

SANYO

Multimedia Projector

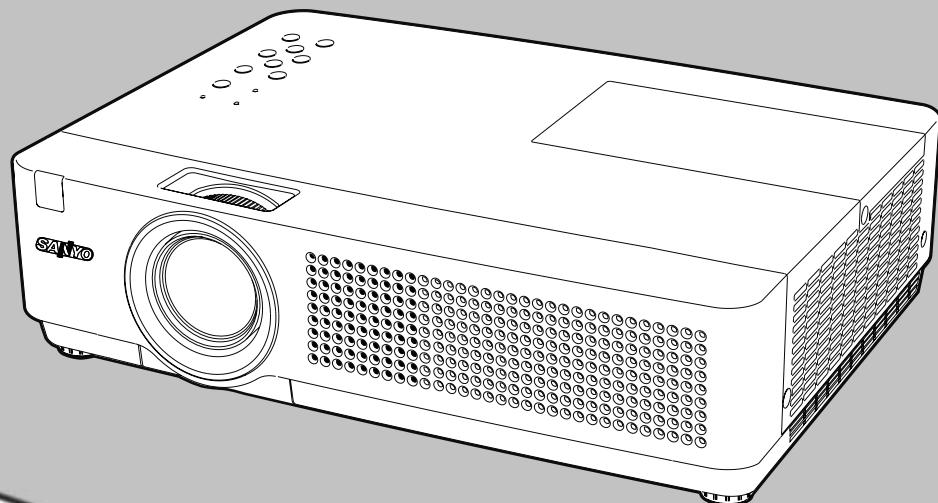
MODEL PLC-XU4000

Network Supported

Wired LAN

Refer to the Owner's Manual below for details about network function.

Network Set-up and Operation



Owner's Manual
PJLink™

Features and Design

This Multimedia Projector is designed with the most advanced technology for portability, durability, and ease of use. This projector utilizes built-in multimedia features, a palette of 16.77 million colors, and matrix liquid crystal display (LCD) technology.

◆ Compact Design

This projector is designed compact in size and weight. It is easy to carry and installed anywhere you wish to use.

◆ Simple Computer System Setting

The projector has the Multi-scan system to conform to almost all computer output signals quickly (p.29). Up to WUXGA resolution can be accepted.

◆ Useful Functions for Presentations

- The digital zoom function allows you to focus on the crucial information during a presentation (p.36).
- Blackboards* can be used as a projection screen.
*The board color is limited to Green (pp.33, 41).

◆ Lamp Control

Brightness of the projection lamp can be selected (pp.25, 54).

◆ Direct OFF Function

With the Direct OFF function, you can disconnect the power cord from the wall outlet or turn off the breaker even during projection (p.20).

◆ Logo Function

The Logo function allows you to customize the screen logo (pp.48-50). You can capture an image for the screen logo and use it for the starting-up display or between presentations.

◆ Multilanguage Menu Display

Operation menu is available in 21 languages: English, German, French, Italian, Spanish, Portuguese, Dutch, Swedish, Finnish, Polish, Hungarian, Romanian, Czech, Russian, Turkish, Kazakh, Vietnamese, Chinese, Korean, Japanese and Thai (p.46).

◆ Switchable Interface Terminal

The projector provides a switchable interface terminal. You can use the terminal as computer input or monitor output conveniently (p.51).

✓ Note:

- The On-Screen Menu and figures in this manual may differ slightly from the product.
- The contents of this manual are subject to change without notice.

◆ Security Function

The Security function helps you to ensure security of the projector. With the Key lock function, you can lock the operation on the top control or remote control (p.55). PIN code lock function prevents unauthorized use of the projector (pp.19, 55-56).

◆ Helpful Maintenance Functions

Lamp and filter maintenance functions provide for better and proper maintenance of the projector.

◆ LAN Network Function

This projector is loaded with the Wired LAN network function. You can operate and manage the projector via network. For details, refer to the owner's manual "Network Set-up and Operation."

◆ Auto Setup Function

This function enables Input search, Auto Keystone correction and Auto PC adjustment by simple pressing the AUTO SETUP button on the top control (p.47).

◆ Colorboard Function

At the time of simple projection on the colored wall, you can get the close color image to the color image projected on a white screen by selecting the similar color to the wall color from the preset four colors.

◆ Power Management

The Power management function reduces power consumption and maintains the lamp life (p.51).

◆ Closed caption

Closed caption is a function that displays the audio portion of a TV program as text on the screen. The closed captioning service is available mainly in the U.S (p.53).

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Trademarks

Each name of corporations or products in this book is either a registered trademark or a trademark of its respective corporation.

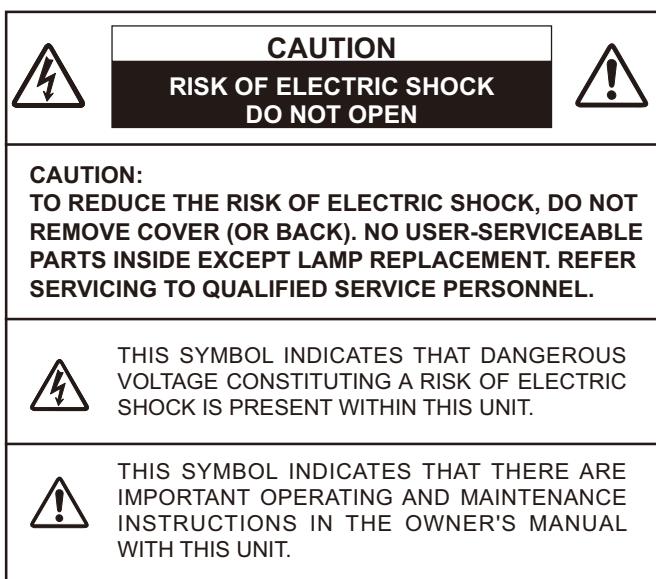
To the Owner

Before installing and operating this projector, read this manual thoroughly.

This projector provides many convenient features and functions. Operating the projector properly enables you to manage those features and maintains it in good condition for many years to come.

Improper operation may result in not only shortening the product-life, but also malfunctions, fire hazard, or other accidents.

If your projector seems to operate improperly, read this manual again, check operations and cable connections and try the solutions in the "Troubleshooting" section in the back of this manual. If the problem still persists, contact the dealer where you purchased the projector or the service center.



FOR EU USERS

The symbol mark and recycling systems described below apply to EU countries and do not apply to countries in other areas of the world.

Your product is designed and manufactured with high quality materials and components which can be recycled and/or reused.

The symbol mark means that electrical and electronic equipment, batteries and accumulators, at their end-of-life, should be disposed of separately from your household waste.

Note:

If a chemical symbol is printed beneath the symbol mark, this chemical symbol means that the battery or accumulator contains a heavy metal at a certain concentration. This will be indicated as follows: Hg: mercury, Cd: cadmium, Pb: lead

In the European Union there are separate collection systems for used electrical and electronic equipment, batteries and accumulators.

Please, dispose of them correctly at your local community waste collection/recycling centre.
Please, help us to conserve the environment we live in!



Safety Precaution

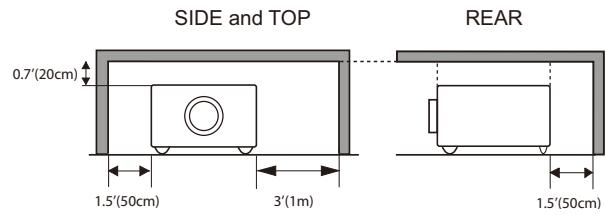
WARNING:

- THIS APPARATUS MUST BE EARTHED.
- TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

–This projector produces intense light from the projection lens. Do not stare directly into the lens, otherwise eye damage could result. Be especially careful that children do not stare directly into the beam.

–Install the projector in a proper position. Otherwise it may result in fire hazard.

–Allowing the proper amount of space on the top, sides, and rear of the projector cabinet is critical for proper air circulation and cooling of the unit. The dimension shown here indicate the minimum space required. If the projector is to be built into a compartment or similarly enclosed, these minimum distances must be maintained.



–Do not cover the ventilation slot on the projector. Heat build-up can shorten the service life of your projector, and can also be dangerous.

–If the projector is unused for an extended time, unplug the projector from the power outlet.

–Do not project the same image for a long time. The afterimage may remain on the LCD panels by the characteristic of panel.

CAUTION

DO NOT SET THE PROJECTOR IN GREASY, WET OR SMOKY CONDITIONS SUCH AS IN A KITCHEN TO PREVENT A BREAKDOWN OR A DISASTER. IF THE PROJECTOR COMES IN CONTACT WITH OIL OR CHEMICALS, IT MAY BECOME DETERIORATED.



CAUTION

Not for use in a computer room as defined in the Standard for the Protection of Electronic Computer/Data Processing Equipment, ANSI/NFPA 75.

READ AND KEEP THIS OWNER'S MANUAL FOR LATER USE.

Safety Instructions

All the safety and operating instructions should be read before the product is operated.

Read all of the instructions mentioned here and retain them for later use. Unplug this projector from AC power supply before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.

Follow all warnings and instructions marked on the projector.

For added protection to the projector during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage due to lightning and power line surges.

Do not expose this unit to rain or use near water... for example, in a wet basement, near a swimming pool, etc...

Do not use attachments not recommended by the manufacturer as they may cause hazards.

Do not place this projector on an unstable cart, stand, or table. The projector may fall, causing serious injury to a child or adult, and serious damage to the projector. Use only with a cart or stand recommended by the manufacturer, or sold with the projector. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturers.

