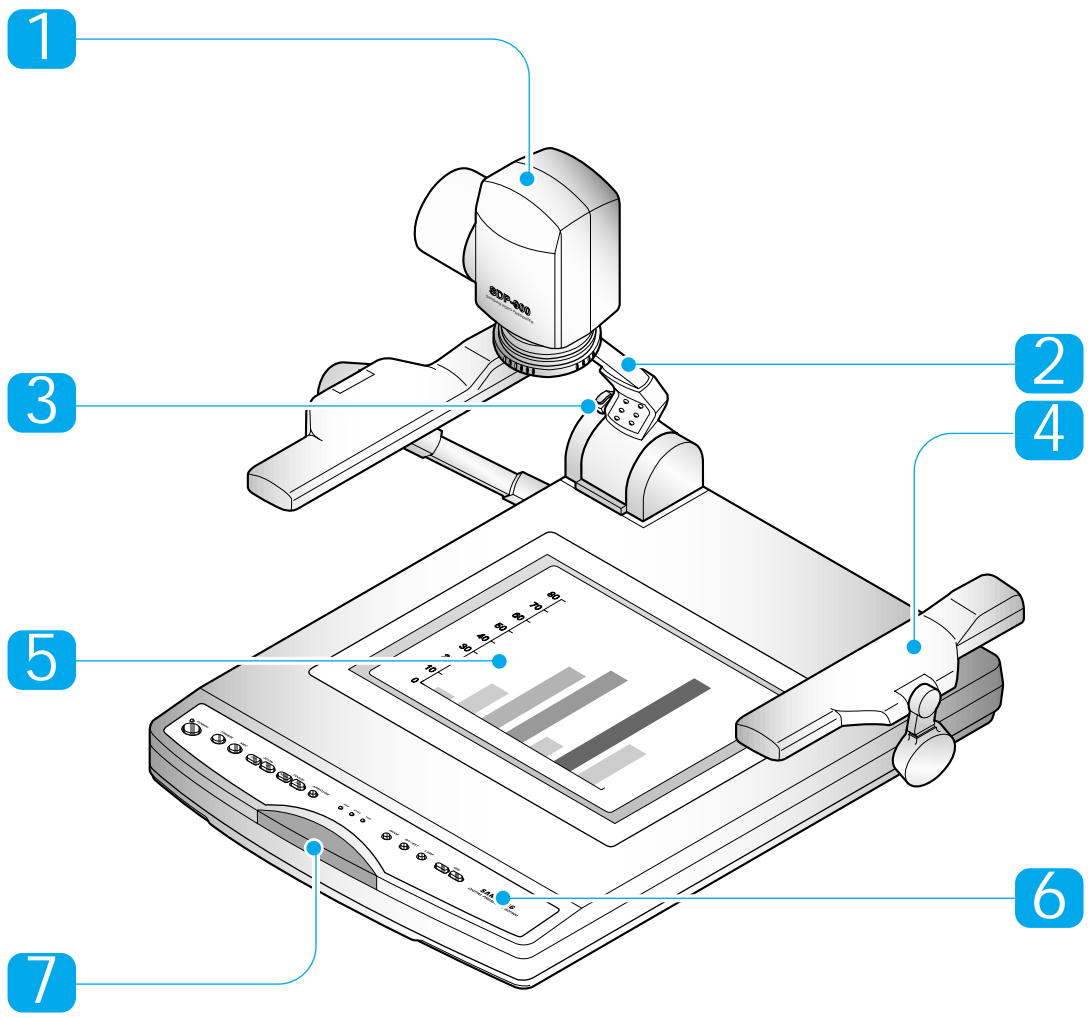


etc.



Name and function of each part

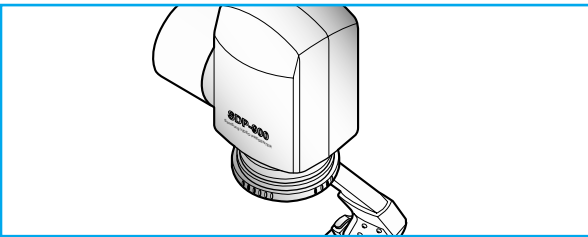
Front side



Name and function of each part



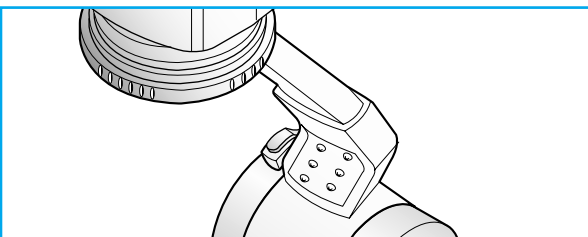
1



Lens

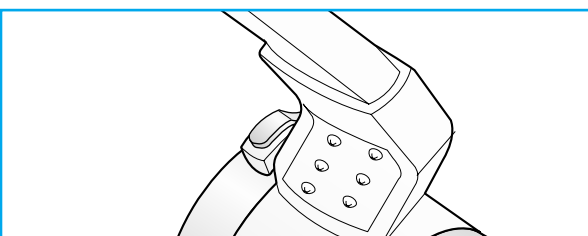
Can rotate to the front and back.

2



Main support

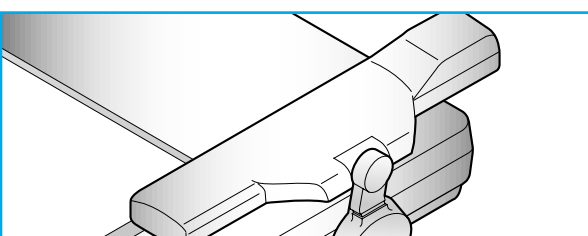
3



Main lock button

Press to move the main support.

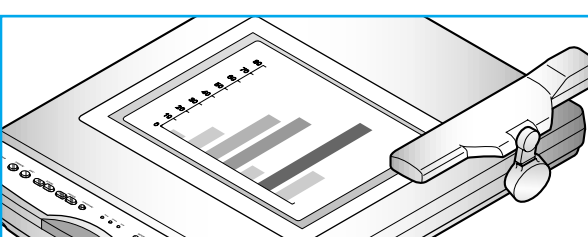
4



Lamp unit

(Upper lamp)

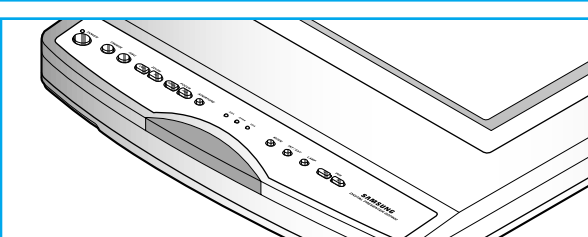
5



Document plate

(built-in light box)

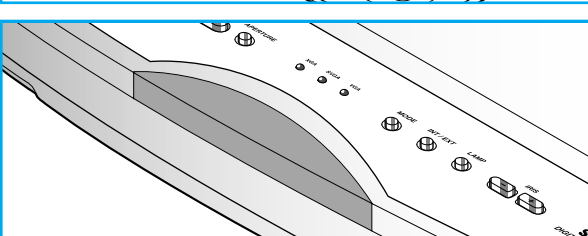
6



Main control panel

(see next page)

7



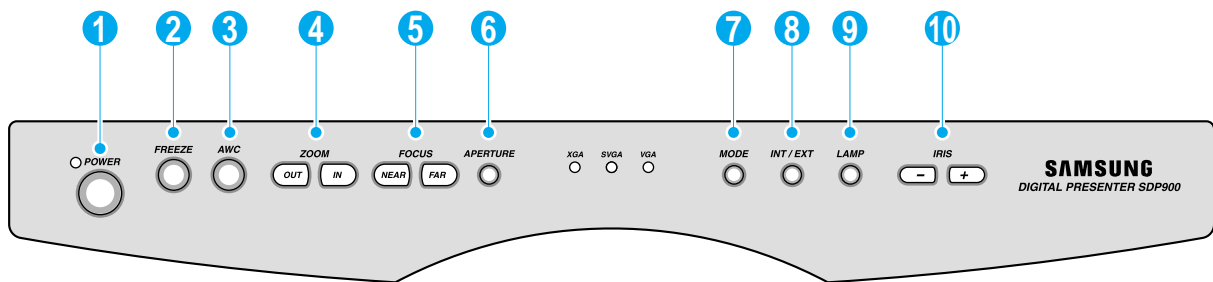
IR Sensor

Name and function of each part

Name and function of each part

Main control panel

- The buttons on the main control panel can be found in the remote controller. These buttons perform the same functions.



1 POWER

Use this to turn the power on or off.

2 FREEZE

Use this to freeze the image.

3 AWC

Use this to control the color automatically.

4 ZOOM

Use this to control the size of an object projected on the screen.

5 FOCUS

Use this to adjust the focus.

6 APERTURE

Use this to control the sharpness of the output image.

7 MODE

Use this to select the desired resolution for the video output device(PC monitor, projector) connected to this product.

8 INT / EXT

Use this to select internal or external image
 INT: to view the image on this product.
 EXT: to view the VGA output from another device such as a PC monitor or a projector by connecting it to this product.

9 LAMP

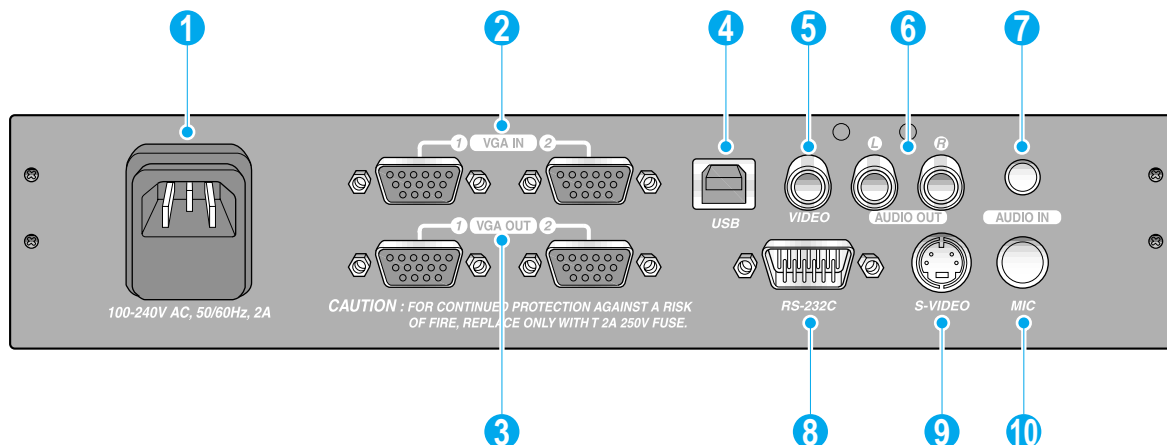
Use this to turn the upper lamp or light box on or off.

