



CRP-221 CRP-261

Classroom Projector

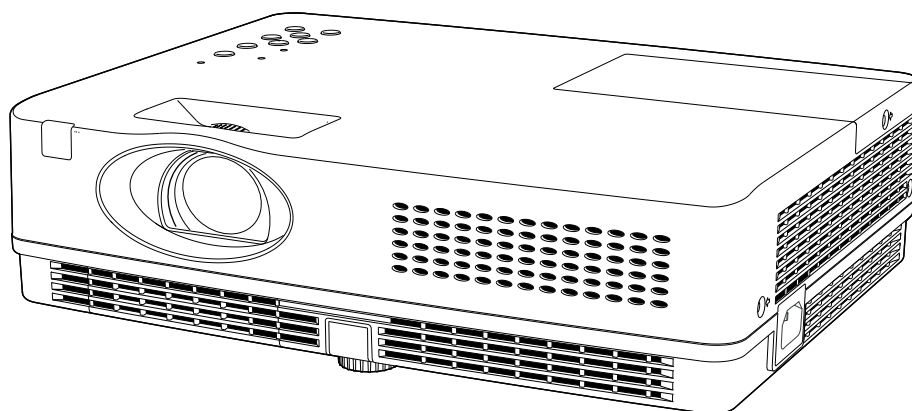
Owner's Manual

Please read this owner's manual carefully before using this product and keep it for future reference.

Network Supported

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

- ☐ Network Set-up and Operation
- ☐ PJ Network Manager



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.28). 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.35).

- Blackboards* can be used as a projection screen.

*The board color is limited to Green (pp.32, 39).

◆ Lamp Control

Brightness of the projection lamp can be selected (pp.25, 53).

◆ 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.46-48). 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 20 languages; English, German, French, Italian, Spanish, Portuguese, Dutch, Swedish, Finnish, Polish, Hungarian, Romanian, Russian, Turkish, Kazakh, Vietnamese, Chinese, Korean, Japanese and Thai.(p.43)

◆ 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.54). PIN code lock function prevents unauthorized use of the projector (pp.19, 54-55).

◆ 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 of "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.44).

◆ 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.

◆ Switchable Interface Terminal

The projector provides a switchable interface terminal. You can use the terminal as computer input or monitor output conveniently. (p.49)

◆ Power Management

The Power management function reduces power consumption and maintains the lamp life (p.50).

◆ Closed Caption

This is a printed version of the program sound or other information displayed on the screen. You can turn on the feature and switch the channels. (p.52)

✓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.

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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 on pages 64-66 of this manual. If the problem still persists, contact the dealer where you purchased the projector or the service center.

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE EXCEPT LAMP REPLACEMENT. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		
	THIS SYMBOL INDICATES THAT DANGEROUS VOLTAGE CONSTITUTING A RISK OF ELECTRIC SHOCK IS PRESENT WITHIN THIS UNIT.	
	THIS SYMBOL INDICATES THAT THERE ARE IMPORTANT OPERATING AND MAINTENANCE INSTRUCTIONS IN THE OWNER'S MANUAL WITH THIS UNIT.	

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!

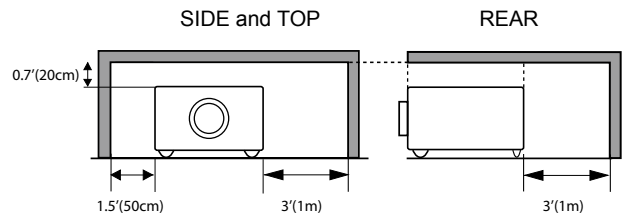


Safety Precaution

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 reduce 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 given 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.

Air Circulation

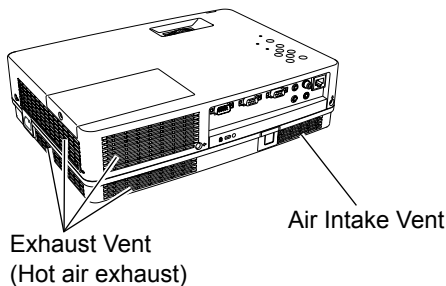
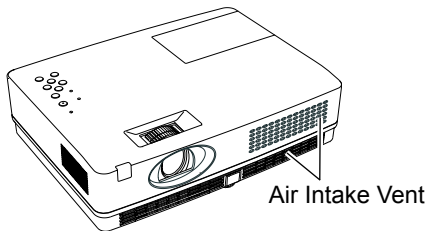
Openings in the cabinet are provided for ventilation. To ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered.

CAUTION

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

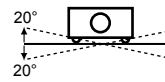
- Do not put any flammable object or spray can near the projector, hot air is exhausted from the air vents.
- Keep the exhaust vent at least 3' (1 m) away from any objects.
- Do not touch a peripheral part of the exhaust vent, especially screws and metallic parts. These areas will become hot while the 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.

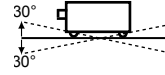


Installing the Projector in Proper Position

Install the projector properly. Improper installation may reduce the lamp life and cause a fire hazard.



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



Do not tilt the projector more than 30 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 foot to prevent damage to the lens and cabinet.

When the projector is not in use for an extended period, put it into a suitable case.



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 : CRP-221, CRP-261
Trade Name : ELMO
Responsible party : ELMO USA CORP.
Address : 1478 Old Country Road Plainview, NY 11803-5034
Telephone No. : (516)501-1400

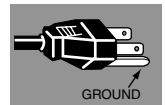
AC Power Cord Requirement

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 . 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  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.