An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



Slots and openings in the back and bottom of the cabinet are provided for ventilation, to ensure reliable operation of the equipment and to protect it from overheating.

The openings should never be covered with cloth or other materials, and the bottom opening should not be blocked by placing the projector on a bed, sofa, rug, or other similar surface. This projector should never be placed near or over a radiator or heat register.

This projector should not be placed in a built-in installation such as a book case unless proper ventilation is provided.

Never push objects of any kind into this projector through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the projector.

Do not install the projector near the ventilation duct of air-conditioning equipment.

This projector should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied, consult your authorized dealer or local power company.

Do not overload wall outlets and extension cords as this can result in fire or electric shock. Do not allow anything to rest on the power cord. Do not locate this projector where the cord may be damaged by persons walking on it.

Do not attempt to service this projector yourself as opening or removing Covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Unplug this projector from wall outlet and refer servicing to qualified service personnel under the following conditions:

- a. When the power cord or plug is damaged or frayed.
- b. If liquid has been spilled into the projector.
- c. If the projector has been exposed to rain or water.
- d. If the projector does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the projector to normal operation.
- e. If the projector has been dropped or the cabinet has been damaged.
- f. When the projector exhibits a distinct change in performance-this indicates a need for service.

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or injury to persons.

Upon completion of any service or repairs to this projector, ask the service technician to perform routine safety checks to determine that the projector is in safe operating condition.

NOTE FOR CUSTOMERS IN THE US

(Hg) LAMP(S) INSIDE THIS PRODUCT CONTAIN MERCURY AND MUST BE RECYCLED OR DISPOSED OF ACCORDING TO LOCAL, STATE OR FEDERAL LAWS.

Safety Instructions

Air Circulation

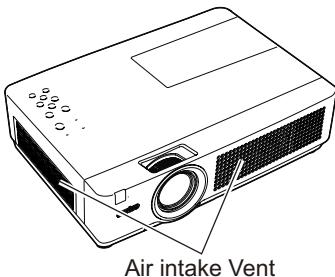
Openings in the cabinet are provided for ventilation. To ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered.

CAUTION

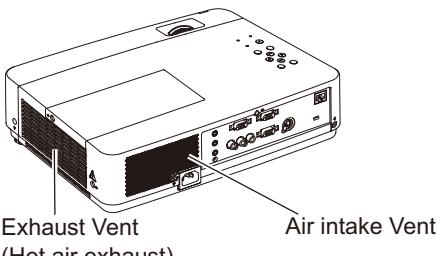
Hot air is exhausted from the exhaust vent. When using or installing the projector, the following precautions should be taken.

- Do not put any flammable object or spray can near the projector, hot air is exhausted from the air vents.
- Keep the exhaust vent at least 3' (1 m) away from any objects.
- Do not touch a peripheral part of the exhaust vent, especially screws and metallic parts. These areas will become hot while the projector is being used.
- Do not put anything on the cabinet. Objects put on the cabinet will not only get damaged but also may cause fire hazard by heat.

Cooling fans are provided to cool down the projector. The fans' running speed is changed according to the temperature inside the projector.

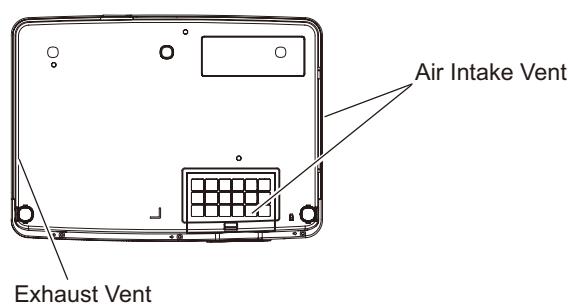


Air intake Vent



Exhaust Vent
(Hot air exhaust)

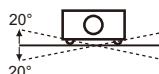
Air intake Vent



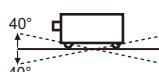
Exhaust Vent
(Hot air exhaust)

Installing the Projector in Proper Position

Install the projector properly. Improper Installation may shorten the lamp life and cause a fire hazard.



Do not roll the projector more than 20 degrees from side to side.



Do not pitch the projector more than 40 degrees from above and below.



Do not point the projector up to project an image.



Do not point the projector down to project an image.



Do not put the projector on either side to project an image.

Moving the Projector

When moving the projector, replace the lens cap and retract adjustable feet to prevent damage to the lens and cabinet.

When the projector is not in use for an extended period, put it into the supplied carrying case with the lens side up.

CAUTION

The carrying case (supplied) is intended for protection against dust and scratches on surface of the cabinet, and it is not designed to protect an appliance from external forces. Do not transport the projector by courier or any other transport service with this case, otherwise the projector can be damaged. When handling the projector, do not drop, bump, subject it to strong forces, or put other things on the cabinet.



CAUTION IN CARRYING OR TRANSPORTING THE PROJECTOR

- Do not drop or bump the projector, otherwise damages or malfunctions may result.
- When carrying the projector, use a suitable carrying case.
- Do not transport the projector by courier or any other transport service in an unsuitable transport case. This may cause damage to the projector. For information about transporting the projector by courier or any other transport service, consult your dealer.
- Do not put the projector in a case before the projector is cooled enough.

Compliance

Federal Communications Commission Notice

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Use of shielded cable is required to comply with class B limits in Subpart B of Part 15 of FCC Rules.

Do not make any changes or modifications to the equipment unless otherwise specified in the instructions. If such changes or modifications should be made, you could be required to stop operation of the equipment.

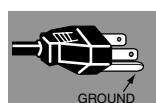
Model Number : PLC-XU4000
Trade Name : Sanyo
Responsible party : SANYO NORTH AMERICA CORPORATION
Address : 21605 Plummer Street, Chatsworth, California 91311
Telephone No. : (818)998-7322

AC Power Cord Requirement

The AC Power Cord supplied with this projector meets the requirement for use in the country you purchased it.

AC Power Cord for the United States and Canada:

AC Power Cord used in the United States and Canada is listed by the Underwriters Laboratories (UL) and certified by the Canadian Standard Association (CSA).



AC Power Cord has a grounding-type AC line plug. This is a safety feature to be sure that the plug will fit into the power outlet. Do not try to defeat this safety feature. Should you be unable to insert the plug into the outlet, contact your electrician.

AC Power Cord for the United Kingdom:

This cord is already fitted with a moulded plug incorporating a fuse, the value of which is indicated on the pin face of the plug. Should the fuse need to be replaced, an ASTA approved BS 1362 fuse must be used of the same rating, marked thus \triangle . If the fuse cover is detachable, never use the plug with the cover omitted. If a replacement fuse cover is required, ensure it is of the same colour as that visible on the pin face of the plug (i.e. red or orange). Fuse covers are available from the Parts Department indicated in your User Instructions. If the plug supplied is not suitable for your socket outlet, it should be cut off and destroyed.

The end of the flexible cord should be suitably prepared and the correct plug fitted.

WARNING : A PLUG WITH BARED FLEXIBLE CORD IS HAZARDOUS IF ENGAGED IN A LIVE SOCKET OUTLET.

The Wires in this mains lead are coloured in accordance with the following code:

- Green-and-yellow Earth
- Blue Neutral
- Brown Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol \downarrow or coloured green or green-and-yellow.

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

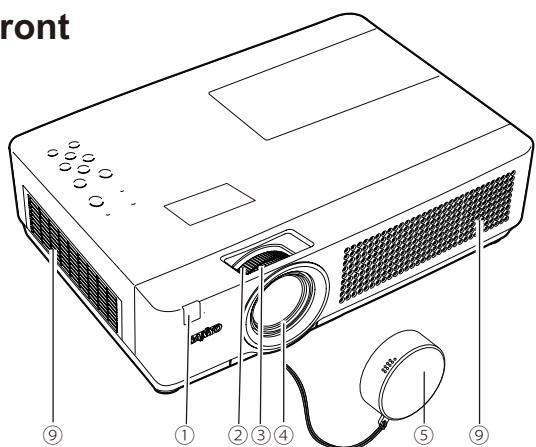
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

WARNING: THIS APPARATUS MUST BE EARTED.

THE SOCKET-OUTLET SHOULD BE INSTALLED NEAR THE EQUIPMENT AND EASILY ACCESSIBLE.

Part Names and Functions

Front



① Infrared Remote Receiver

② Zoom Ring

③ Focus Ring

④ Projection Lens

⚠ CAUTION

Do not cover the light beam in front of the lens. High temperature from light beam may damage the lens.

⑤ Lens Cap

(See page 62 for attaching.)

⚠ CAUTION

Do not turn on a projector with lens cap attached. High temperature from light beam may damage lens cap and result in fire hazard.

⑥ Speaker

⑦ Exhaust Vents

⚠ CAUTION

Hot air is exhausted from the exhaust vent. Do not put heat-sensitive objects near this side.