10 IRIS

Use this to control the brightness of the image by using the iris.

Name and function of each part

Terminals at the back

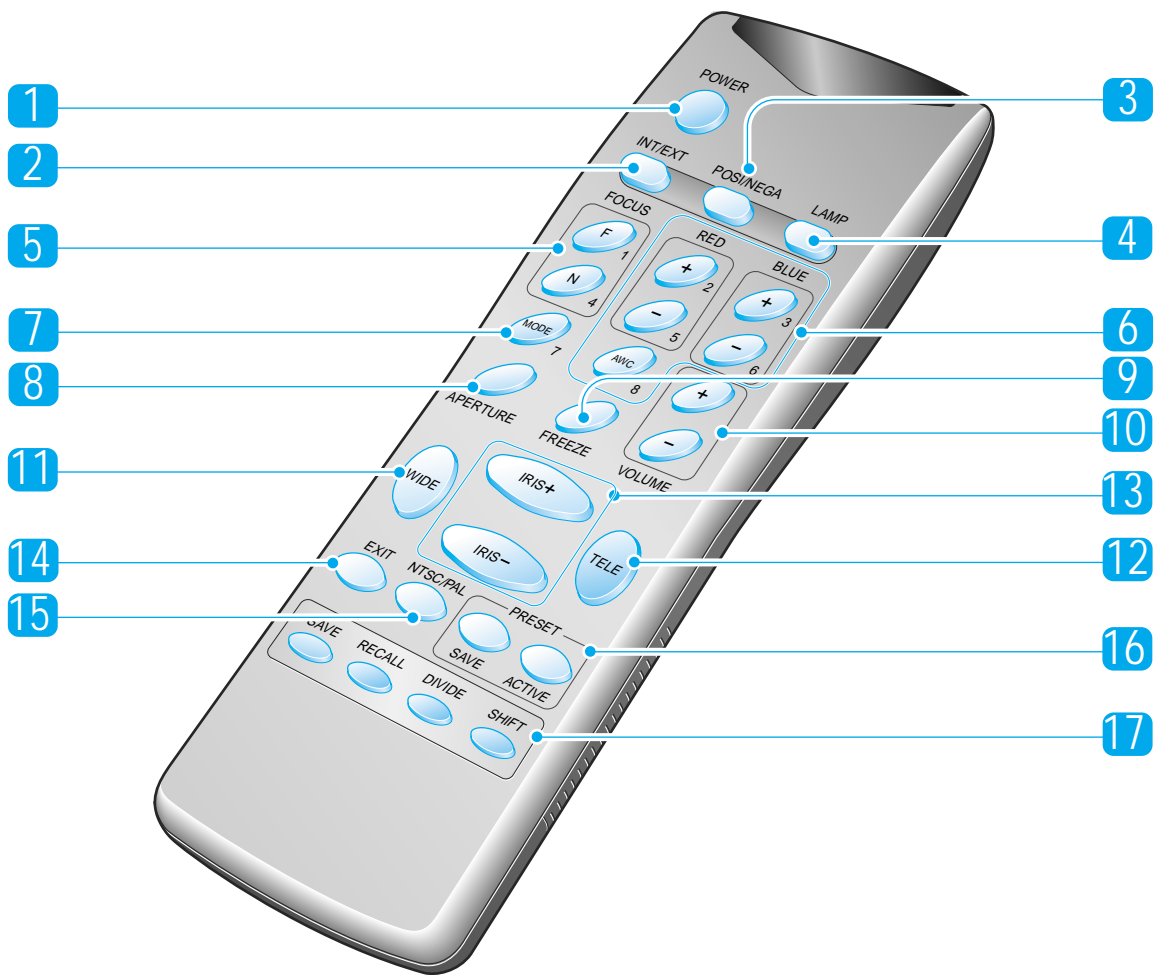


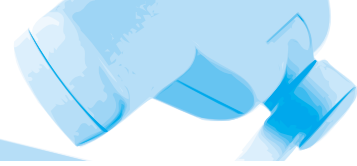
- 1 POWER INPUT TERMINAL**
Use this to connect the power cable. (100 - 240V, free voltage)
- 2 VGA VIDEO INPUT 1,2**
Connect this to the VGA output terminal of another VGA output device.
When external input is selected, the image is shown through the VGA out terminal.
- 3 VGA VIDEO OUTPUT 1,2**
Connect this to the RGB input terminal of a PC monitor or a projector.
- 4 USB: COMPUTER CONNECTION TERMINAL**
Use this to connect USB cable when transmitting image by USB port.
- 5 TV OUTPUT**
Connect this to the TV input terminal.
Connect this to view the image projected on the TV screen.
Even when the external input is selected, only the image on the main unit is displayed on TV output terminal.
- 6 AUDIO OUTPUT (LEFT/RIGHT)**
Connect this to the audio output terminal of a TV or a VCR or speakers.
The sound from an external AV device or microphone is heard through this.
- 7 AUDIO INPUT**
Connect this to the audio output terminal of a PC.
Connect this to listen to the sound from another AV device.
- 8 RS-232C: COMPUTER CONNECTION TERMINAL**
Use this to connect RS-232C cable.
- 9 S-VIDEO OUTPUT**
This is the video output terminal connecting to a TV that has S-video input terminal.
- 10 MICROPHONE**
Use this to connect the microphone to the main unit.

Name and function of each part

On the remote controller

Name and function of each part

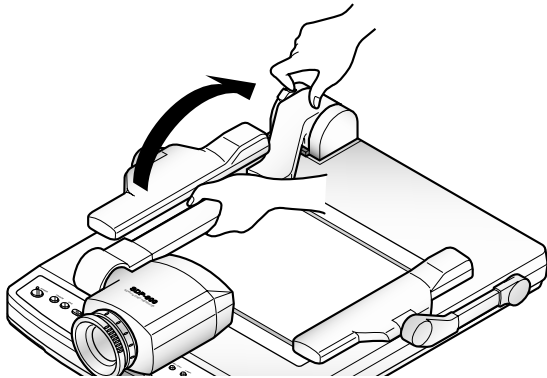




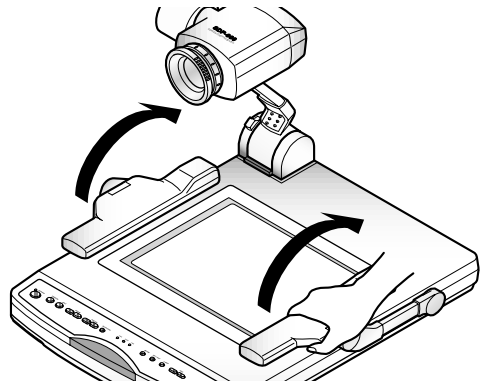
- 1 POWER**
Turns power on or off.
 - 2 INT/EXT**
Allows to choose the signal input to be displayed.
 - 3 NEGA/POSI**
Switches for negative or positive film.
 - 4 LAMP**
Turns the upper lamps and/or lightbox on or off.
 - 5 FOCUS**
Allows to focus an object.
F: Used to focus an object which is in the far distance.
N: Used to focus an object being close.
 - 6 RED/BLUE/AWC**
Adjusts the image color.
R +/-: Adjusts the red color.
B +/-: Adjusts the blue color.
AWC: Adjusts color automatically.
 - 7 MODE**
Allows to choose the resolution of the VGA output device connected to the Digital Presenter.
 - 8 APERTURE**
Controls the sharpness of the output image.
 - 9 FREEZE**
Keeps the current image on the screen.
 - 10 VOLUME**
Adjusts the audio volume.
 - 11 WIDE/TELE**
 - 12**
 - Enlarges the image size.
 - Reduces the image size.
 - 13 IRIS+ / IRIS-**
 - Opens iris to increase the brightness.
 - Closes iris to decrease the brightness.
 - 14 EXIT**
Stops current function and return to the normal mode.
 - 15 NTSC/PAL**
Switches Video output mode to NTSC or PAL.
 - 16 PRESET**
 - Saves the customized user setting values.
 - Activates the preset user settings.
 - 17 SAVE/RECALL**
 - Saves the projected image into the memory of this unit.
 - Recalls the image from the memory.
- DIVIDE**
Divides the screen to see both of the current image and the image recalled from the memory simultaneously on one screen or to see all the images in the memory on one screen.
- SHIFT**
Shifts the recalled image shown in the divided screen from the left to right to see the hidden portion of the image.

Set preparation

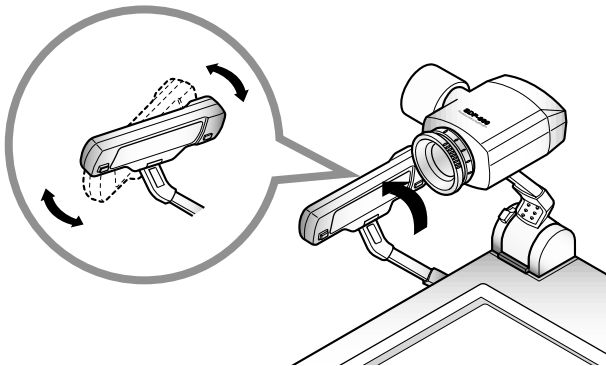
1 Press the main lock button and raise the main support



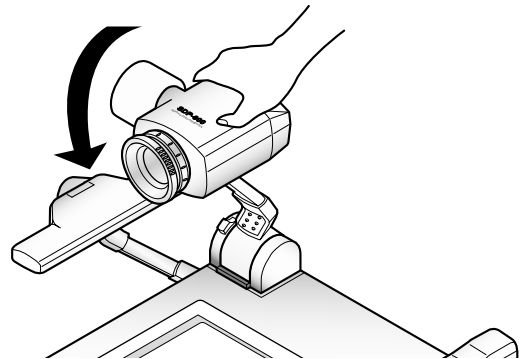
2 Raise the lamp unit until it is convenient for use, and set it to the center of the document plate.