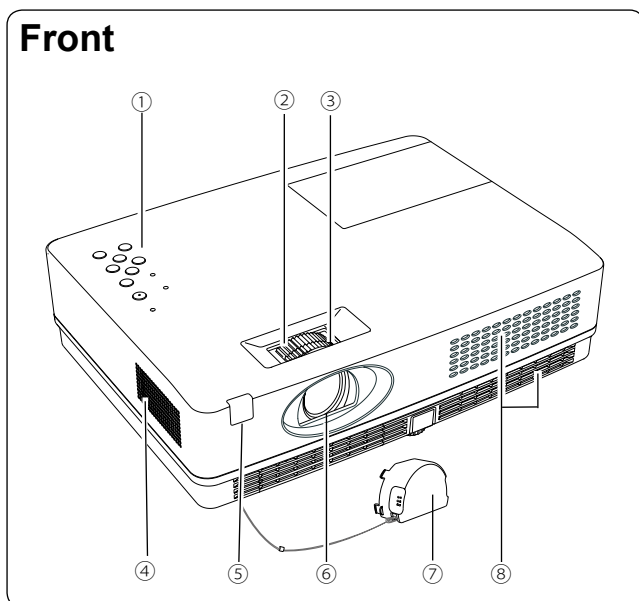
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

WARNING: THIS APPARATUS MUST BE EARTHED.

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

Part Names and Functions

Front



- ① Top controls and Indicators
- ② Zoom Ring
- ③ Focus Ring
- ④ Speaker
- ⑤ Infrared Remote Receiver
- ⑥ Projection Lens
- ⑦ Lens Cap
- (See page 61 for attaching.)

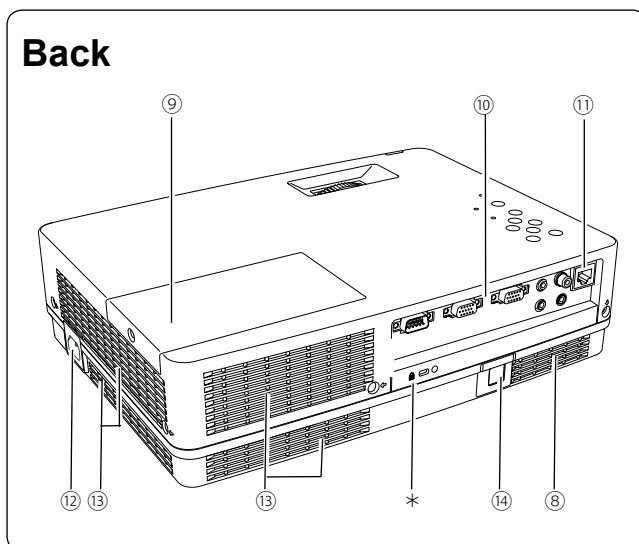


CAUTION

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

- ⑧ Air Intake Vent

Back



- ⑨ Lamp Cover
- ⑩ Terminals and Connectors
- ⑪ LAN Connection Terminal
- ⑫ Power Cord Connector
- ⑬ Exhaust Vents

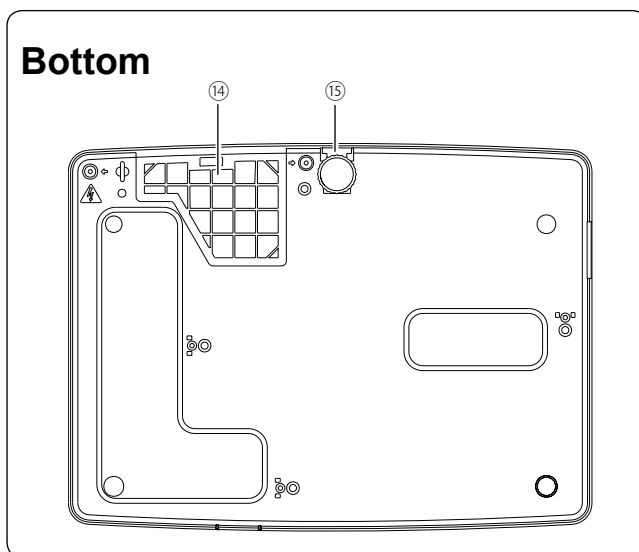


CAUTION

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

- ⑭ Filters
- ⑮ Adjustable Foot

Bottom



✓Note:

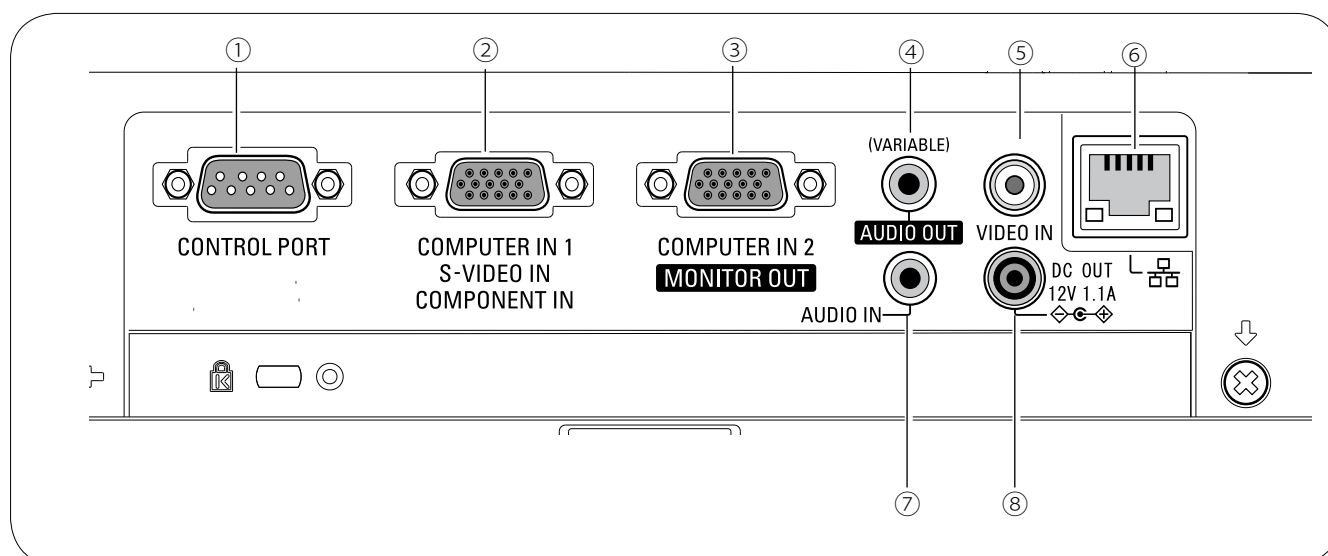
⑪ LAN Connection Terminal is for the Network function. Refer to the owner's manual of "Network Set-up and Operation".

* 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 CONTROL PORT

When the projector is controlled by a computer, connect to this jack with serial control cable.

② COMPUTER IN 1 / S-VIDEO IN / COMPONENT IN

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

③ COMPUTER IN 2 / MONITOR OUT

- Connect analog RGB output signal from a computer to this terminal (p.14).
- This terminal can be used to output the incoming analog RGB and Component signal from COMPUTER IN 1 / S-VIDEO IN / 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.

⑤ VIDEO IN

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

⑥ LAN Connection Terminal

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

⑦ AUDIO IN

Connect the audio output signal from computer or video equipment to this jack (pp.14-16).

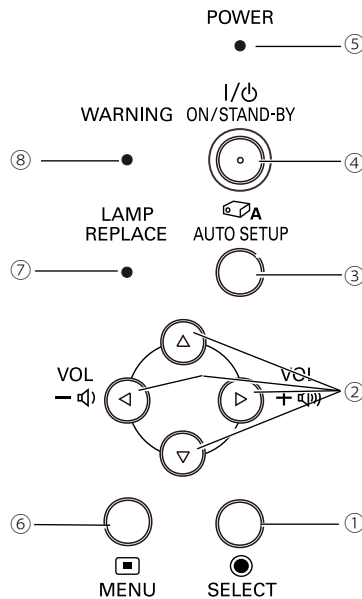
⑧ DC OUT 12V 1.1A

Connect the DC power cord (supplied) to this jack to supply DC 12V to a document camera.

Notes on using ELMO document cameras;

- The projector can supply 12V DC power to the document camera "L-1ex/TT-02RX" or "L-1n/TT-02s" with setting to Network mode of Standby mode menu. (p.51)
- Do not connect any other document cameras other than ELMO "L-1ex/TT-02RX" and "L-1n/TT-02s" with the supplied VGA/DC power combined cord. Otherwise damages may result.
- Use only the supplied VGA/DC power combined cord.
- When DC OUT 12V jack is plugged in, the cooling fans are running even if the projector is in standby mode.

Top Control



① SELECT button

- Execute the selected item (p.21).
- Expand or compress the image in the Digital zoom mode (p.35).

② POINT ▲ ▼ ◀ ▶ (VOLUME +/-) buttons

- Select an item or adjust the value in the On-Screen Menu (p.21).
- Pan the image in the Digital zoom +/- mode (p.35).
- Adjust the volume level (Point ◀ ▶ buttons) (p.24).

③ 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, 44).

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.50).

⑥ MENU button

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

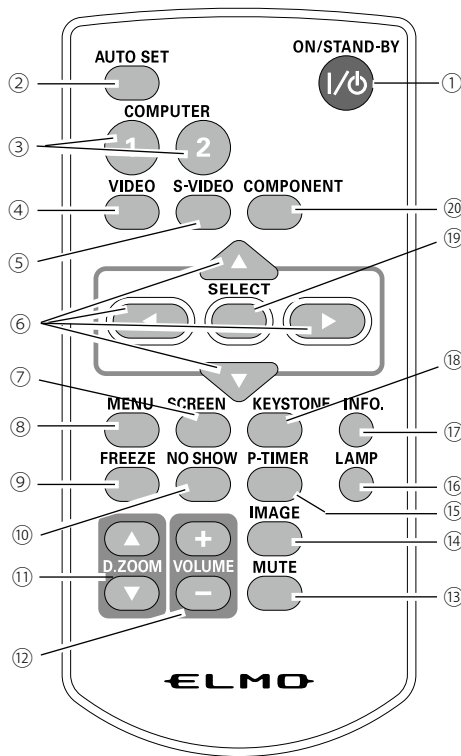
⑦ LAMP REPLACE indicator

Lights yellow when the projection lamp reaches its end of life (pp.62, 70).

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.59, 70).