⑧ Lamp Cover

⑨ Air Intake Vents

⑩ Terminals and Connectors

⑪ Top Controls and Indicators

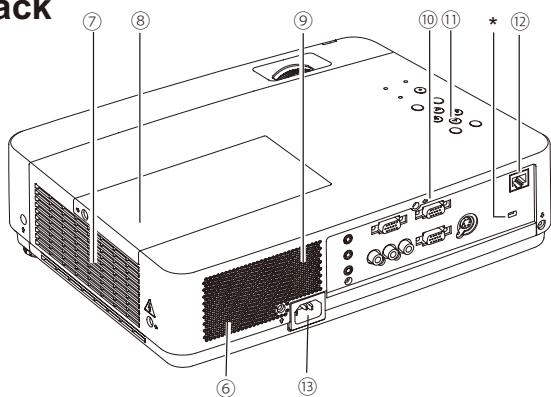
⑫ LAN Connection Terminal

⑬ Power Cord Connector

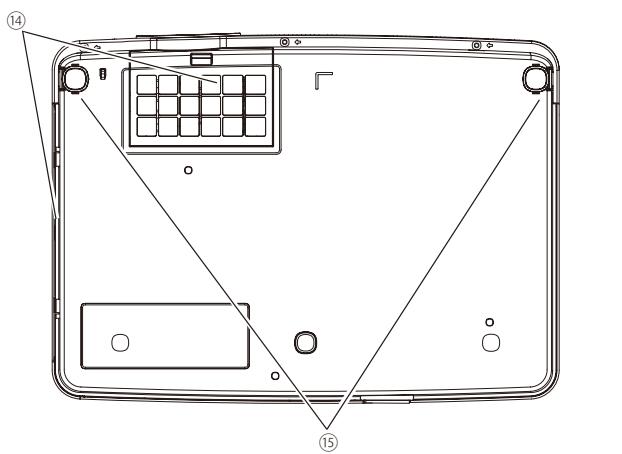
⑭ Filter Covers

⑮ Adjustable Feet

Back



Bottom



✓ Note:

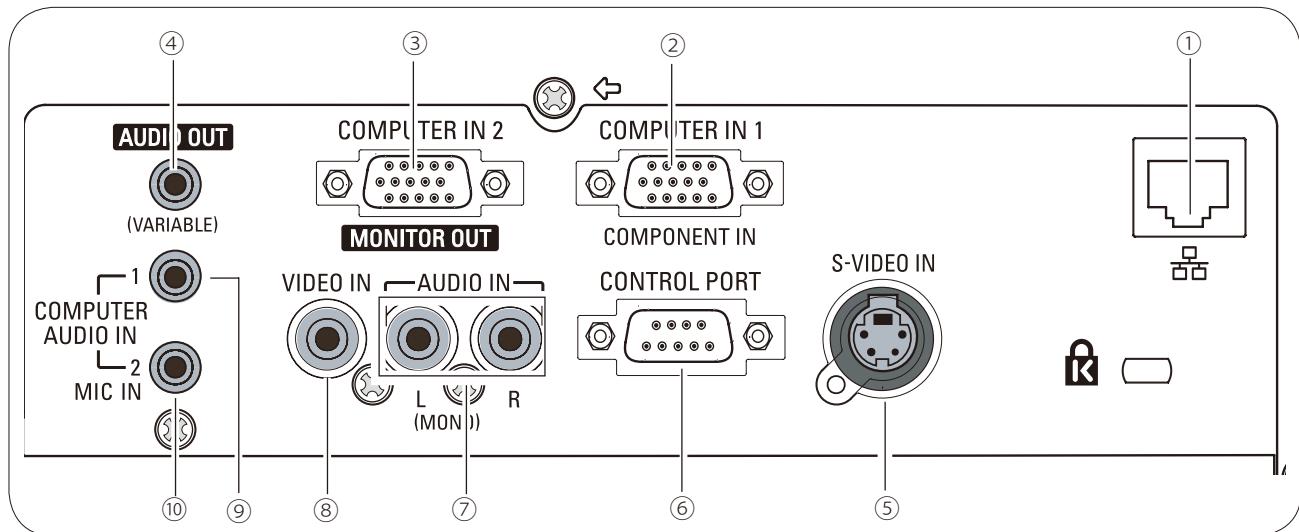
⑫ LAN Connection Terminal is for the Network function. Refer to the owner's manual of "Network Set-up and Operation".

* Kensington Security Slot

This slot is for a Kensington lock used to deter theft of the projector.

*Kensington is a registered trademark of ACCO Brands Corporation.

Rear Terminal



① LAN Connection Terminal

Connect the LAN cable (refer to the owner's manual of "Network Set-up and Operation").

② COMPUTER IN 1 / COMPONENT IN

Connect output signal from a computer, RGB scart 21-pin video output or component video output to this terminal(pp.14,16).

③ COMPUTER IN 2 / MONITOR OUT

- Connect computer output to this terminal (p.14).
- This terminal can be used to output the incoming analog RGB and Component signal from COMPUTER IN 1/COMPONENT IN terminal to the other monitor (pp.14,16).

④ AUDIO OUT (VARIABLE)

Connect an external audio amplifier to this jack (pp.14-16).

This terminal outputs sound from AUDIO IN terminal (⑦ or ⑨).

⑤ S-VIDEO IN

Connect the S-VIDEO output signal from video equipment to this jack (p.15).

⑥ CONTROL PORT

When controlling the projector with RS-232 C, connect the control equipment to this connector with the serial control cable.

⑦ AUDIO IN

Connect the audio output signal from video equipment connected to ⑤ or ⑧ to this jack.

For a mono audio signal (a single audio jack), connect it to the L (MONO) jack (p.15).

⑧ VIDEO IN

Connect the composite video output signal to this jack (p.15).

⑨ COMPUTER AUDIO IN 1

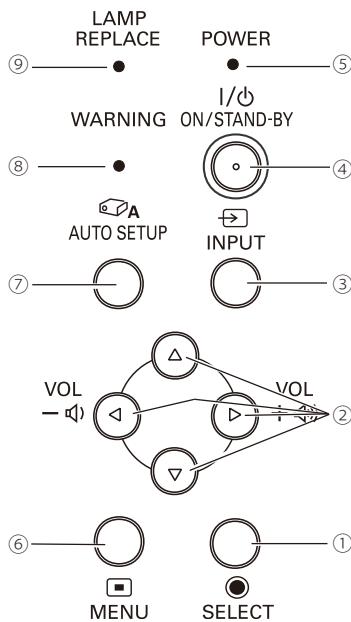
Connect the audio output (stereo) from a computer or video equipment connected to ② to this jack. (pp14, 16).

⑩ COMPUTER AUDIO IN 2 (MIC IN)

Connect the audio output (stereo) from a computer or video equipment connected to ③ to this jack. Or connect the MIC to the this jack (pp14, 16).

Part Names and Functions

Top Control



① SELECT button

- Execute the selected item (p.21).
- Expand or compress the image in the Digital zoom mode (p.36).

② POINT ▲▼◀▶ (VOLUME -/+)

- Select an item or adjust the value in the On-Screen Menu (p.21).
- Pan the image in the Digital zoom +/- mode (p.36).
- Adjust the volume level (Point ◀▶ buttons) (p.24).

③ INPUT button

Select an input source (pp.27-28, 38-39).

④ ON/STAND-BY button

Turn the projector on or off (pp.18-20).

⑤ POWER indicator

- Lights red when the projector is in stand-by mode.
- Lights green during operations.
- Blinks green in the Power management mode (p.51).

⑥ MENU button

Open or close the On-Screen Menu (p.21).

⑦ AUTO SETUP button

Execute the setting of Auto setup (includes Input search, Auto PC adj. and Auto Keystone functions) in the setting menu. (pp.23, 47).

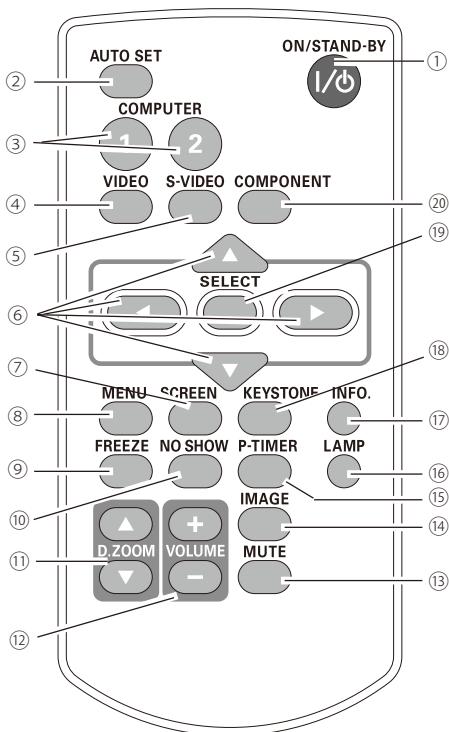
⑧ WARNING indicator

- Lights red when the projector detects an abnormal condition.
- Blinks red when the internal temperature of the projector exceeds the operating range (pp.60, 70).

⑨ LAMP REPLACE indicator

Lights yellow when the projection lamp reaches its end of life (pp.63, 70).

