# Canon

# MULTIMEDIA PROJECTOR LV-8320

# **User's Manual**







# **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.30). 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.37)
- The MIC function and 10W audio output allows you to make a presentation without any external audio equipment (p.26).

#### Lamp mode

Brightness of the projection lamp can be selected (pp.27, 56).

#### **♦** Direct Power Off Function

With the Direct Power Off function, you can disconnect the power cord from the wall outlet or turn off the breaker even during projection (p.22).

#### 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.

#### Picture in Picture Function

This projector is capable of projecting two images simultaneously by using either built-in P in P mode or P by P mode. (pp.28, 52)

#### ♦ Multilanguage Menu Display

Operation menu is available in 22 languages: English, German, French, Italian, Spanish, Portuguese, Dutch, Swedish, Finnish, Polish, Hungarian, Romanian, Czech, Russian, Turkish, Arabic, Kazakh, Vietnamese, Chinese, Korean, Japanese and Thai (p.46).

#### 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 controller (p.57). PIN code lock function prevents unauthorized use of the projector (pp.21, 57-58).

#### **♦** 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 user's manual of "Network Set-up and Operation."

#### Auto Setup Function

This function enables Auto input, Auto Keystone correction and Auto PC adjustment by pressing the AUTO SET button (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.

#### **♦** Switchable Interface Terminal

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

#### Power Management Mode

The Power management mode function reduces power consumption and maintains the lamp life (p.53).

#### 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.55)

# **Table of Contents**

| Features and Design                       | 2    | Auto PC Adjustment                          | 31   |
|---|------|---|------|
| Table of Contents                         | 3    | Manual PC Adjustment                        | 32   |
| To the Owner                              | 4    | Image Mode Selection                        | 34   |
| Safety Instructions                       | 5    | Image Adjustment                            | 35   |
| Air Circulation                           | 8    | Aspect Setting                              | 36   |
| Installing the Projector in Proper Positi | on 8 | VIDEO Input                                 | .38  |
| Moving the Projector                      | 8    | Input Source Selection                      |      |
| Compliance                                | 9    | (VIDEO, S-VIDEO)                            | 38   |
| Part Names and Functions                  |      | Input Source Selection                      |      |
| Front                                     | 10   | (COMPONENT, SCART, HDMI)                    | 39   |
| Back                                      | 10   | VIDEO System Selection                      | 40   |
| Bottom                                    | 10   | Image Mode Selection                        | 41   |
| Rear Terminal                             | 11   | Image Adjustment                            | 42   |
| Top Control                               | 12   | Aspect Setting                              | 44   |
| Remote controller                         | 13   | Setting                                     | .46  |
| Remote controller Battery Installation    | 14   | Setting                                     | 46   |
| Remote controller Operating Range         | 14   | Information                                 | .61  |
| Remote Control Code                       | 14   | Input Source Information Display            | 61   |
| Installation                              | .15  | Maintenance and Cleaning                    | .62  |
| Positioning the Projector                 | 15   | WARNING indicator                           | 62   |
| Adjustable Feet                           | 15   | Replacing the Filters                       | 63   |
| Connecting to a Computer                  | 16   | Resetting the Filter Counter                | 63   |
| Connecting to VIDEO Equipment             | 17   | Attaching the Lens Cap                      | 64   |
| Connecting to COMPONENT VIDEO             |      | Cleaning the Projection Lens                | 64   |
| and SCART Equipment                       | 18   | Cleaning the Projector Cabinet              | 64   |
| Connecting the AC Power Cord              | 19   | Lamp Replacement                            | 65   |
| Basic Operation                           | .20  | Appendix                                    | . 67 |
| Turning On the Projector                  | 20   | Troubleshooting                             | 67   |
| Turning Off the Projector                 | 22   | Menu Tree                                   | 70   |
| How to Operate the On-Screen Menu         | 23   | Indicators and Projector Condition          | 72   |
| Main Menu                                 | 24   | Compatible Computer Specifications          | 73   |
| Zoom and Focus Adjustment                 | 25   | Technical Specifications                    | 75   |
| Auto Setup Function                       | 25   | Optional Parts                              | 76   |
| Keystone Correction                       | 25   | PJ Link Notice                              | 77   |
| Sound Adjustment                          | 26   | Attaching the Filter Cover to the Projector | 77   |
| Remote controller Operation               | 27   | Configurations of Terminals                 | 78   |
| Computer Input                            | . 29 | List of Picture in Picture                  | 79   |
| Input Source Selection (ANALOG PC:        |      | PIN Code Protection                         | 79   |
| COMPUTER 1/COMPUTER 2)                    | 29   | Dimensions                                  | 80   |
| Computer System Selection                 | 30   |   |      |

### **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 67-69 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 USER'S MANUAL WITH THIS UNIT.

#### 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.

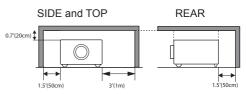


### Safety Precaution

#### 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.
   Improper positioning may reduce the lamp life and result in severe accident or 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.
- 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.

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.

READ AND KEEP THIS USER'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.

# **Safety Instructions**

# **№ WARNING**

Immediately turn the power off, unplug the projector, and contact your dealer under the following conditions, otherwise a fire or an electric shock may result.

- If smoke comes out from it.
- If it emits a strange odor, or makes a strange noise.
- If lamp goes out with a loud bang.
- If water or any other liquid gets into it.
- If metal or foreign objects get inside it.
- If it is knocked down or dropped and the cabinet is broken.

# **WARNING**

Follow the instructions below when using the power cable, otherwise a fire, an electric shock, or injury may result.