Remote Control



- ① **ON/STAND-BY button**
Turn the projector on or off. (pp.18-20)
You can also turn the document camera on or off with this button.
- 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, 44)
- ③ **COMPUTER 1/2 buttons**
Select the COMPUTER 1 or COMPUTER 2 input source. (pp.27, 37)
- ④ **VIDEO button**
Select the VIDEO input source. (p.36)
- ⑤ **S-VIDEO button**
Select the S-VIDEO input source. (p.36)
- ⑥ **Point ▲ ▼ ◀ ▶ buttons**
– Select an item or adjust the value in the On-Screen Menu. (p.21)
– Pan the image in the Digital zoom +/- mode. (p.35)
- ⑦ **SCREEN button**
Select a screen mode. (pp.26, 34-35, 42)
- 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 ▲ ▼ buttons**
Zoom in and out the images. (pp.25, 35)
- 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, 32, 39)
- ⑮ **P-TIMER button**
Operate the P-timer function. (pp.26, 51)
- ⑯ **LAMP button**
Select a lamp mode. (pp.25, 53)
- ⑰ **INFO. button**
Operate the information function. (p.58)
- ⑱ **KEystone button**
Correct keystone distortion. (pp.23, 45)
- ⑲ **SELECT button**
– Execute the selected item. (p.21)
– Expand or compress the image in Digital zoom mode. (p.35)
- ⑳ **COMPONENT button**
Select the COMPONENT input source. (p.37)

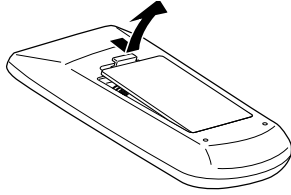
✓Note:

To ensure safe operation, please observe the following precautions:

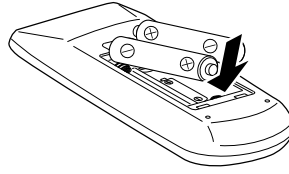
- Do not bend, drop or expose the remote control to moisture or heat.
- For cleaning, use a soft dry cloth. Do not apply benzene, thinner, spray, or any chemical material.

Remote Control Battery Installation

- 1** Open the battery compartment lid.



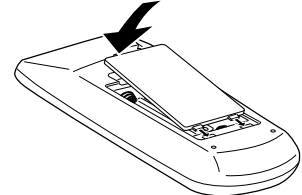
- 2** Install new batteries into the compartment.



Two AAA size batteries

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

- 3** Replace the compartment lid.

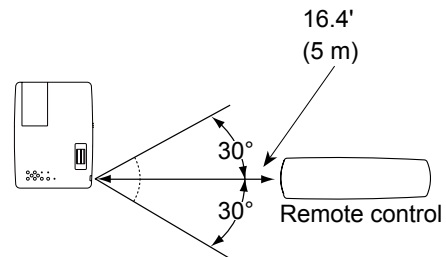


To ensure safe operation, please observe the following precautions :

- 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

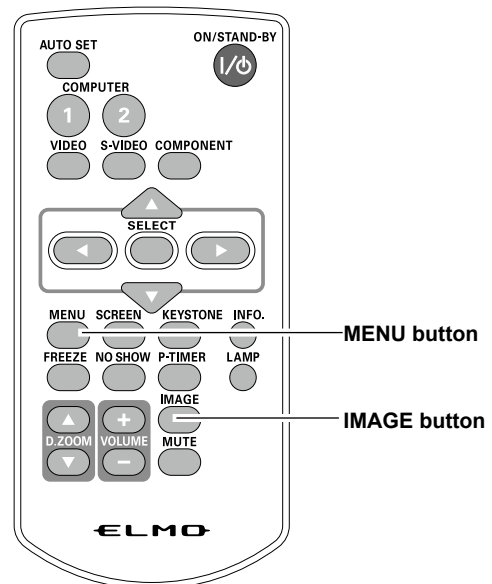
Point the remote control toward the projector (Infrared Remote Receiver) when pressing the buttons. Maximum operating range for the remote control is about 16.4'(5 m) and 60 degrees in front of the projector.



Remote Control Code

The two 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 53.

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**.