Remote Control



① **ON/STAND-BY button**

Turn the projector on or off. (pp.18-20)

② **AUTO SET button**

Execute the setting of Auto setup (includes Input search, Auto PC adj. and Auto Keystone functions) in the setting menu. (pp.23, 47)

③ **COMPUTER 1/2 buttons**

Select the COMPUTER 1 or COMPUTER 2 input source. (pp.27-28, 39)

④ **VIDEO button**

Select the VIDEO input source. (p.38)

⑤ **S-VIDEO button**

Select the S-VIDEO input source. (p.38)

⑥ **Point \blacktriangle \blacktriangledown \blackleftarrow \blackrightarrow buttons**

– Select an item or adjust the value in the On-Screen Menu. (p.21)
– Pan the image in the Digital zoom +/- mode. (p.36)

⑦ **SCREEN button**

Select a screen mode. (pp.26, 35, 44)

⑧ **MENU button**

Open or close the On-Screen Menu. (p.21)

⑨ **FREEZE button**

Freeze the picture on the screen. (p.25)

⑩ **NO SHOW button**

Temporarily turn off the image on the screen. (p.26)

⑪ **D.ZOOM \blacktriangle \blacktriangledown buttons**

Zoom in and out the images. (pp.25, 36)

⑫ **VOLUME +/- buttons**

Adjust the volume level. (p.24)

⑬ **MUTE button**

Mute the sound. (p.24)

⑭ **IMAGE button**

Select the image mode. (pp.26, 33, 41)

⑮ **P-TIMER button**

Operate the P-timer function. (pp.26, 52)

⑯ **LAMP button**

Select a lamp mode. (pp.25, 54)

⑰ **INFO. button**

Operate the information function. (pp.25, 59)

⑱ **KEYSTONE button**

Correct keystone distortion. (pp.23, 37, 45)

⑲ **SELECT button**

– Execute the selected item. (p.21)
– Expand or compress the image in Digital zoom mode. (p.36)

⑳ **COMPONENT button**

Select the COMPONENT input source. (p.39)

✓ **Note:**

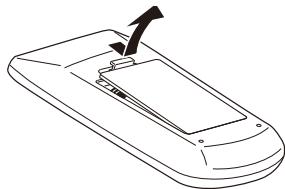
To ensure safe operation, please observe the following precautions:

- Do not bend, drop, or expose the remote control to moisture or heat.
- For cleaning, use a soft dry cloth. Do not apply benzene, thinner, spray, or any chemical material.

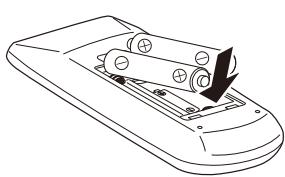
Part Names and Functions

Remote Control Battery Installation

1 Open the battery compartment lid.



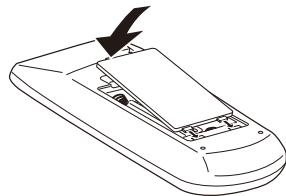
2 Install new batteries into the compartment.



Two AAA size batteries

For correct polarity (+ and -), be sure battery terminals are in contact with pins in compartment.

3 Replace the compartment lid.



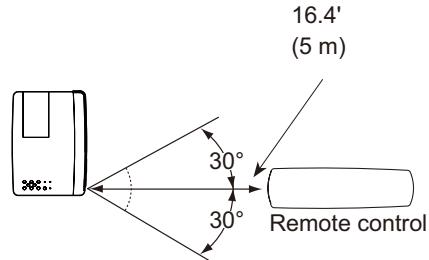
To ensure safe operation, please observe the following precautions :



- Use two (2) AAA or LR03 type alkaline batteries.
- Always replace batteries in sets.
- Do not use a new battery with a used battery.
- Avoid contact with water or liquid.
- Do not expose the remote control to moisture or heat.
- Do not drop the remote control.
- If the battery has leaked on the remote control, carefully wipe the case clean and install new batteries.
- Risk of an explosion if battery is replaced by an incorrect type.
- Dispose of used batteries according to the instructions or your local disposal rule or guidelines.

Remote Control Operating Range

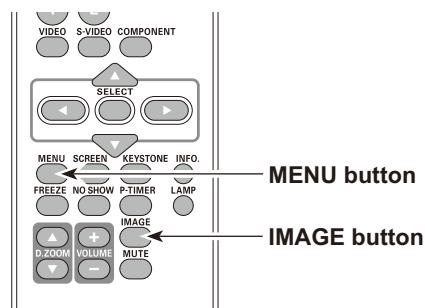
Point the remote control toward the projector (Infrared Remote Receiver) when pressing the buttons. Maximum operating range for the remote control is about 16.4'(5 m) and 60 degrees in front of the projector.



Remote Control Code

The 2 different remote control codes (Code 1–Code 2) are assigned to this projector. Switching the remote control codes prevents interference from other remote controls when several projectors or video equipment next to each other are operated at the same time. Change the remote control code for the projector first before changing that for the remote control. See "Remote control" in the Setting Menu on page 54.

Press and hold the MENU and IMAGE buttons for more than five seconds to switch between the **Code 1** and **Code 2**. The initial code is set to **Code 1**.



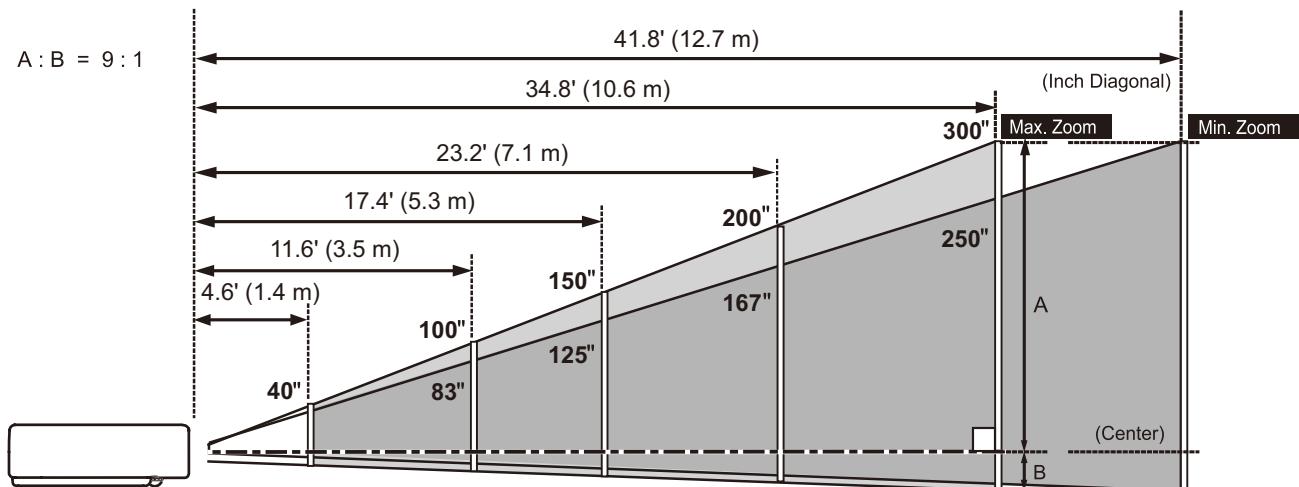
Installation

Positioning the Projector

For projector positioning, see the figures below. The projector should be set perpendicularly to the plane of the screen.

✓ Note:

- The brightness in the room has a great influence on picture quality. It is recommended to limit ambient lighting in order to obtain the best image.
 - All measurements are approximate and may vary from the actual sizes.



Screen Size (W x H) mm 4 : 3 aspect ratio	40"	100"	150"	200"	300"
	813 x 610	2032 x 1524	3048 x 2286	4064 x 3048	6096 x 4572
Zoom (max)	4.6' (1.4 m)	11.6' (3.5 m)	17.4' (5.3 m)	23.2' (7.1 m)	34.8' (10.6 m)
Zoom (min)	5.5' (1.7 m)	13.9' (4.2 m)	20.9' (6.4 m)	27.8' (8.5 m)	41.8' (12.7 m)

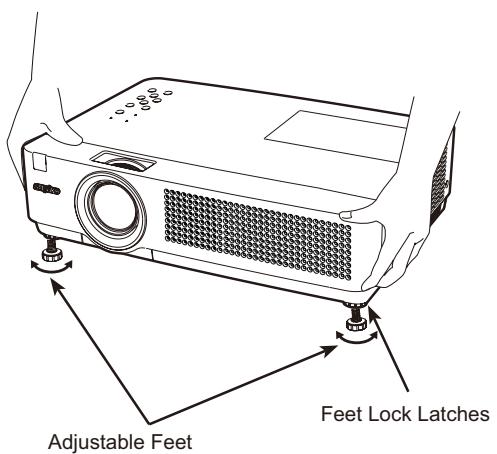
Adjustable Feet

Projection angle can be adjusted up to 12.0 degrees with the adjustable feet.

Lift the front of the projector and press the feet lock latches on both side of the projector.

Release the feet lock latches to lock the adjustable feet and rotate the adjustable feet to a proper height and tilt.

Keystone distortion can be adjusted automatically with the Auto setup function or manually by using the remote control or the menu operation (see pages 23, 37, 45).