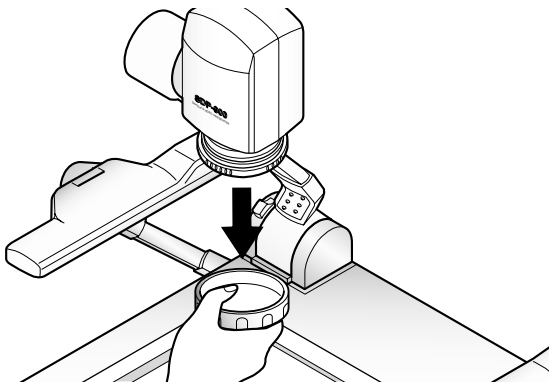
3 Adjust the angle of the lamps properly.



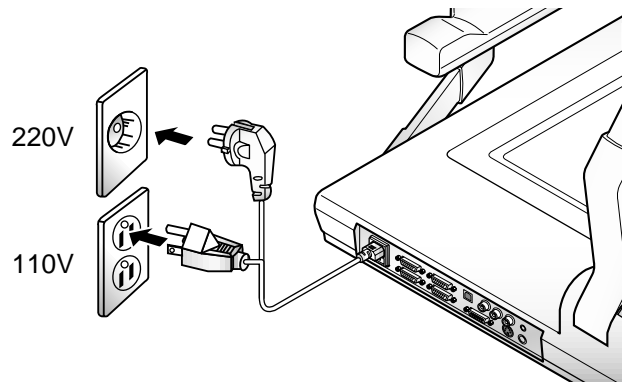
4 Turn the lens area to face downward.



5 Remove the lens cap.

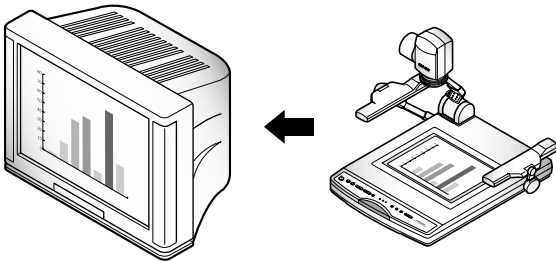


6 Plug the power cord in.



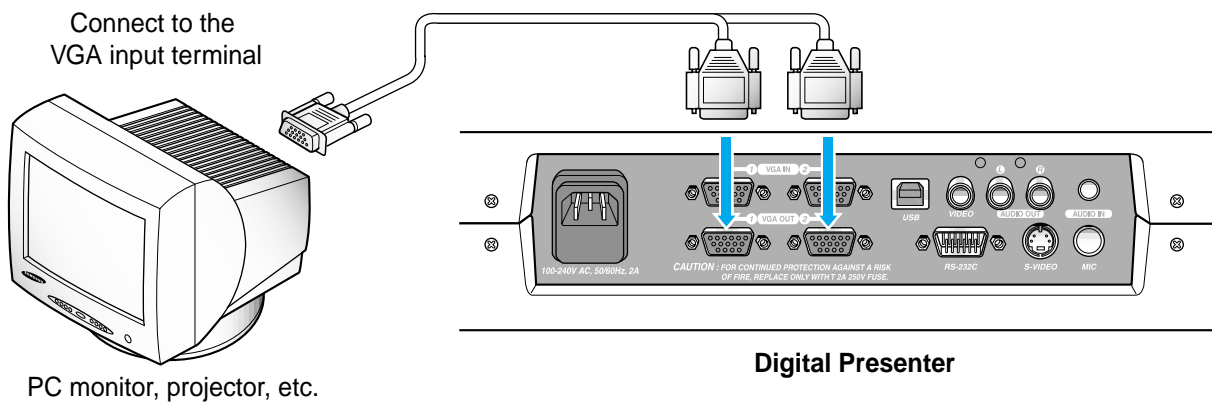
Connecting to output device

TV, PC Monitor or Projector



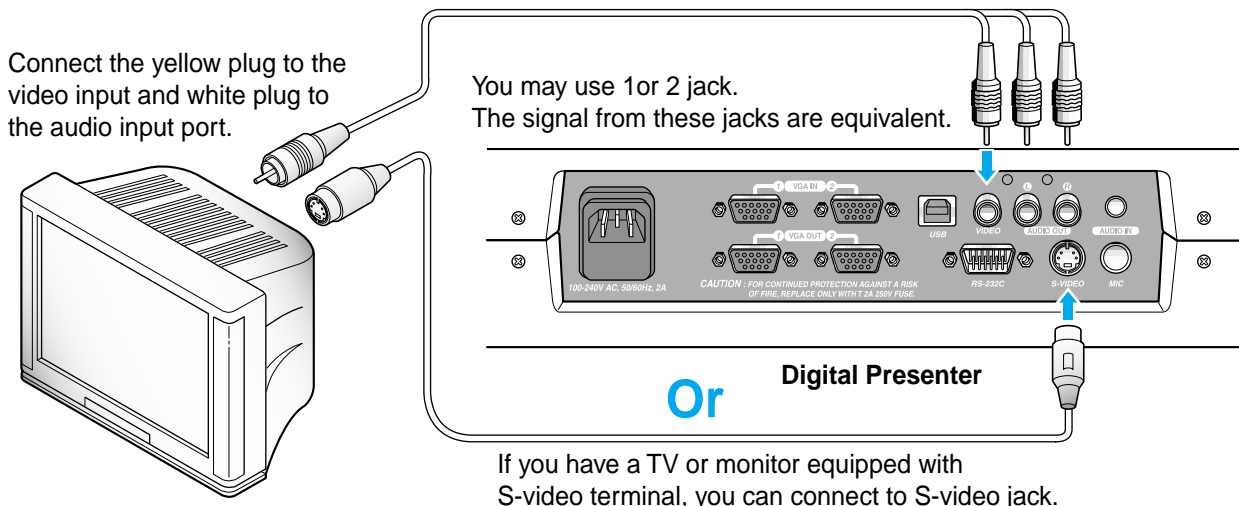
- Connect a TV, PC monitor or Projector to this presenter to display the projected image using the AV cables, S-video cable or PC monitor cable.
- If you use an optional microphone or if your presentation includes sound effects which is received from AUDIO IN jack, you need to connect the audio cable to AUDIO OUT jack.

Connection



Note Set the resolution mode of the main unit to the maximum resolution of the external device connected.

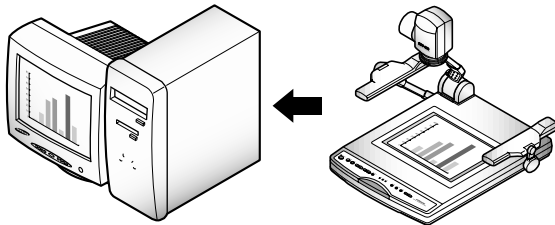
Connect the yellow plug to the VIDEO OUT and white plug to AUDIO OUT jack.



Note If you connect to S-video terminal, you may obtain more clear image, but the signal from the external AV source(if connected) is not available on this terminal.

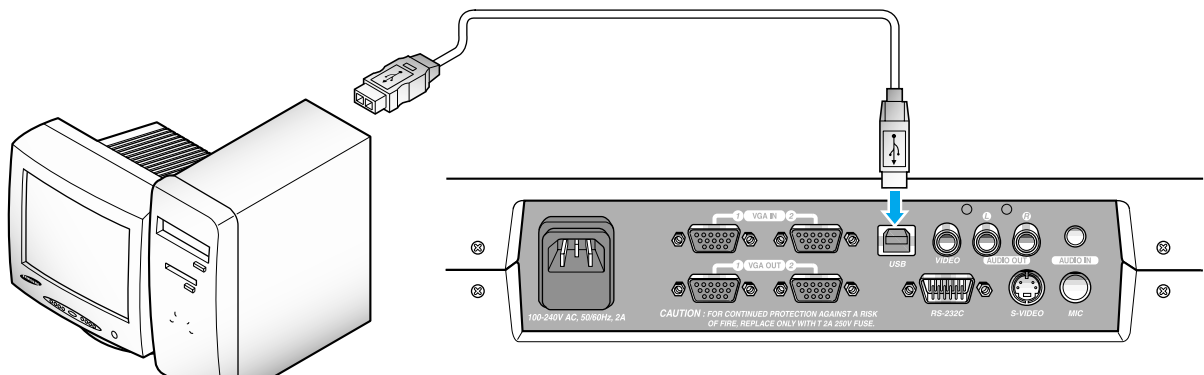
Connecting to output device

Desktop computer



- For SDP-900, connect a desktop PC using USB cable and install the supplied SDP-900 program. You can see the projected image on the PC monitor and control the image as a graphic file using the program.
- RS-232C connection is available for advanced user. If you connect a PC with RS-232C cable, you should set up your PC and make your own program to control the projected image on PC. Ask your dealer for further details.

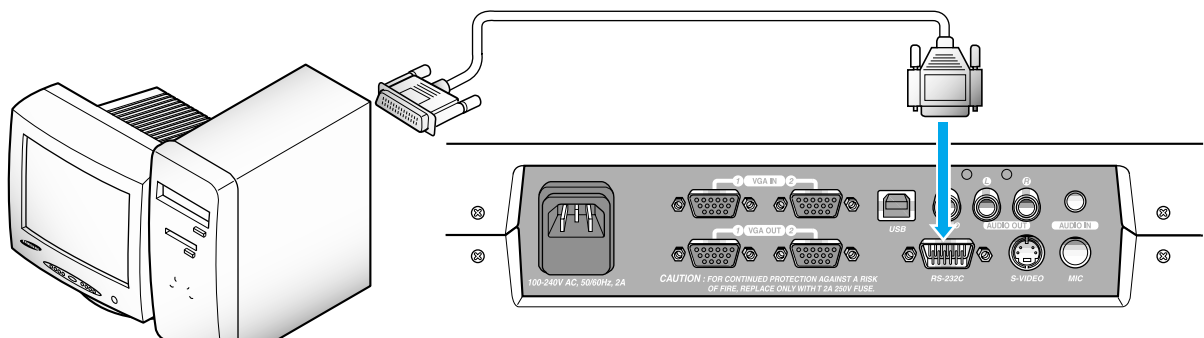
USB connection



Digital Presenter

Connect to the USB port on your PC, then install the supplied SDP-900 program.