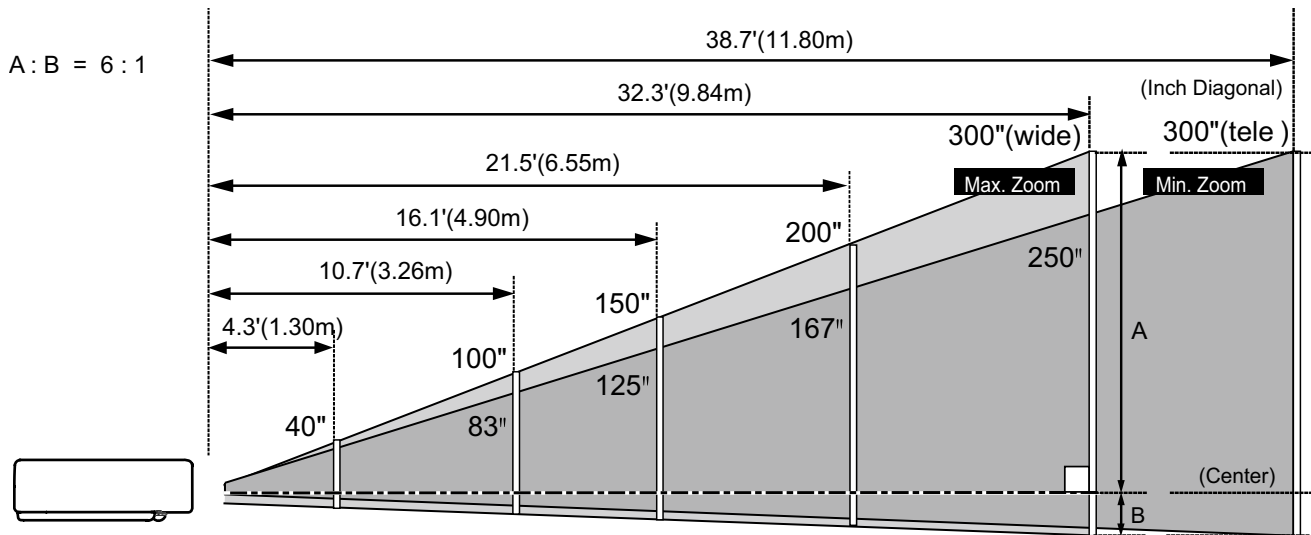
Installation

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"
Zoom (max)	4.3'(1.30m)	10.7'(3.26m)	16.1'(4.90m)	21.5'(6.55m)	32.3'(9.84m)
Zoom (min)	5.1'(1.55m)	12.9'(3.92m)	19.4'(5.90m)	25.8'(7.87m)	38.7'(11.80m)

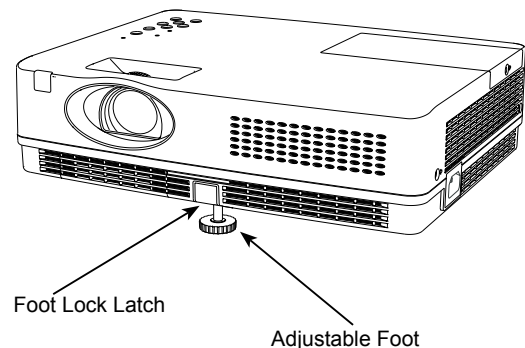
Adjustable Foot

Projection angle can be adjusted up to 10.0 degrees with the adjustable foot.

Lift the front of the projector and push the foot lock latch on the projector.

Release the foot lock latch to lock the adjustable foot and rotate the adjustable foot to adjust the position and tilt.

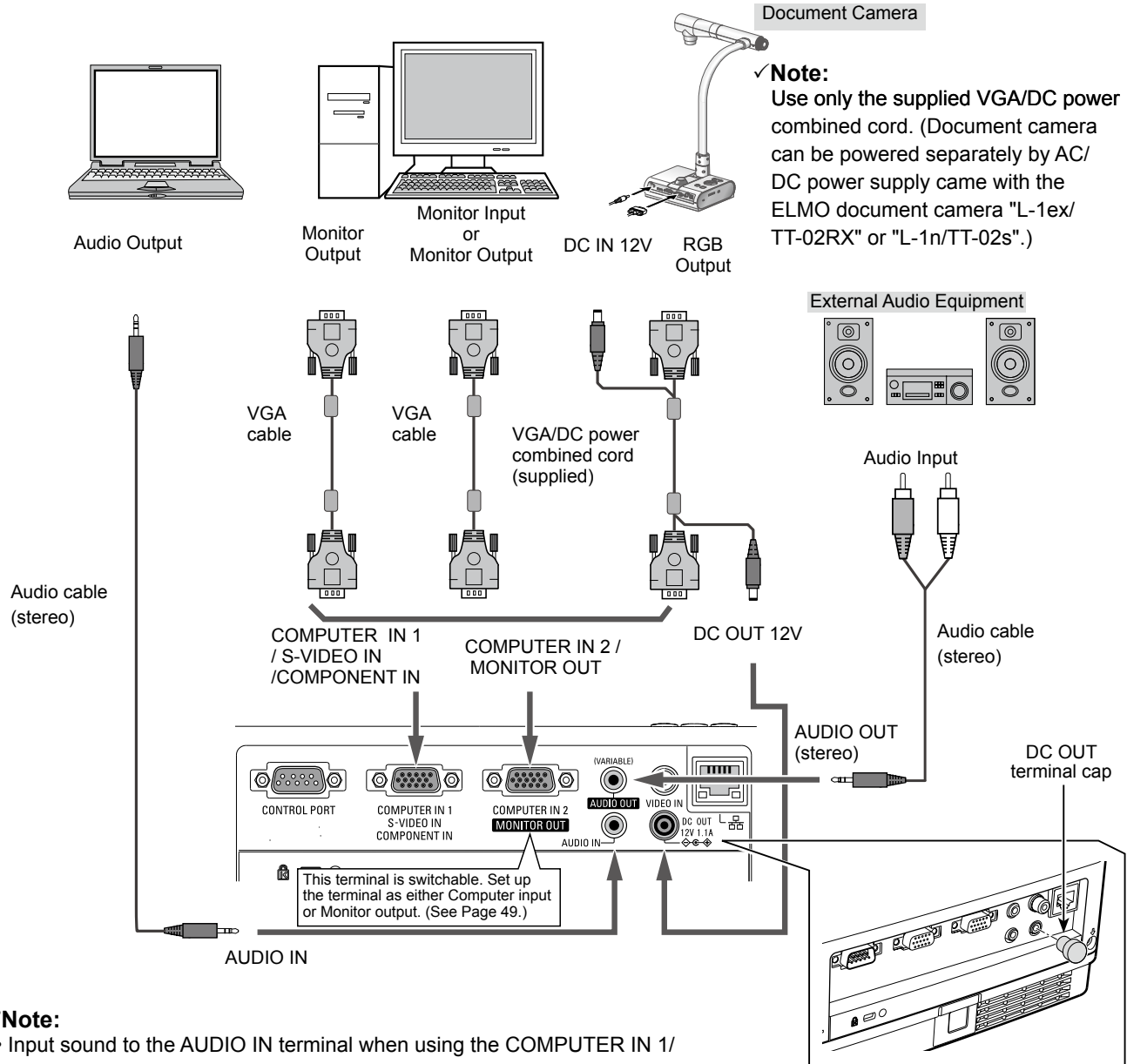
To retract the adjustable foot, lift the front of the projector and push and undo the foot lock latch. Keystone distortion of the projected image can be corrected by menu operation.(see pages 23, 44-45)