Installation

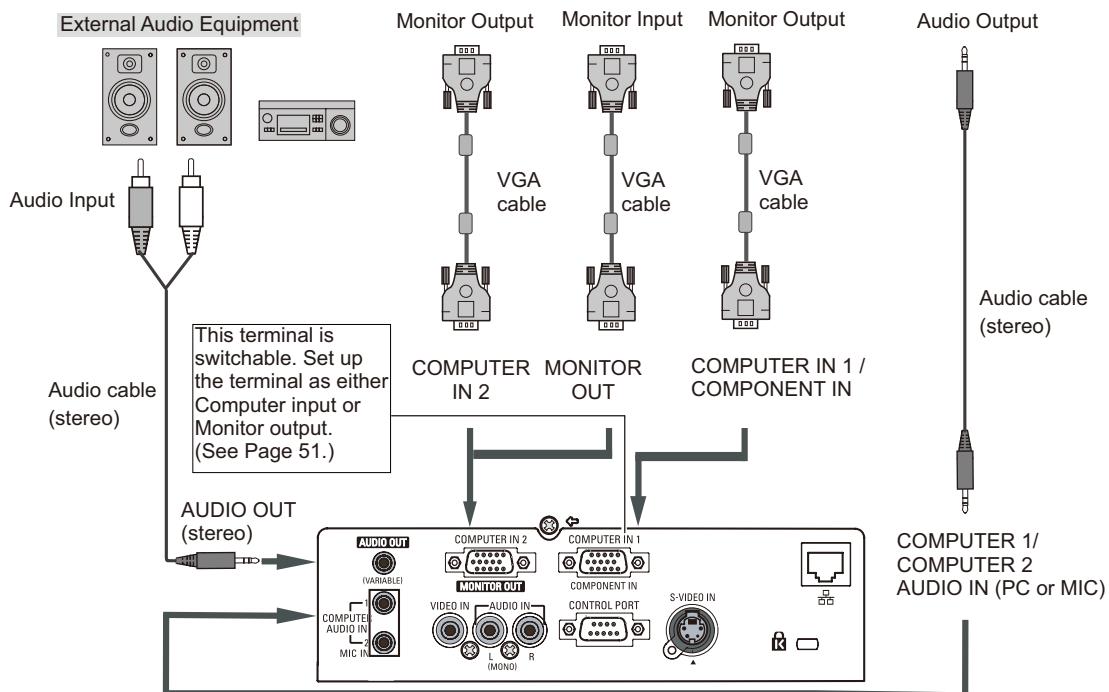
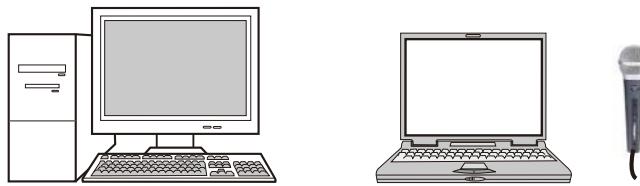
Connecting to a Computer

Cables used for connection

- VGA Cables (Mini D-sub 15 pin) *

- Audio Cables

(*One cable is supplied; other cables are not supplied with the projector.)



✓ Note:

- When the MIC function is set to **Off** in the Sound menu, the MIC function is disabled. (p 24)
- When **MIC** is set to **On** in Sound Menu, COMPUTER AUDIO IN 1, COMPUTER AUDIO IN 2 / MIC IN and AUDIO IN(L/R) terminals can be connected at the same time. At this time, COMPUTER AUDIO IN 2 terminal as MIC input. (p 24)
- Input sound to the COMPUTER AUDIO IN 1, COMPUTER AUDIO IN 2 / MIC IN terminals when using the COMPUTER IN 2 / MONITOR OUT and the COMPUTER IN 1/ COMPONENT IN terminal as input.
- When the AUDIO OUT is plugged-in, the projector's built-in speaker is not available.
- When the cable is of the longer variety, it is advisable to use the COMPUTER IN 1 / COMPONENT IN and not the COMPUTER IN 2/ MONITOR OUT.



Unplug the power cords of both the projector and external equipment from the AC outlet before connecting cables.

Connecting to Video Equipment

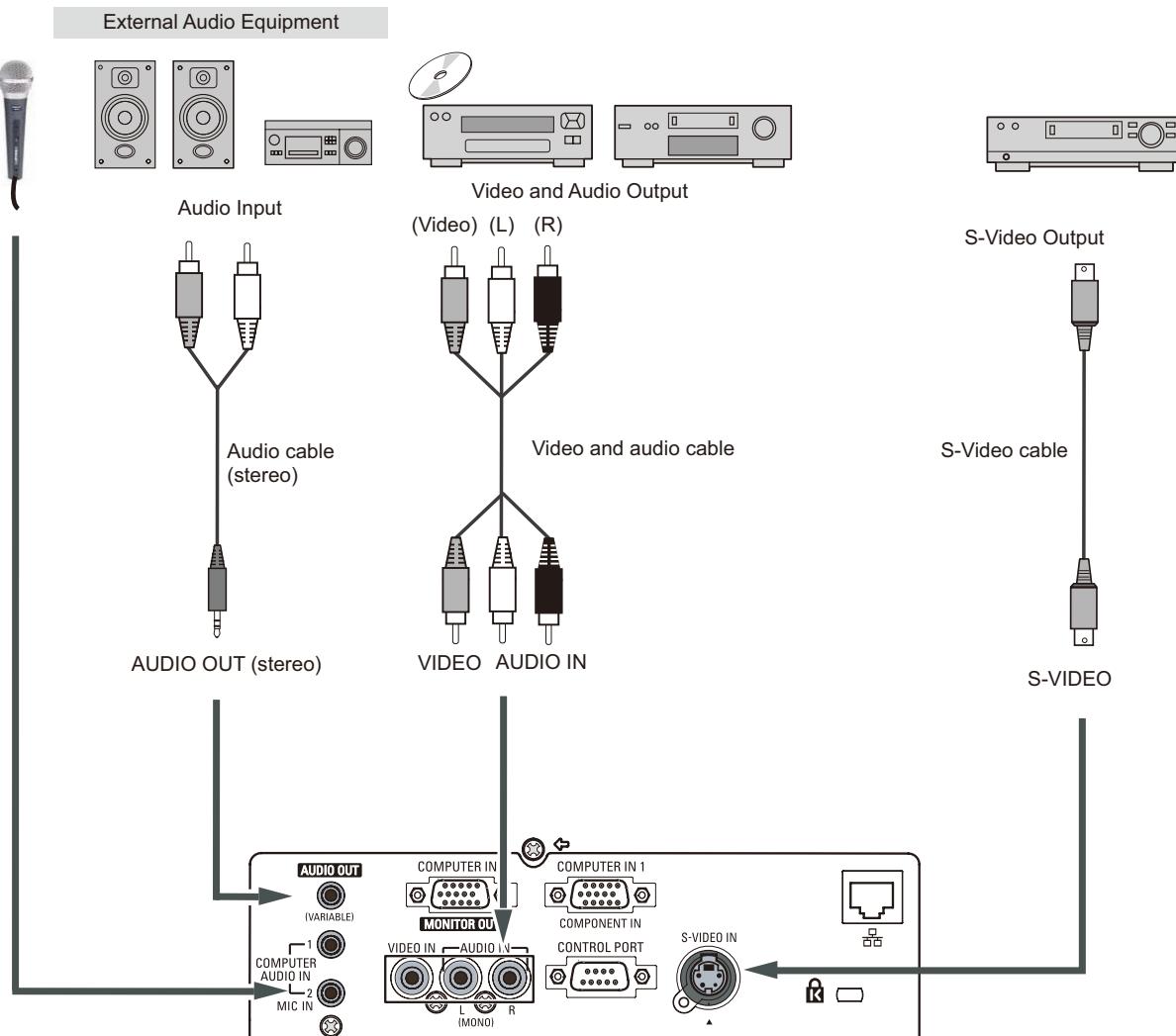
Cables used for connection

- Video and Audio Cable (RCA x 3)

- S-VIDEO Cable

- Audio Cable

(Cables are not supplied with the projector.)



✓ **Note:**

When the **AUDIO OUT** is plugged-in, the projector's built-in speaker is not available.

! Unplug the power cords of both the projector and external equipment from the AC outlet before connecting cables.