RS-232C connection



Digital Presenter

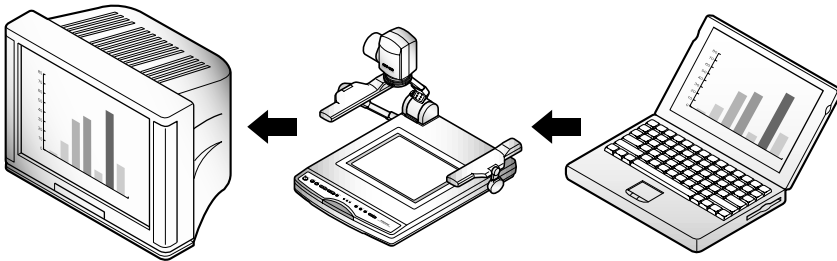
Connect to the RS-232C terminal on your PC.

Note

RS-232C cable is not provided with the presenter. You can obtain one from your computer dealer.

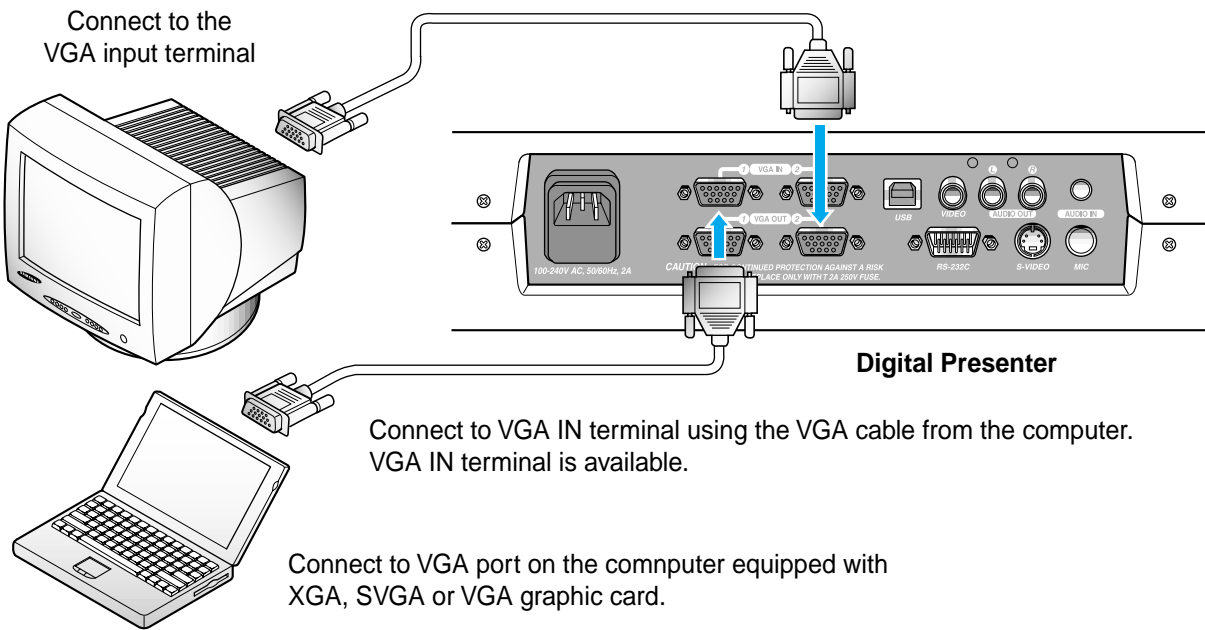
Connecting to output device

Computer



- If you connect computer through VGA IN port, you can receive video signal from the computer.

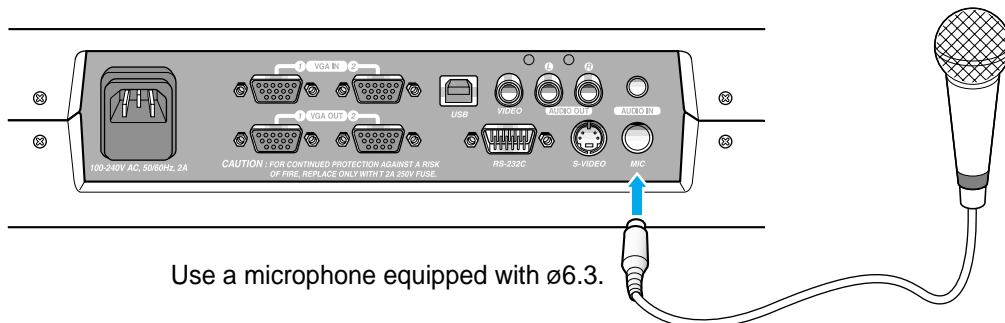
Connection



Connecting to output device

Microphone

- To enhance the presentation with the presenter's voice guidance, use a microphone. Microphone is not supplied with this presenter.

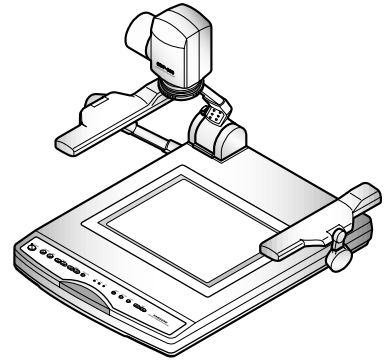


Using the presenter

To See the image received from external device

1

Set up your digital presenter properly.
(See page 14.)

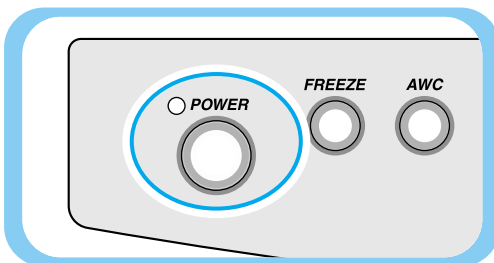


2

Connect the input device from which you want to receive the image and the output device on which you want to see the image.
(See pages 15 through 17.)

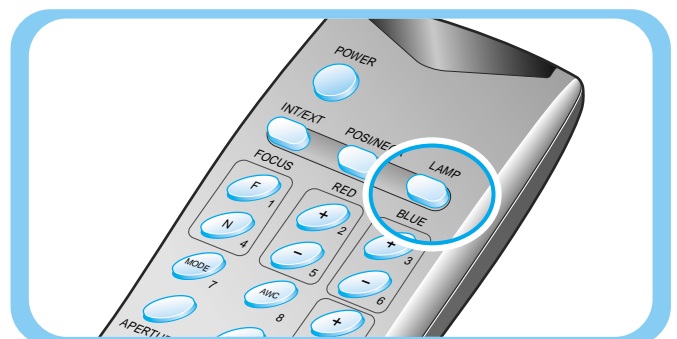
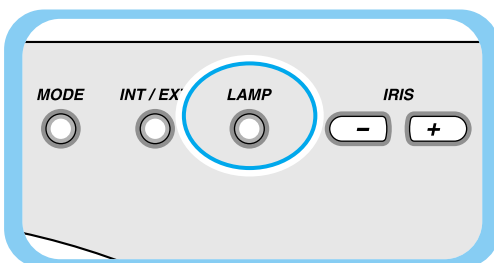
3

Turn the power of the input and output device, and the digital presenter on.



Note

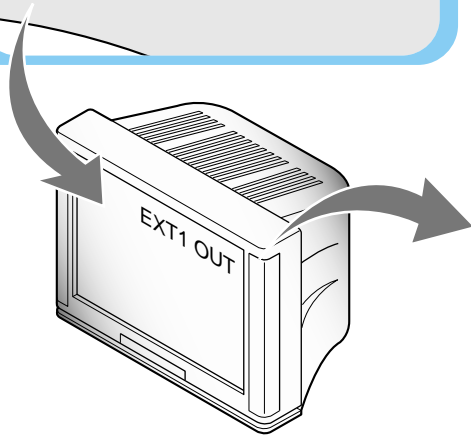
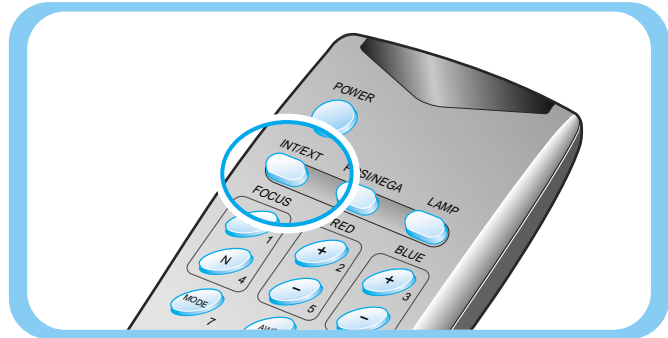
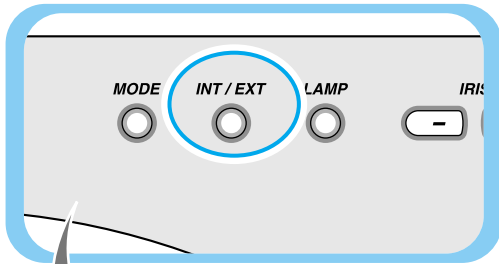
When the digital presenter is powered on, the upper lamps turn on.
To turn it off, press LAMP button of the presenter.



Using the presenter

4

Choose the video source with the **INT/EXT** button of the presenter.