Connecting to a Computer

Cables used for connection

- VGA Cables (Mini D-sub 15 pin)
- VGA/DC power combined cord (supplied)
- Audio Cables



✓Note:

- Input sound to the AUDIO IN terminal when using the COMPUTER IN 1 / S-VIDEO IN / COMPONENT IN and the COMPUTER IN 2/MONITOR OUT terminals 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 / S-VIDEO IN / COMPONENT IN and not the COMPUTER IN 2/MONITOR OUT.

✓Note:

- The cap is installed before shipping.
- Keep the cap installed when the DC OUT terminal is not used to avoid audio cable connecting to DC OUT terminal.
- Take off the cap and connect the cable when using DC OUT terminal. Keep the cap carefully for later use.



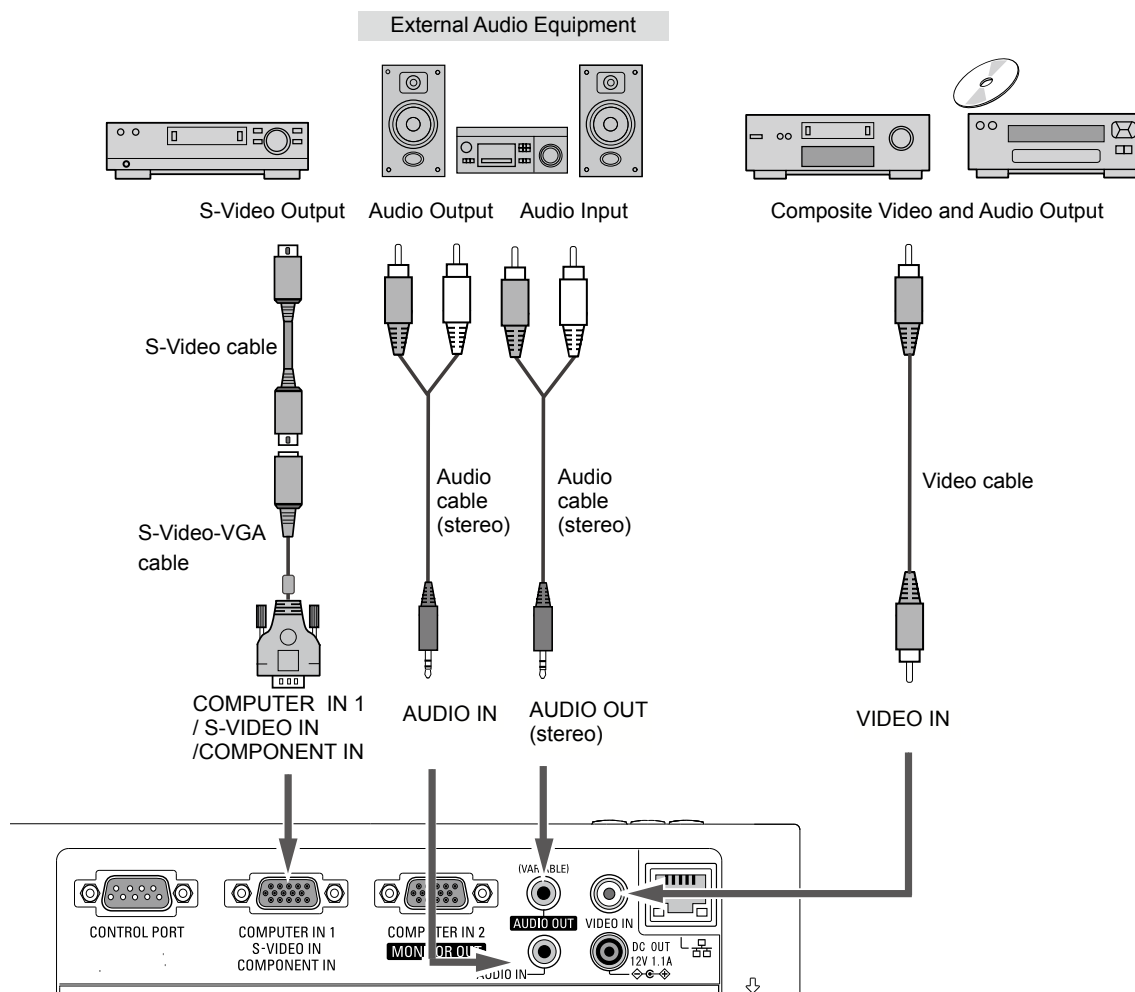
Unplug the power cords of both the projector and external equipment from the AC outlet before connecting cables.