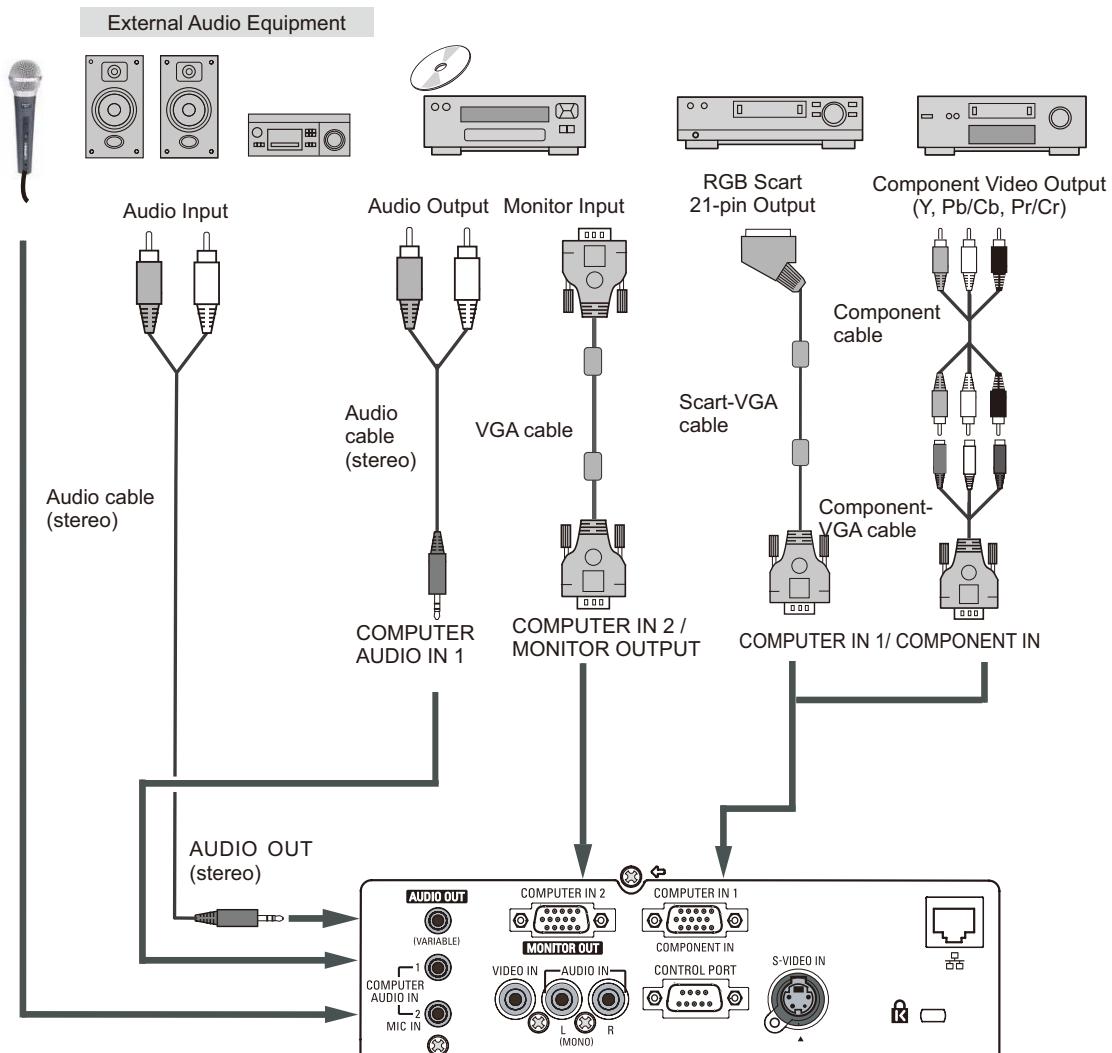
Installation

Connecting to Component Video Equipment

Cables used for connection

- Audio Cables
- Scart-VGA Cable
- VGA Cable
- Component Cable
- Component-VGA Cable

(Cables are not supplied with this projector.)



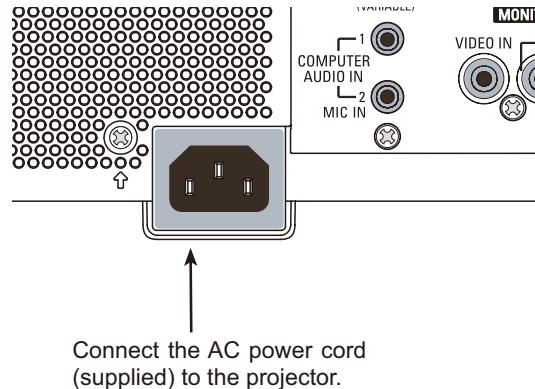
✓ Note:

- When the AUDIO OUT is plugged-in, the projector's built-in speaker is not available.
- See page 73 for ordering optional cables.

Unplug the power cords of both the projector and external equipment from the AC outlet before connecting cables.

Connecting the AC Power Cord

This projector uses nominal input voltages of 100-240 V AC and it automatically selects the correct input voltage. It is designed to work with single-phase power systems having a grounded neutral conductor. To reduce the risk of electrical shock, do not plug into any other type of power system. If you are not sure of the type of power being supplied, consult your authorized dealer or service center. Connect the projector with all peripheral equipment before turning the projector on.



CAUTION

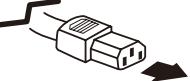
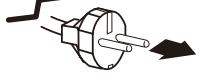
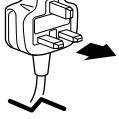
The AC outlet must be near this equipment and must be easily accessible.

✓ Note:

Unplug the AC power cord when the projector is not in use. When this projector is connected to an outlet with the AC power cord, it is in Stand-by mode and consumes a little electric power.

NOTE ON THE POWER CORD

AC power cord must meet requirement of the country where you use the projector. Confirm the AC plug type with the chart below and proper AC power cord must be used. If supplied AC power cord does not match your AC outlet, contact your sales dealer.

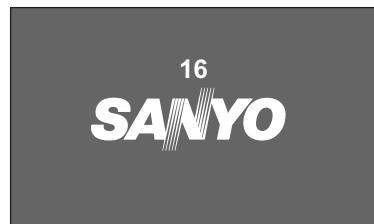
Projector side	AC outlet side		
 To power cord connector on your projector.	For the U.S.A. and Canada  To the AC outlet. (120 V AC)	For Continental Europe  To the AC outlet. (200 - 240 V AC)	For the U.K.  To the AC outlet. (200 - 240 V AC)

Basic Operation

Turning On the Projector

- 1 Complete peripheral connections (with a computer, VCR, etc.) before turning on the projector.
- 2 Connect the projector's AC power cord into an AC outlet. The POWER indicator lights red. Open the lens cap (see pages 8, 62).
- 3 Press the ON/STAND-BY button on the top control or on the remote control. The POWER indicator lights green and the cooling fans start to operate. The preparation display appears on the screen and the countdown starts.
- 4 After the countdown, the input source that was selected the last time and the lamp control status icon (see page 54) appear on the screen.
- 5 If there is no signal input when start on the projector, or the current signal is missed while operating the projector, the Video/PC selection window will be displayed on the screen, please move the pointer to input source desired by pressing the Point **▲▼** buttons and press the SELECT button. And then follow the input signal guidance window to correct the signal and connection.

If the projector is locked with a PIN code, PIN code input dialog box will appear. Enter the PIN code as instructed on the next page.



The preparation display will disappear after 30 seconds.

Selected Input Source and Lamp Control



(See page 54 for Lamp control status.)

✓ **Note:**

The Filter warning and Lamp replacement icons may appear on the screen depending on the usage state of the projector.

PC Selection



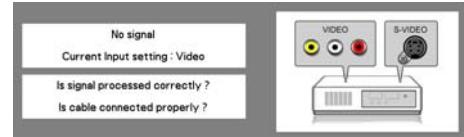
Guidance for PC Input



Video Selection



Guidance for Video Input



Enter a PIN code

Use the Point **▲▼** buttons to enter a number. Press the Point **►** button to fix the number and move the red frame pointer to the next box. The number changes to “*”. If you fixed an incorrect number, use the Point **◀** button to move the pointer to the number you want to correct, and then enter the correct number.

Repeat this step to complete entering a four-digit number.

After entering the four-digit number, move the pointer to **Set**. Press the **SELECT** button so that you can start to operate the projector.

If you entered an incorrect PIN code, **PIN code** and the number (****) will turn red for a moment. Enter the correct PIN code all over again.

What is PIN code?

PIN (Personal Identification Number) code is a security code that allows the person who knows it to operate the projector. Setting a PIN code prevents unauthorized use of the projector.

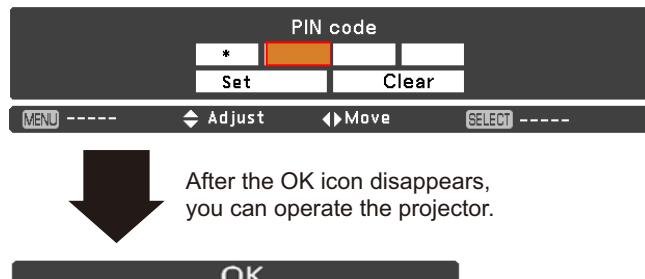
A PIN code consists of a four-digit number. Refer to the PIN code lock function in the Setting Menu on pages 55-56 for locking operation of the projector with your PIN code.



CAUTION ON HANDLING PIN CODE

If you forget your PIN code, the projector can no longer be started. Take a special care in setting a new PIN code; write down the number in a column on page 76 of this manual and keep it on hand. Should the PIN code be missing or forgotten, consult your dealer or service center.

PIN Code Input Dialog Box



After the OK icon disappears, you can operate the projector.

OK

✓ Note:

- If the PIN code number is not entered within three minutes after the PIN code dialog box appears, the projector will be turned off automatically.
- The “1234” is set as the initial PIN code at the factory.

Basic Operation

Turning Off the Projector

- 1 Press the ON/STAND-BY button on the top control or on the remote control, and **Power off?** appears on the screen.
- 2 Press the ON/STAND-BY button again to turn off the projector. The POWER indicator starts to blink red, and the cooling fans keep running. (You can select the level of fans' quietness and speed. See "Fan" on page 56.) At this time, you can unplug the AC power cord even if the fans are still running.
- 3 When the projector has cooled down enough, the POWER indicator stops blinking and you can turn on the projector.

Power off ?

Power off? disappears after 4 seconds.



TO MAINTAIN THE LIFE OF THE LAMP, ONCE YOU TURN THE PROJECTOR ON, WAIT AT LEAST FIVE MINUTES BEFORE TURNING IT OFF.



DO NOT OPERATE THE PROJECTOR CONTINUOUSLY WITHOUT REST. CONTINUOUS USE MAY RESULT IN SHORTENING THE LAMP LIFE. TURN OFF THE PROJECTOR AND LET IT STAND FOR ABOUT AN HOUR IN EVERY 24 HOURS.

✓ **Note:**

- When the Direct on function is set to **On**, the projector will be turned on automatically by connecting the AC power cord to an AC outlet (p.51).
- The running speed of cooling fans is changed according to the temperature inside the projector.
- Do not put the projector in a case before the projector is cooled enough.
- If the WARNING indicator blinks or lights red, see "WARNING indicator" on page 60.
- While the POWER indicator is blinking, the lamp is being cooled down and the projector cannot be turned on. Wait until the POWER indicator stops blinking to turn on the projector again.
- For assisting the cooling fans' operation, the projector is equipped with a large capacitor. While the projector is operating, the capacitor charges electricity. When disconnecting the AC plug from AC outlet, cooling fans start to run 1 minute until the capacitor is discharged.
- The projector can be turned on after the POWER indicator turns red. The waiting time to restart will be shortened when the normal power-off processing for fan cooling is completed, compared with the time the AC power cord is immediately unplugged after the power-off.

Direct OFF Function

You can disconnect the power cord from the wall outlet or turn off the breaker even during projection without pressing the ON/STAND-BY button.