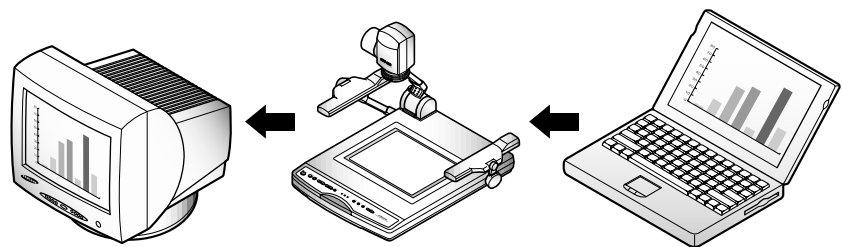
- Each time you press the button, the display shows EXT1 OUT, EXT2 OUT, INT OUT.
- **EXT1 OUT, EXT2 OUT**
View the image and sound from an external VGA output device through a PC monitor or a projector connected to the digital presenter.
- **INT OUT**
Choose this mode to see the image through the lens of the digital presenter.

Note

If NO EXT1 SYNC or NO EXT2 SYNC is displayed, check if the external input device is connected properly.

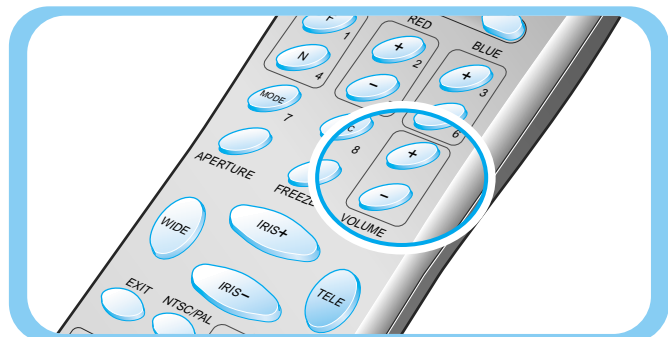
5

Open the image on the computer. Now you see the image through a PC monitor or a projector.



6

If necessary, you can adjust the audio volume using the volume buttons on the remote controller.

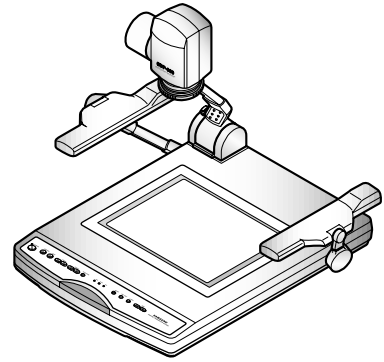


Using the presenter

To project an object on the video presenter

1

Set up your digital presenter properly.
(See page 14.)

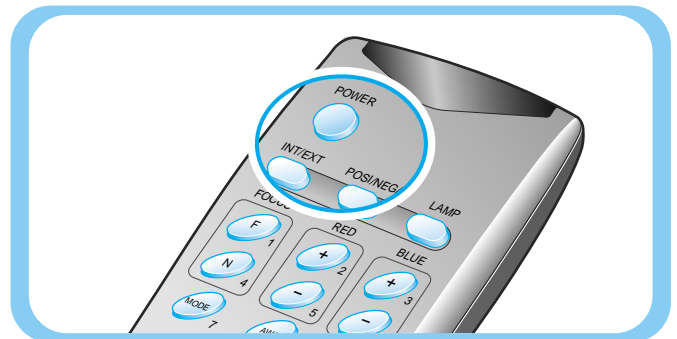
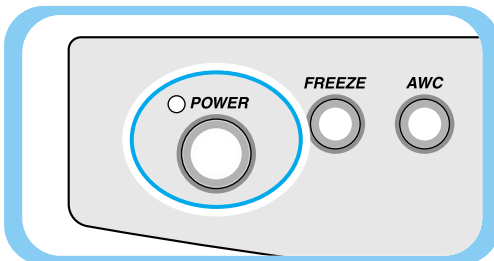


2

Connect to a TV, a PC monitor, a projector to display the image.
(See page 15.)

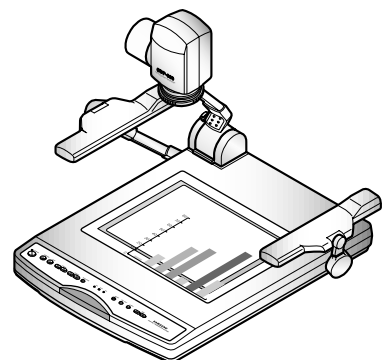
3

Turn the power of the output device and the digital presenter on.



3

Place the object on the lightbox, and adjust the head to face the object.



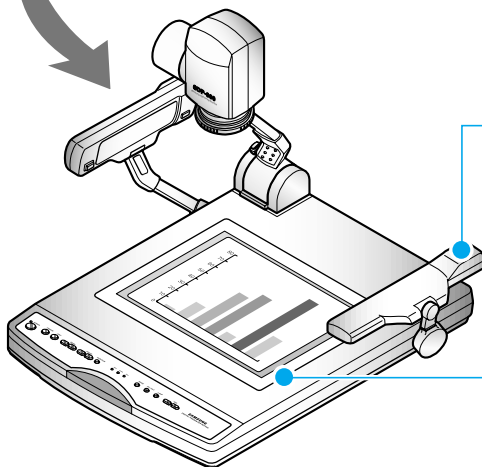
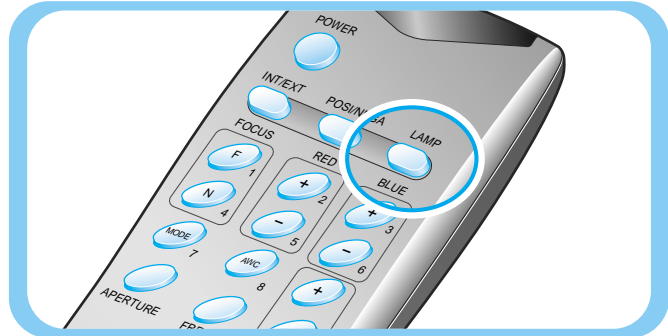
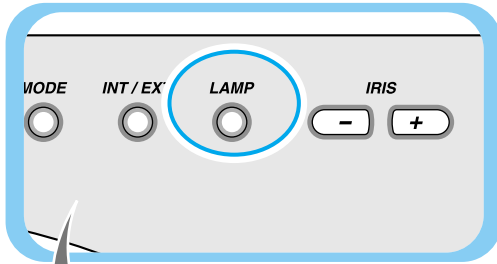
Note

If there is no image on the TV, PC monitor or the projector check if the cable is properly connected, and press the INT/EXT button of the presenter to select the input mode to INT OUT.

Using the presenter

5

Select a proper lighting source with the LAMP button of the presenter. Each time you press the button, upper lamps on, lightbox on, then all lighting off.

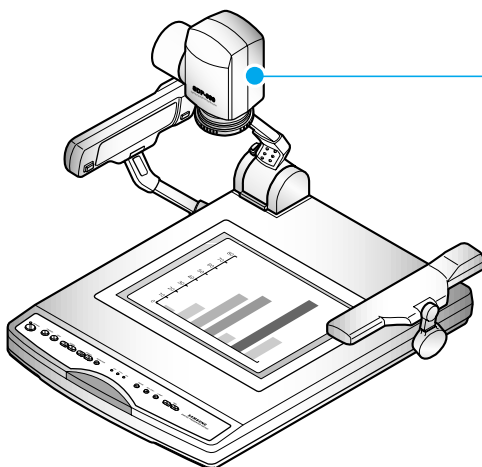


Upper lamp. Use the upper lamps to project paper document and other material, and use lightbox lamp to project transparencies.

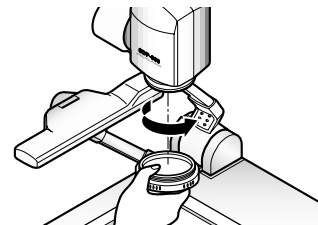
Lightbox

6

Remove or attach the adapter lens according to the objected.



Rotate the lens to remove or attach it.



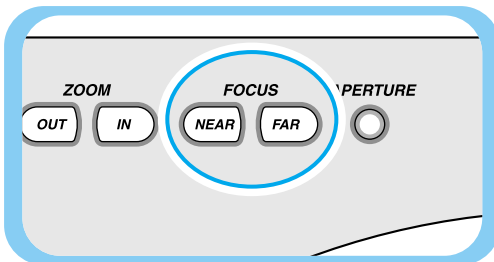
- Attach the adaptor lens only in the camera mode (possible focal length: 1m ~ ∞)
- Remove the adaptor lens to view a material or a document or a film placed on the document plate. (Possible focal length: 230mm ~ 320mm)
- Beyond the possible focal length mentioned above, it might be out of focus. So pay attention to the distance between the object to be viewed and the main unit and whether the adaptor lens is attached.

Using the presenter

7

Focus on the object.

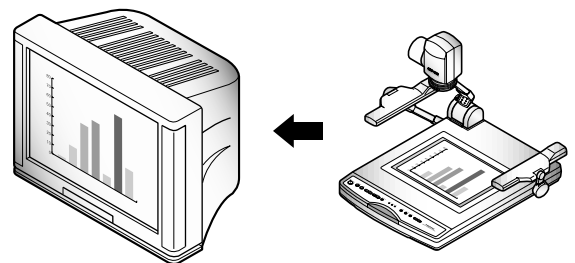
- Manual focus control: press [Focus F] or [Focus N] to adjust.
- If the user want to adjust more accurately, press the WIDE button to the maximum close-up then bring the image into focus and then adjust to the desired screen size by pressing the TELE button.



8

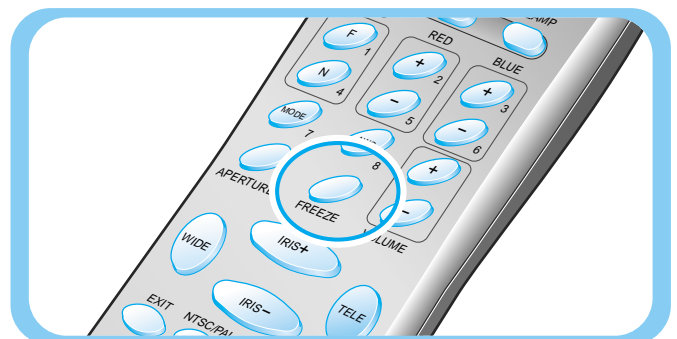
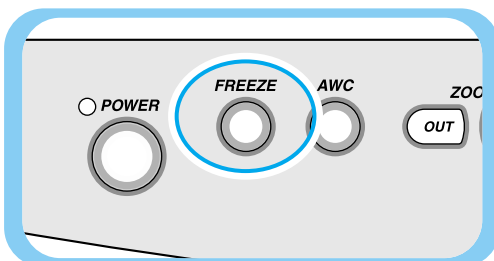
You see the image on the TV, the PC monitor or the projector.