Connecting to Video Equipment

Cables used for connection

- Video Cable
- S-Video Cable
- S-Video-VGA Cable
- Audio Cables (Mini Plug: stereo)

(Cables are not supplied with the 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.

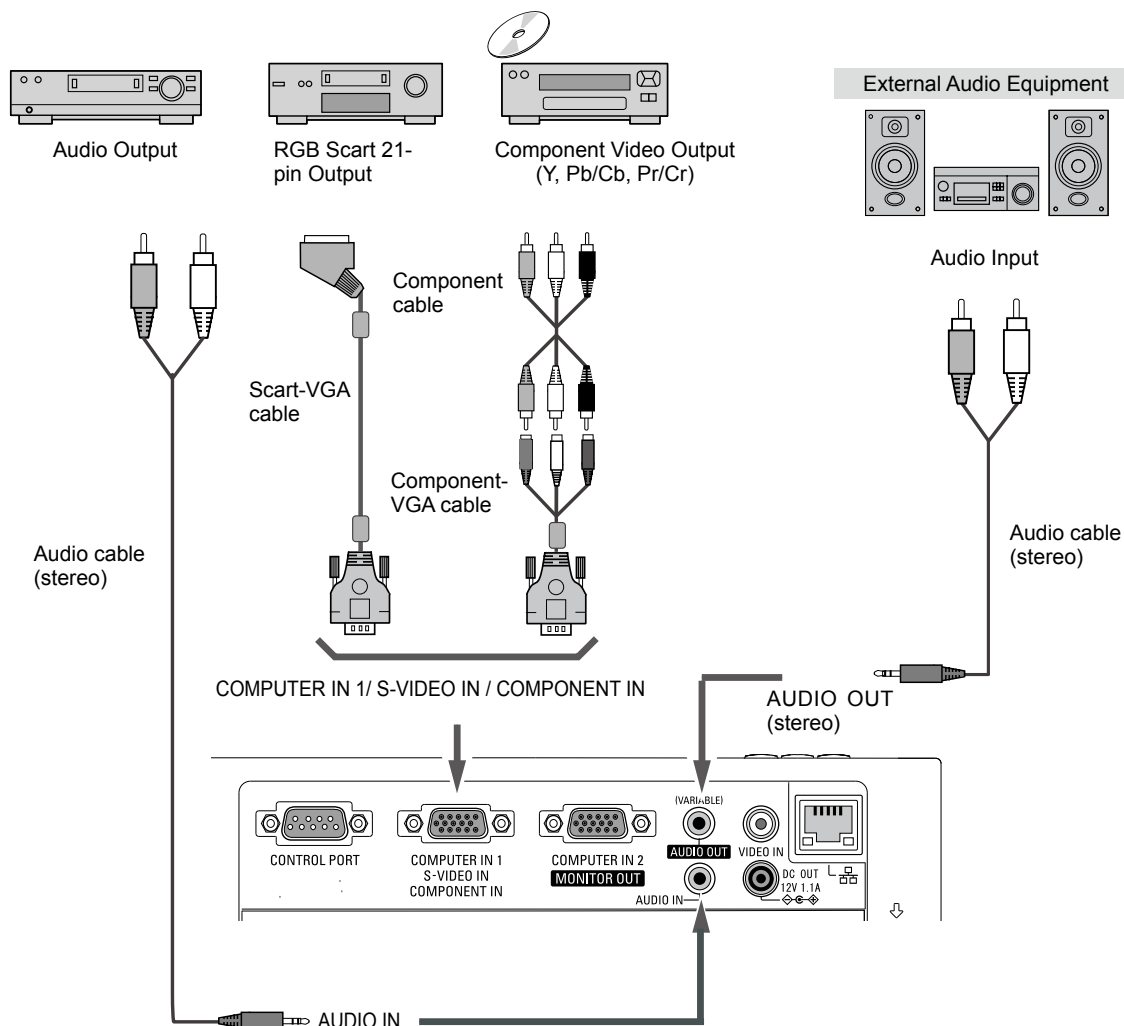


Unplug the power cords of both the projector and external equipment from the AC outlet before connecting cables.

Connecting to Component Video and RGB (Scart) Equipment

Cables used for connection

- Audio Cables (Mini Plug: stereo)
 - Scart-VGA Cable
 - Component Cable
 - Component-VGA Cable
- (Cables are not supplied with this projector.)



✓Note:

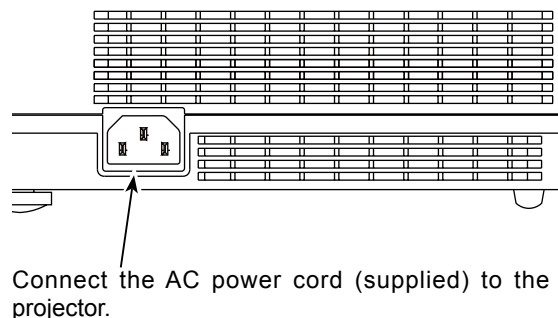
- When the AUDIO OUT is plugged-in, the projector's built-in speaker is not available.
- See page 73 for ordering optional cables.