✓ **Note:**

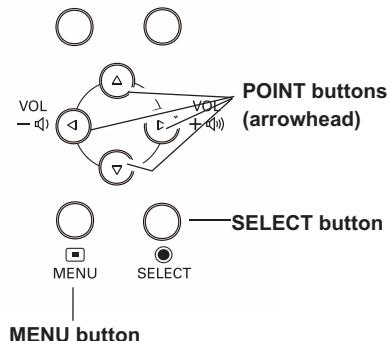
When using the Direct OFF function, you can not restart the projector immediately after the power is disconnected. If the external power supply is suddenly cut off, the fans stop immediately. The lamp remains high temperature and needs to be cooled.

How to Operate the On-Screen Menu

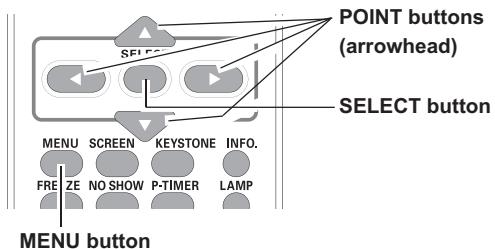
The projector can be adjusted or set via the On-Screen Menu. The menus have a hierarchical structure, with a main menu that is divided into submenus, which are further divided into other submenus. For each adjustment and setting procedure, refer to respective sections in this manual.

- 1 Press the MENU button on the top control or the remote control to display the On-Screen Menu.
- 2 Use the Point **▲▼** buttons to highlight or select a main menu item. Press the Point **▶** or the SELECT button to access the submenu items. (The selected item is highlighted in orange.)
- 3 Use the Point **▲▼** buttons to select the desired submenu item and press the SELECT button to set or access the selected item.
- 4 Use the Point **▲▼◀▶** buttons to adjust the setting or switch between each option and press the SELECT button to activate it and return to the submenu.
- 5 Press the Point **◀** button to return to the main menu. Press the MENU button to exit the On-Screen Menu.

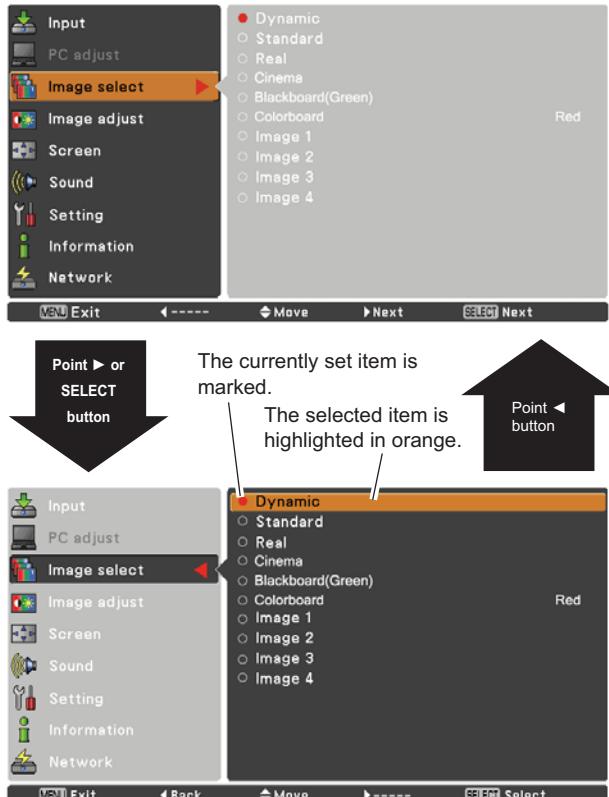
Top Control



Remote Control



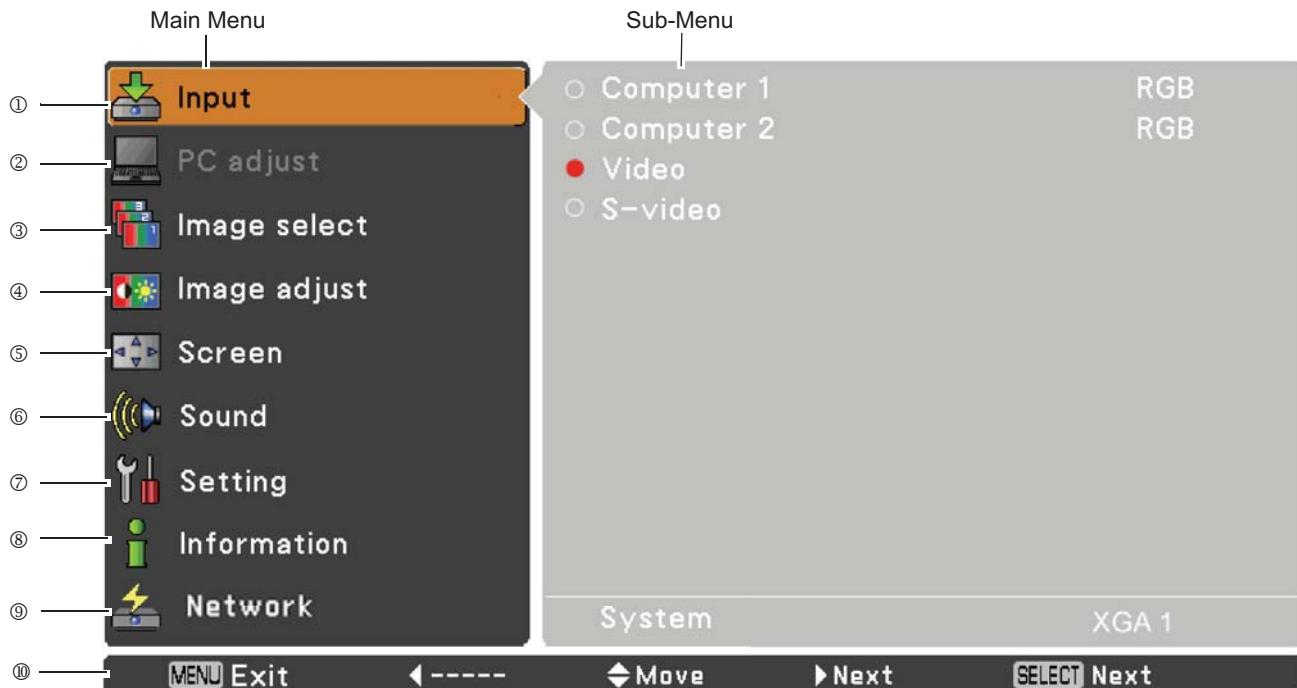
On-Screen Menu



Basic Operation

Menu Bar

For detailed functions of each menu, see “Menu Tree” on pages 68-69.



① Input

Used to select an input source from **Computer 1**, **Computer 2**, **Video** or **S-video**. (pp.27-28,38-39).

② PC adjust

Select **Auto PC adj.**, **Fine sync**, **Total dots**, **Horizontal**, **Vertical**, **Current mode**, **Clamp**, **Display area H**, **Display area V**, **Reset**, **Mode free** and **Store** to adjust the parameters to match with the PC input signal format (pp.30-32).

③ Image select

For both of computer and Video sources, used to select an image mode from among **Dynamic**, **Standard**, **Real**, **Cinema**, **Blackboard(Green)**, **Colorboard** and **Image 1 - 4** (pp.33, 41).

④ Image adjust

For computer source, used to adjust computer image [**Contrast**, **Brightness**, **Color temp.**, **White balance (R/G/B)**, **Sharpness** and **Gamma**] (pp.34-35).

For Video source, used to adjust picture image [**Contrast**, **Brightness**, **Color**, **Tint**, **Color temp.**, **White balance (R/G/B)**, **Sharpness**, **Gamma**, **Noise reduction** and **Progressive**] (pp.42-43).

⑤ Screen

For computer source, used to adjust size of the image [**Normal**, **Full**, **Wide (16:9)**, **Zoom**, **True**, **Custom**, **Custom adj.**, **Digital zoom +**, **Digital zoom -**, **Keystone**, **Ceiling**, **Rear** and **Reset**] (pp.35-37).

For Video source, used to set size of image [**Normal**, **Full**, **Wide (16:9)**, **Zoom**, **Custom**, **Custom adj.**, **Keystone**, **Ceiling**, **Rear** and **Reset**] (pp.44-45).

⑥ Sound

Used to adjust the volume or mute the sound or set configurations to the MIC functions (p.24).

⑦ Setting

Used to set the projector's operating configurations (pp.46-58).

⑧ Information

Display the input source information: **Input**, **H-sync freq.**, **V-sync freq.**, **Screen**, **Language**, **Lamp status**, **Lamp counter**, **Power management**, **Security**, **Remote control**, **SERIAL NO.** and **Total power savings** (p.59).

⑨ Network

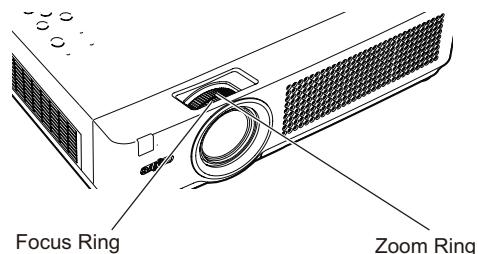
See owner's manual of “Network Set-up and Operation”.

⑩ Guide

The key operation is displayed.

Zoom and Focus Adjustment

Rotate the Zoom Ring to zoom in and out.
Rotate the Focus Ring to adjust the focus of the image.