- To use versatile image control features, see pages 23 through 26.



Note



To change the object projected during presentation, freeze the image on the screen using FREEZE button of the presenter then change it.
To cancel the freezing, press FREEZE button again or EXIT button on the remote controller.

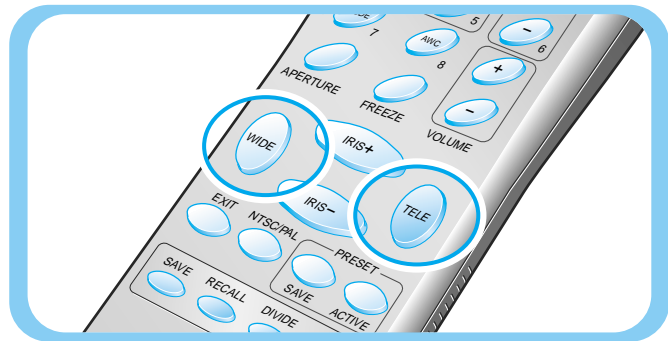
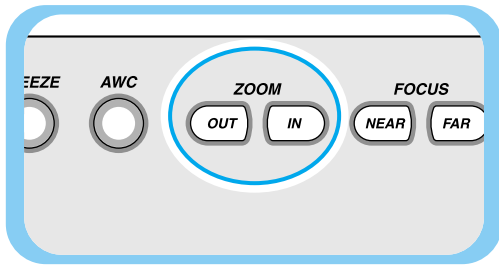


Adjusting your image

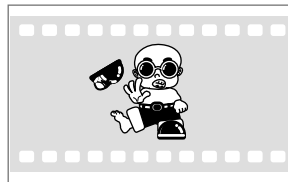
Use the control buttons on the remote controller or on the control panel of the presenter to adjust the projected image. Some of the main features are described below:

Adjusting image size

- ▼ Press **WIDE** or **TELE** button on the remote controller to reduce or enlarge the image size displayed on the screen.
- ▼ You can also use **ZOOM**  or **ZOOM**  button of the presenter to achieve the same result.





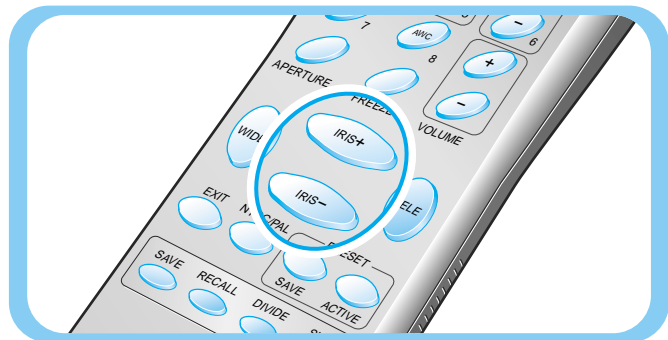
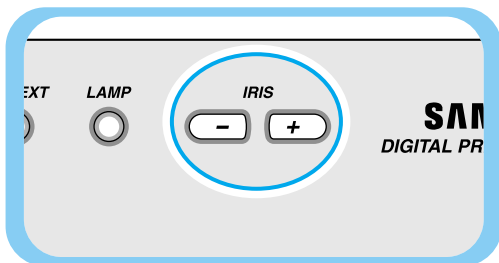
WIDE



TELE

Adjusting brightness

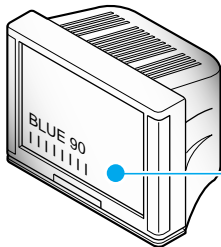
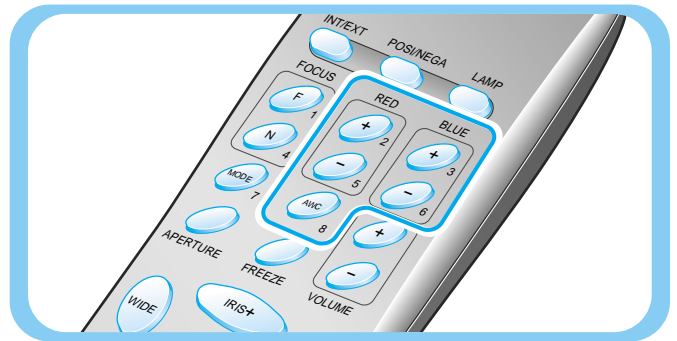
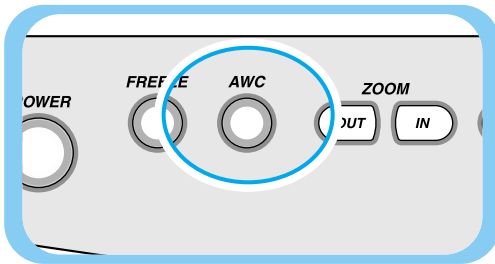
- ▼ Press **IRIS**  button on the control panel or **IRIS +** button on the remote controller to lighten the overall image.
- ▼ Press **IRIS**  button on the control panel or **IRIS -** button on the remote controller panel to darken the overall image.



Adjusting your image

Adjusting image color

- ▼ For automatic color adjustment, press **AWC** button.
- ▼ If you want to fine adjust, press **BLUE +/-** or **RED +/-** button on the remote controller button to increase or decrease blue or red color factor manually.



The color level chosen will be displayed.

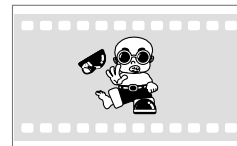
Hint:

To obtain best result, put the camera lens facing the white paper and press **AWC** button.

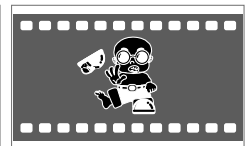
Positive and negative switching



- ◀ Press **NEGA/POSI** button. Each time you press the button, POSI or NEGA appears alternately on the screen. Set to POSI to see normal object and set to NEGA to see negative film.



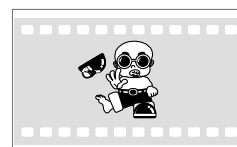
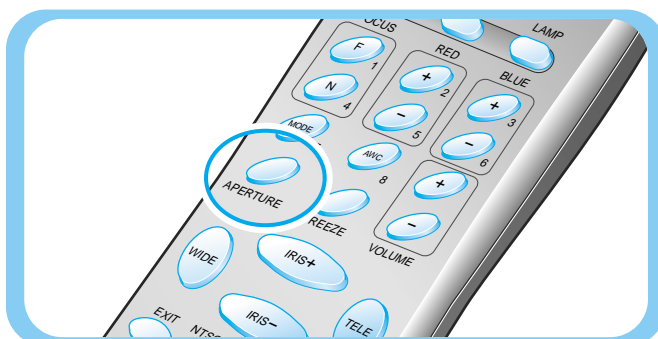
Positive



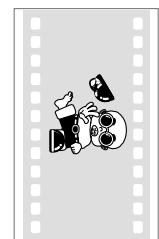
Negative

Image sharpness control

- ▼ Press **APERTURE** button to control the sharpness of the output image of this product.
 - **APERTURE ON**: For a material mostly with words.
 - **APERTURE OFF**: For a material with many pictures or colors.



Normal image

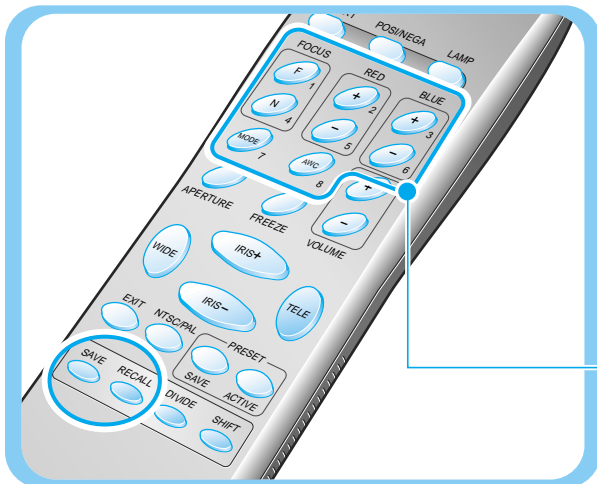


Rotated image

Adjusting your image

Saving image in memory

- You can save the image up to 8 frames into your digital presenter's memory. After saving you will be able to recall it.



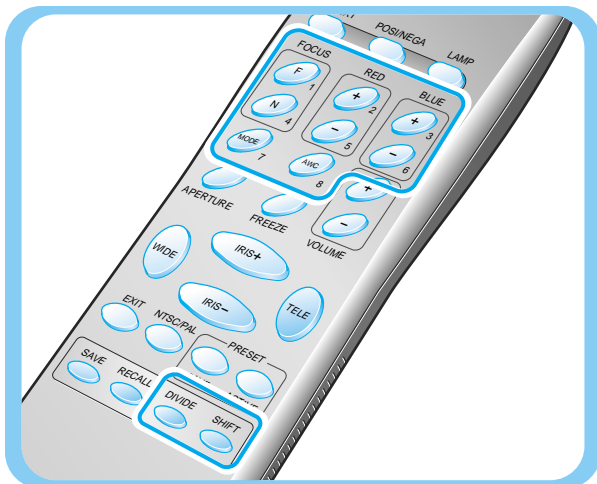
- ◀ To save the image into the memory, press **SAVE** button and specify the memory location within 4 seconds using the number keys from 1 through 8.
- ◀ If you want to recall the saved image from memory, press **RECALL** button and press the memory location number within 4 seconds. If you press and hold down **RECALL** button, all images saved in memory are displayed one by one.
- ◀ If you want to exit from the recall mode, press **EXIT** button.

The memory location numbers are printed on the right side of these buttons. For example, if you want to save the image into memory location 7, press **SAVE** then press **MODE** button printed **7** at right side.

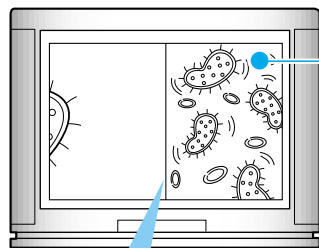
Note If you turn the power off, all the saved images will be lost.