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

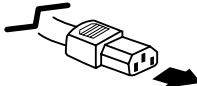
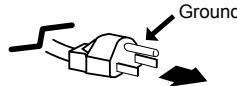
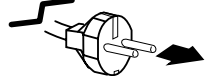
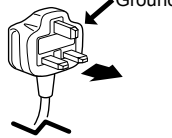
The AC outlet must be near this equipment and must be easily accessible.

✓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		
	For the U.S.A. and Canada	For Continental Europe	For the U.K.
 <p>To power cord connector on your projector.</p>	 <p>To the AC outlet. (120 V AC)</p>	 <p>To the AC outlet. (200 - 240 V AC)</p>	 <p>To the AC outlet. (200 - 240 V AC)</p>

Basic Operation

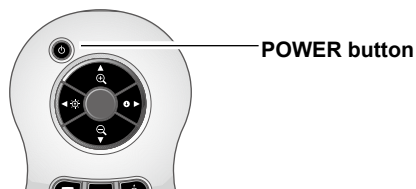
Turning On the Projector

- 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, 61).
 - 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 53) 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.

Note:

- The projector can be turned ON or OFF by pressing the POWER button on the remote control of the specified document camera ("L-1ex/TT-02RX").
- The projector can be turned off with this remote by pressing once; however, the "Power Off?" indicator on the screen will not be displayed.
- While the POWER indicator is blinking, the lamp is being cooled down and the projector cannot be turned back on.

Remote Control of the document camera



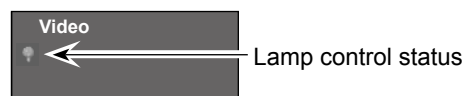
✓Note:

- When the Logo select function is set to **Off**, the logo will not be shown on the screen (p.46).
- When **Countdown off** or **Off** is selected in the Display function, the preparation display will not be shown on the screen (p.45).
- When the Input Search function is set to **On2**, the input signal will be searched automatically (p.44).
- When **Off** is selected in the Display function, the Video/PC selection window and the input signal guidance window are not shown on the screen. (p.45)



The preparation display will disappear after 30 seconds.

Selected Input Source and Lamp Control

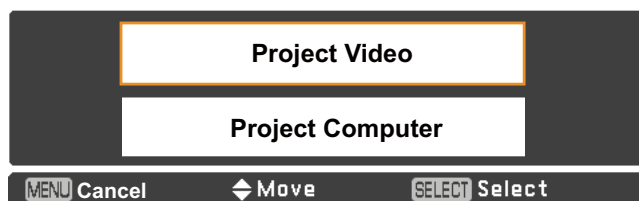


(See page 53 for Lamp control status.)

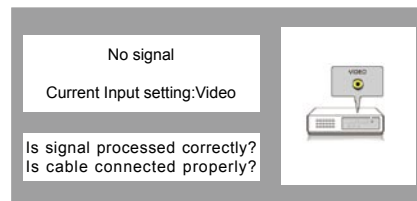
✓Note:

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

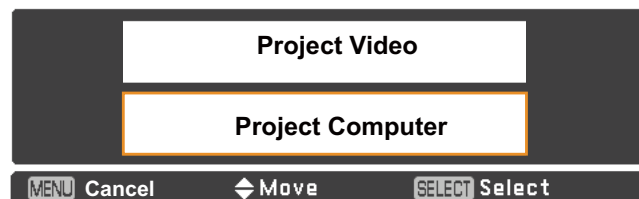
Video / PC selection window



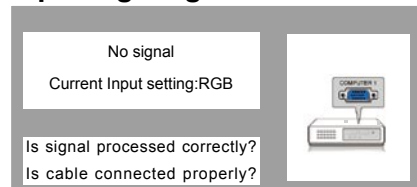
Input signal guidance window



Video / PC selection window



Input signal guidance window



Enter a PIN code

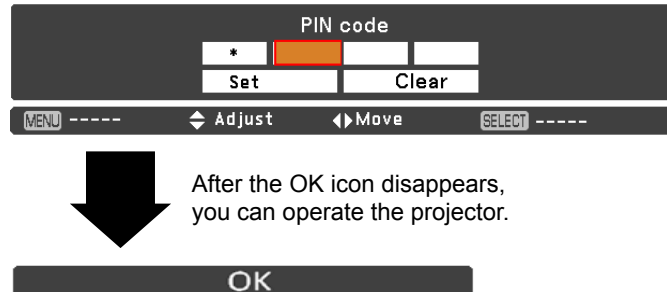
Use the Point ▲▼ buttons to enter a number. Press the Point ◀▶ buttons to fix the number and move the red frame pointer to the next box. The number changes to “*”. If you fixed an incorrect number, use the Point ◀▶ buttons to move the pointer to the number you want to correct, and then enter the correct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

PIN Code Input Dialog Box



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 54-55 for locking operation of the projector with your PIN code.

✓Note:

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

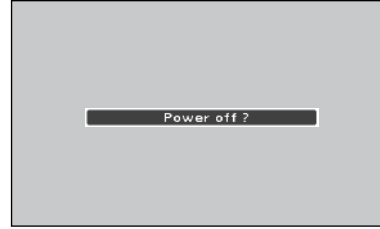


CAUTION ON HANDLING PIN CODE

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.

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? 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 STAND FOR ABOUT AN HOUR IN EVERY 24 HOURS.

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 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.50).
- 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 59.
- 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.
- The fan rotation will terminate directly if the AC power cord is unplugged immediately after the projector is turned off.
- 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.

✓Note:

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