Auto Setup Function

Auto setup function is provided to automatically execute the setting of Auto setup (includes Input search, Auto PC adj. and Auto Keystone functions) in the setting menu by just pressing the AUTO SETUP button on the top control or the AUTO SET button on the remote control. Refer to page 47 for the setting of the Auto setup function.

✓Notes:

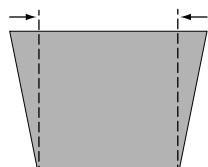
- Auto Keystone corrects vertical distortion only; it does not correct horizontal distortion.
- Auto Keystone cannot work when Ceiling feature is set to **On** in the Screen Size Adjustment menu (pp.37, 45).
- Perfect correction of the image distortion cannot be ensured with the Auto setup function. If the distortion cannot be corrected properly by pressing the AUTO SETUP or AUTO SET button, adjust manually by pressing the KEYSTONE button on the remote control or selecting Keystone in the Screen Size Adjustment menu (pp.37, 45).
- **Fine sync, Total dots, Horizontal and Vertical** position of some computers cannot be fully adjusted with the Auto PC Adjustment function. When the image is not provided properly with this operation, manual adjustments are required (pp.31-32).

Keystone Correction

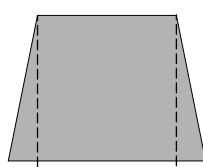
If a projected picture still has keystone distortion after pressing the AUTO SETUP button on the top control or the AUTO SET button on the remote control, correct the image manually as follows:

Press the KEYSTONE button on the remote control. The Keystone dialog box appears. Use the Point **▲ ▼** buttons to correct keystone distortion. The keystone adjustment can be stored (see pages 37, 45).

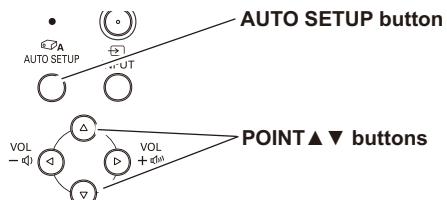
Reduce the upper width
with the Point **▲** button.



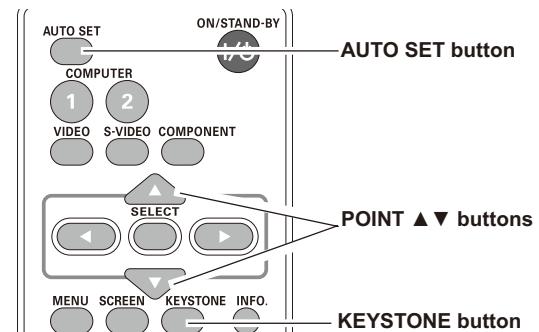
Reduce the lower width
with the Point **▼** button.



Top Control



Remote Control



Keystone

- The white arrows indicate that there is no correction.
- A red arrow indicates the direction of correction.
- An arrow disappears at the maximum correction.
- If you press the KEYSTONE button on the remote control once more while the keystone dialog box is being displayed, the keystone adjustment will be canceled.
- The adjustable range is limited depending on the input signal.

Basic Operation

Sound Adjustment

Direct Operation

Volume

Press the VOLUME+/- buttons on the top control or on the remote control to adjust the volume. The volume dialog box appears on the screen for a few seconds.

Mute

Press the MUTE button on the remote control to select **On** to temporarily turn off the sound. To turn the sound back on, press the MUTE button again to select **Off** or press the VOLUME +/- buttons. The Mute function is also effective for the AUDIO OUT jack.

Menu Operation

- 1 Press the MENU button to display the On-Screen Menu. Use the Point **▲▼** buttons to select **Sound**. Press the Point **▶** button or the SELECT button to access the submenu items.
- 2 Use the Point **▲▼** buttons to select the desired submenu item and press the SELECT button to access the selected item.

Volume

Press the Point **▶** button to turn up the volume; press the Point **◀** button to turn down the volume.

Mute

Press the SELECT button to switch the mute function **On/Off**. When the sound is turned off, **On** is displayed. Press the VOLUME +/- buttons again to turn the sound back on.

MIC

Use the Point **▲▼** buttons to switch the MIC function **On/Off**, and then press the SELECT button. When **On** is selected, the synthesis volume (MIC and RCA) is output.

MIC gain

Press the Point **▶** button to turn up the MIC mixing gain; Press the Point **◀** button to turn down the MIC mixing gain.

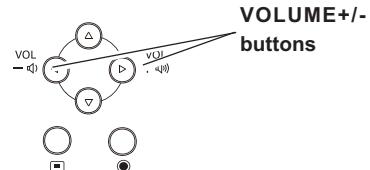
Standby MIC out

When switch the Standby MIC out function **On** and in **Standby mode out** status, only MIC volume can be output.

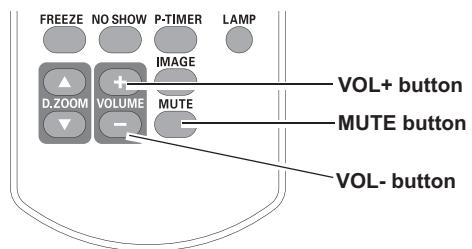
✓ Note:

- When **Off** is selected in MIC function, the **MIC gain** and **Standby MIC out** functions are not available.
- Only the **Standby mode** is set to **Network**, **Standby MIC out** can be selected.
- If the MIC function is turned on when connecting PC audio to the COMPUTER AUDIO IN 2 (MIC IN), loud sound may be output suddenly depending on the setting value of MIC gain.

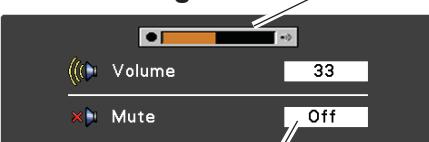
Top Control



Remote Control

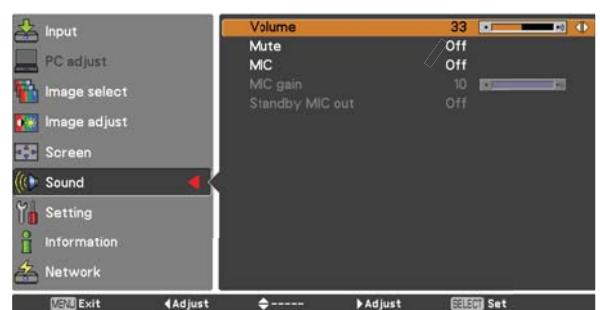


Volume Dialog Box



Press the MUTE button to set the Mute function **On** or **Off**. The dialog box disappears after 4 seconds.

Sound Menu



AUDIO INPUT SELECTION (see pages 14-16)

	AUDIO IN		
MIC Setup	RCA L/R terminal	COMPUTER AUDIO IN 1	COMPUTER AUDIO IN 2 (MIC IN)
MIC Off	Video audio	PC 1 audio	PC 2 audio
MIC On for Video	Video audio	---	MIC
MIC On for PC 1	---	PC 1 audio	MIC
MIC On for PC 2	---	PC 2 audio	MIC

Remote Control Operation

Using the remote control for some frequently used operations is advisable. Just pressing one of the buttons enables you to make the desired operation quickly without calling up the On-Screen Menu.

COMPUTER 1/2, VIDEO, S-VIDEO and COMPONENT buttons

Press the COMPUTER 1/2, VIDEO, S-VIDEO and COMPONENT buttons on the remote control to select the input source. See pages 27-28, 38-39 for details.

FREEZE button

Press the FREEZE button on the remote control to freeze the picture on the screen, meanwhile, volume is muted. To cancel the Freeze function, press the FREEZE button again or press any other button.

Fig.1 will appear on the Screen menu while the Freeze function is working.

Fig.1



INFO. button

Display the input source information: **Input**, **H-sync freq.**, **V-sync freq.**, **Screen**, **Language**, **Lamp status**, **Lamp counter**, **Power management**, **Keylock**, **PIN code lock**, **Remote control**, **SERIAL NO.** and **Total power savings** (p.59).

D.ZOOM buttons

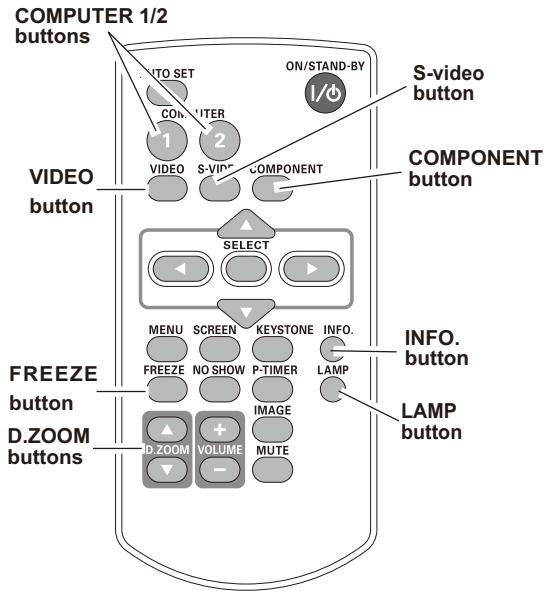
Press the D.ZOOM buttons on the remote control to enter to the Digital zoom +/- mode. See page 36 for details.

LAMP button

Press the LAMP button on the remote control to select the lamp mode for changing the brightness on the screen.

- Ⓐ **Auto** Brightness according to the input signal.
- Ⓑ **Normal** Normal brightness
- Ⓒ **Eco 1** 70%-80% of the normal brightness.
- Ⓓ **Eco 2** 50% of the normal brightness.

Remote Control



✓ Note:

See the next page for the description of other buttons.