Screen 2 divide and image shift

- You can see both the image of an object currently projected and the image saved in memory simultaneously on one screen.



- ◀ Press **DIVIDE** button and press the memory location number within 4 seconds to recall the image you want to see.
- ◀ To cancel this mode and return to normal mode, press **EXIT** button.



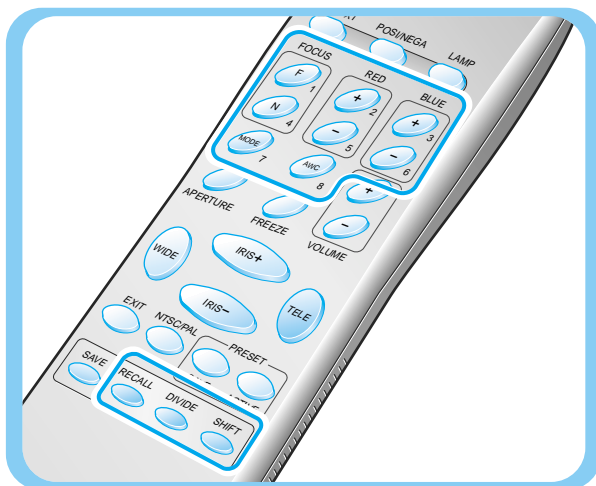
You can see the image of an object currently projected at right side.

The recalled image from memory appears at left side. Press **SHIFT** button to shift the image from right to left. Each time you press the button, a third of the image will be moved from right to left.

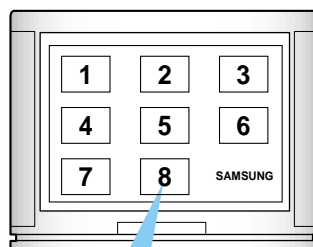
Adjusting your image

3x3 Multi-Screen

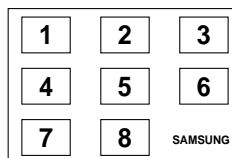
- You can see all the images saved in memory simultaneously on one screen and choose one to display it.



- Press **DIVIDE** button for 2 seconds or more, then all the images saved in memory are displayed on the screen.
- To cancel this mode and return to normal mode, press **EXIT** button.

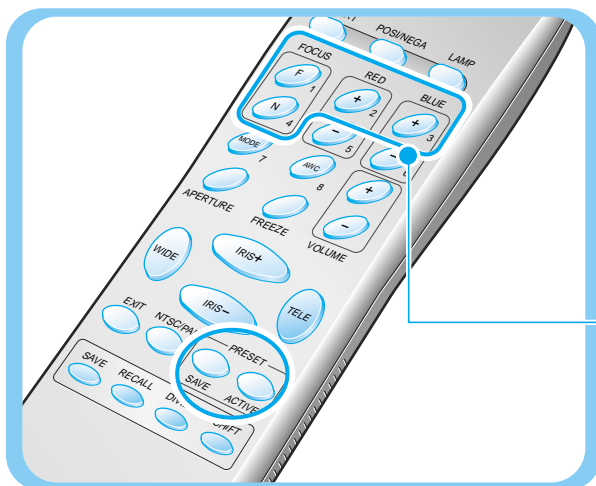


When you want to see one of them, press the number button to recall it.
For example, if you want to see the image in memory location 3, press **BLUE +** button and the image is displayed on the screen.



Saving custom user settings

- After you adjust feature value, you can save the value for next time use. You can save up to 4 different custom user settings.



- To save the current value, press **SAVE** button and specify the memory location within 4 seconds using the number keys from 1 through 4.
- To recall your custom setting, press the **ACTIVE** button and press the memory location number within 4 seconds.

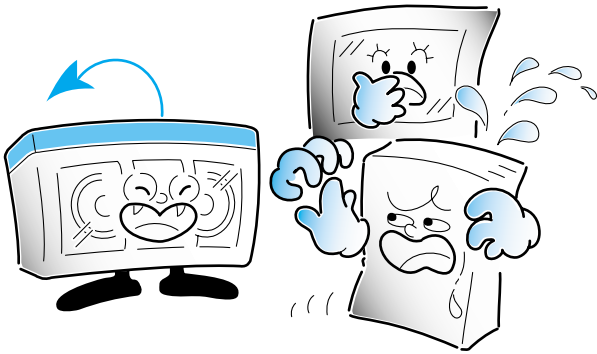
The memory location numbers are printed on the right side of these buttons. For example, if you want to save the feature into memory location 4, press **SAVE** then press **FOCUS N** button printed 4 at right side.

Note

You can not save the setting on the **FREEZE**, **RECALL**, **DIVIDE**, **FOCUS** and **ZOOM** (**WIDE/TELE**) buttons.

Safety precautions

Please note that any slides, pictures, documents that are protected under the copy right law can't be reproduced without permission.



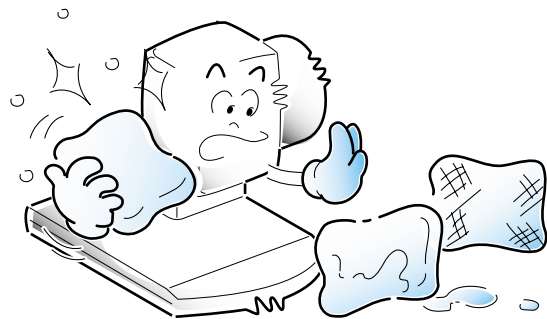
Do not place heavy objects.



Do not drop.



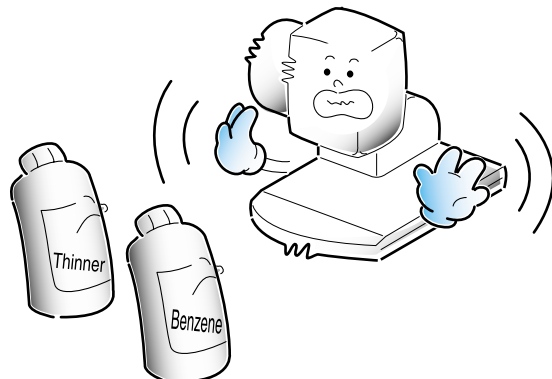
Wipe with dry and soft cloth



Do not use in the humid or wet area

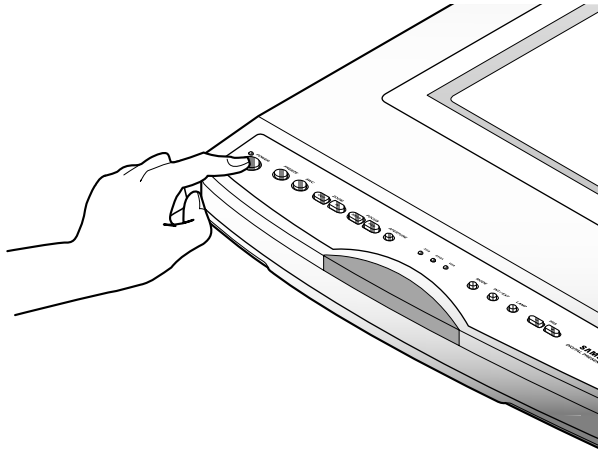


Use of benzene or thinner can damage the product.

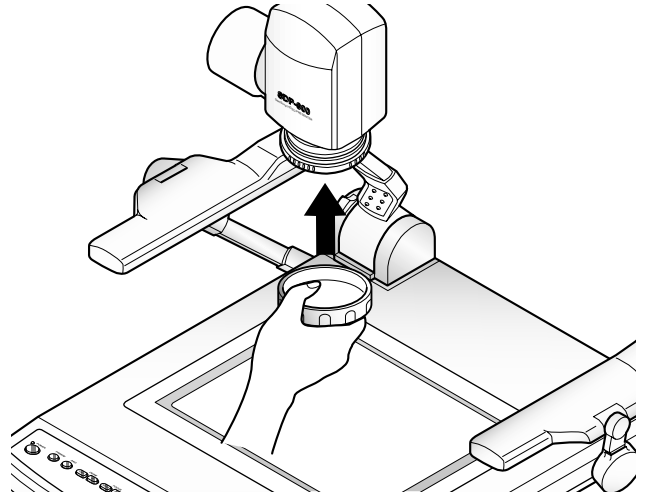


Storage

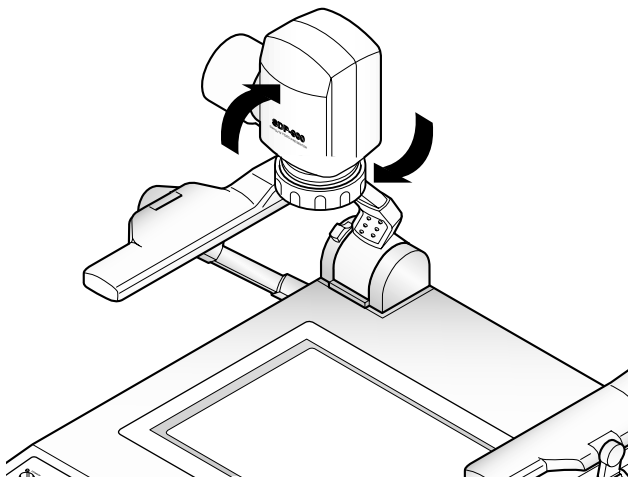
1 Turn the power off and unplug the power cord.



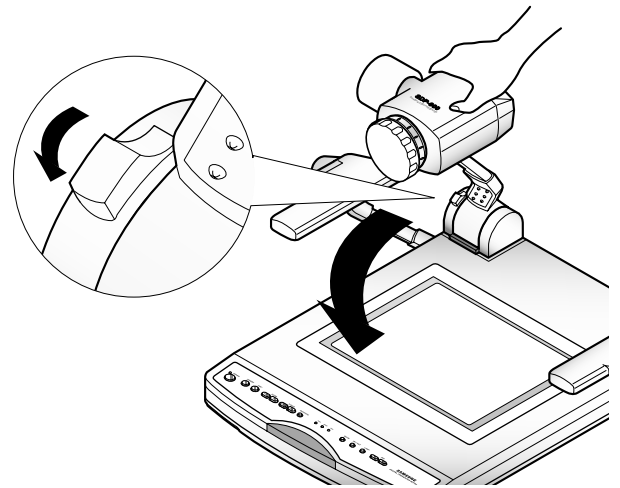
2 Attach the lens cap.



3 Turn the head upside down.

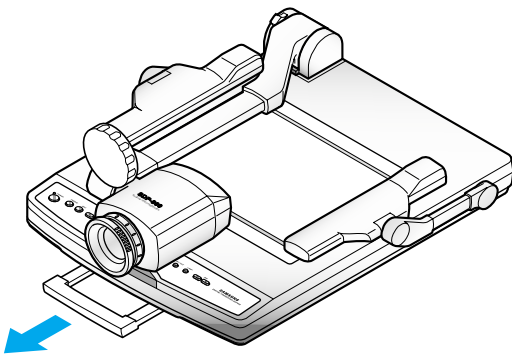
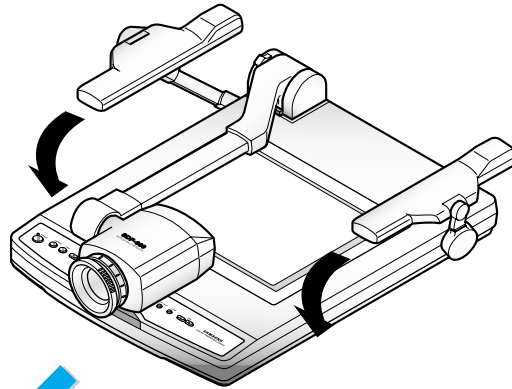


4 While you pull the main lock button toward the front of the presenter, fold the head completely.

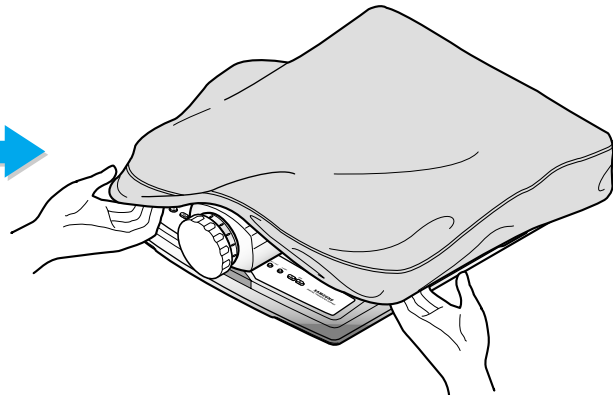




5 Fold the lamps on both sides completely.



Use the handle when you move it.



When you do not use it for a long time,
protect it with the cover supplied.

Troubleshooting



No image appears



- Check if the resolution of the output device corresponds to that of the video presenter. (For example, when the maximum resolution of a projector is SVGA and if the video presenter is set to XGA, then no image appears.)
- Check if the input selection of the output device is appropriate.
- Check if the iris control is adequate.
- Check if the VGA cable is connected to the VGA output terminal correctly.
- Check if there is any problem with the fuse.
- Check if the lens cap is removed.



No communication between the PC and USB.



- Make sure the operating system is Windows 98 or later. It doesn't work on Windows 95.
- For other detailed information, please refer to the program manual supplied with the product.



No image from a slide film or a negative film.



- Check if the box is turned on.
- Adjust the lens to face the film directly.
- Check if the NEGA/POSI button is selected properly.



remote controller is not working.



- Check the battery of the remote controller. Replace it with a new one.



The light is not turned on right away after the LAMP button is pressed.



- It is a normal phenomenon occurring because the protection circuit is in operation to protect the lamp.



The image is out of focus.



- Check if the adaptor lens is attached properly for the purpose. (Be sure to attach the adaptor lens in the camera mode.)
- Check if the distance from the object is too short.

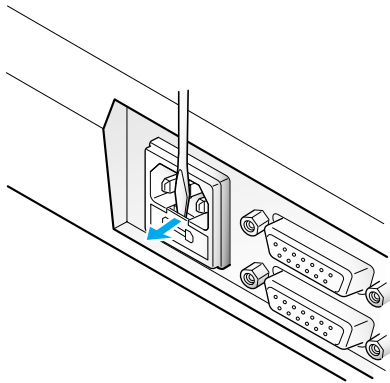
If there are problems, please contact the store you purchased the product or our distributor nearest you.



Fuse and battery replacement

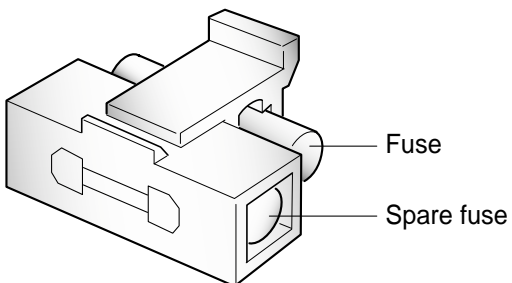
Fuse replacement

1 Take out the fuse holder .

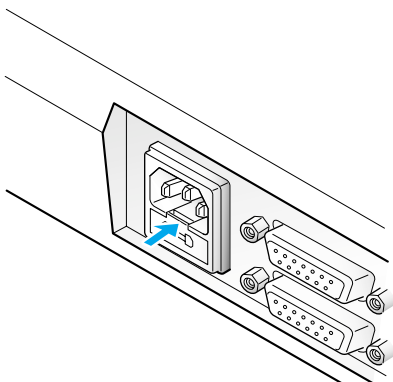


2 Take out the fuse and replace it.

• Fuse type: 2A, 250V

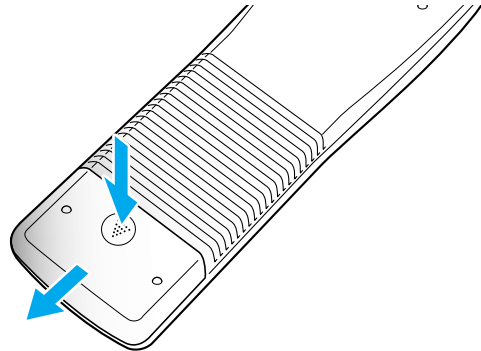


3 Put the fuse holder back.



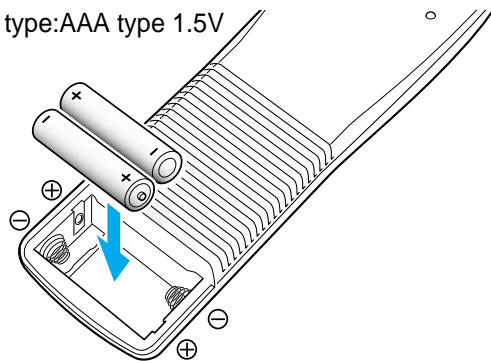
Battery replacement

1 Open the battery compartment lid at the back of the remote controller.

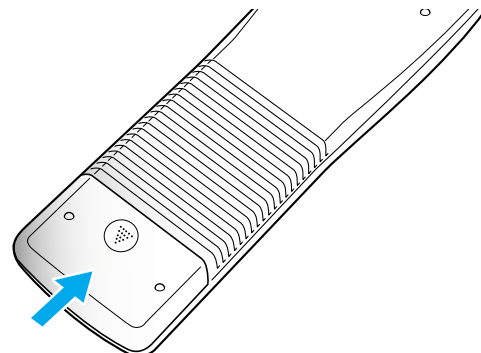


2 Insert the batteries so that their

• Battery type: AAA type 1.5V



3 Close the lid.



Specifications

※ **Note:** Specifications are subject to change without notice.

Specifications		Description
Optical system	Lens	F=2.8~3.3 f=6.4~73.6, 12x power zoom
	Shooting Area	Max: 384 x 272mm, Min: 50x 40mm
	Zoom	Powered
	Focus	Powered
	Iris	Auto (with fine level adjustment)
Illumination system	Upper	Attach to the side arm of the main unit
	Lower	Light box (built-in main unit)
Video	Pick-up Device/ Effective pixel	1/2" 850,000 pixels PS CCD / 1034(H) x 779(V)
	Frame rate	15 frame/sec
	Sync system	Internal sync.
	VGA output	1024 x 768(XGA) RGB color, 800 x 600(SVGA) RGB color, 640 x 480(VGA) RGB color
	Video output	C-Video VBS 1.0V _{p-p} / 75Ω (unbalance)
		S-Video Y: 1.0V _{p-p} / 75Ω (unbalance)
		C: 0.286V _{p-p} / 75Ω (unbalance)
	White Balance	Manual / Auto (one touch type)
	Positive / Negative	Selectable
	Freeze	built-in
	Input terminals	Microphone: 1, VGA:2, Audio:1
	Output terminals	VIDEO:1, Audio:1, VGA:2, USB:1, RS-232C:1, S-Video:1
	NTSC / PAL	Selectable
	remote controller	Supplied
	Input selection	3 channels (Internal: 1, External: 2)
	On-screen display	Available
	Image freeze	Available
	Image save	Available (8 frames)
	Image recall	Available (8 frames)
	Image divide	Available (2/9 divide)
Image transfer to computer	Available (USB: full, 1/4, 1/16 mode)	
Preset function	Up to 4 user settings	
PC connection	USB	built-in
	RS-232C	SET control
	Application software	Windows application in Windows 98 or later.
General	Operating temperature/ Humidity	+5°C ~ +35°C, 30% ~ 90%
	Power	AC 100V ~ 240V Free Voltage, 50/60Hz, 60W
	Dimensions(mm)	In-use: 676(W) x 537(H) x 558(D) Storage: 533(W) x 145(H) x 558(D)
	Weight	11.5kg
	Accessories	remote controller, Cables, etc.



SALES NETWORK

■ **HEAD OFFICE : SAMSUNG TECHWIN CO., LTD**

145-3 Sangdaewon 1-Dong, Jungwon-Gu, Sunnam, Kyungki-Do, Korea 462-121
TEL : 82-31-740-8137~8141
FAX : 82-31-740-8145

■ **U.S.A OFFICE : SAMSUNG OPTO-ELECTRONICS AMERICA, INC.**

40 Seaview Drive, Secaucus N.J.07094, U.S.A
TEL : 201-902-0347
FAX : 201-902-9342

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