- Do not place heavy objects on the power cord or position the power cord under the projector. Doing so may damage the power cord.
- Do not run the power cord under a carpet. As it goes unnoticed, excessive load may be applied on the cord unintentionally.
- Do not modify, bend forcibly, twist, or pull the power cord.
- Do not place the power cord near heat generating equipment or heat it.
- Do not bend, wind, or bind excessively the power cord when using it.
- Be sure to connect the projector to a grounded outlet. Failure to do so may result in an electric shock.
- Do not continue to use a damaged power cord.
   If the power cord is damaged, take it to your dealer and have it replace.
- Use only the supplied power cord.

# **№** WARNING

Follow the instructions below when handling the power plug or connector, otherwise a fire, an electric shock, or injury may result.

- Use the projector within the voltage range specified on the projector (AC 100 V- 240 V).
- Insert the power plug or connector into the power outlet firmly. Do not use a damaged or loosen power plug or connector.
- Be sure to hold the power cord plug or connector when disconnecting it from the power outlet. If the power cord itself is pulled, it may be damaged.
- Do not plug or unplug the power cord with wet hands.
- Disconnect the power cord from the power outlet before cleaning the projector.
- Do not stick metal objects into the electrical contacts of the power plug or connector.

- When an extension cord is necessary, be sure that the total current load of all equipment connected to the extension cord does not exceed the specified rating of the extension cord.
- Periodically unplug the power cord and remove the dust that builds up on the power cord or connector.

# / WARNING

Follow the instructions below to install or handle the projector. Otherwise, a fire, an electric shock, or injury may result.

- Do not touch the projector, power cord, or cables when lighting begins.
- Do not use the projector in a bathroom or shower room.
- Do not expose the projector to rain, snow, or use near water.
- Do not insert metal objects into the projector through the air vents.
- Do not place the containers with water on the projector.
- Do not install in the locations exposed to oily vapors or smoke (e.g., near a cooking table or humidifier).
- Before moving the projector, turn the power off and disconnect the power cord and all cables.
- Do not put spray cans in front of the exhaust vent. When spray cans are exposed to heat, the pressure in them will increase and explode.
- Do not open nor remove the cabinet. There are high voltage components inside the projector.
   Contact your dealer for inspection, adjustment, and service.
- Do not attempt to disassemble the projector (including expendable parts) or remote controller.
- Do not look into the lens while the projector is used. Strong light may hurt your eyes. Be especially careful that small children do not look into the lens.

# **MARNING**

Follow the instructions below when the lamp is replaced or breaks.

- Always unplug the power cord before replacing the lamp.
- When the lamp breaks, shards of glass may scatter in the lamp housing. Contact your dealer for cleaning or inspecting the projector, or replacing the lamp.

# / WARNING

Follow the instructions below when handling the batteries. Failure to do so may cause explosion, heat generation, a fire, or leakage of the battery fluid.

- Do not heat or disassemble the batteries, or throw them into fire.
- Do not attempt to recharge the batteries.

- Remove the batteries when they have been exhausted or not in use for an extended period of time.
- Be sure to replace both batteries at the same time. Do not mix batteries of different types.

 Insert batteries correctly according to the "+" and "-" markings.

 If a fluid from a battery leaks and comes in contact with your skin, rinse the affected skin thoroughly as soon as possible.

# **CAUTION**

- Do not place heavy objects or step on the projector. Be especially careful that small children do not step on the projector. If not, the projector may drop or break, causing injury.
- Disconnect the power cord from the power outlet if the projector is left unused for a long period of time. Failure to do so may result in a fire.
- Do not bring your hands to the peripheral part of the exhaust vent on the cabinet. This area becomes hot during use. Be especially careful that small children do not touch the area.
   Failure to do so may result in burn.

 Do not put metal objects in front of or near the exhaust vent. They will become hot while projector is being used.

 Do not place the projector on top of unstable or slanted surfaces. The projector may fall down and cause injury.

- Do not attach the léns cover while the projector is being used or place any objects in front of the lens. Failure to do so may result in a fire
- A buildup of dust inside the projector can cause a fire or damage. Consult your dealer for cleaning.
- When installing the projector to a ceiling, consult your electrician or dealer. If the projector is not fixed securely, accidents may result.

# **♠** CAUTION

- Never take out the lamp soon after the projector is used. Let the projector cool for at least 1 hour before taking out the lamp, as burns may result.
- If the lamp replacement icon appears or the LAMP REPLACE indicator lights orange, immediately replace the lamp with a new one. Otherwise, the lamp may burst.
- If the lamp burns out, the gas or dust (containing mercury) inside the lamp may escape from the air vents. Immediately open the windows and ventilate the room. If you inhale the gas or the gas gets into your eyes or mouth, see a doctor at once.
- Dispose of a lamp containing mercury in the same manner as fluorescent lamps according to local regulations.

### **Precaution During Use**

- This projector is a precision machine. Do not subject the projector to strong shocks or vibrations or knock it down. Remove the lens, close the lens mounting hole with the front cover, and retract the adjustable feet before placing the projector into the carrying case. The projector may be damaged if you place it in the case without retracting the adjustable feet
- Place the projector into the specified case when transporting it by courier or any other transportation service. Consult your dealer for the case.
- Keep space of 1 m or more at the sides of the projector between the intake/exhaust vents and walls. Poor ventilation may cause malfunction.
- Do not install the projector in the locations with heavy dust, high humidity, oily vapors, or cigarette smoke.
  - A buildup of dust on the optical elements such as lens or mirror may degrade image quality.
- Directly touching the lens may cause poor image quality.
- If the projector is carried from a cold place to a warm place or the room temperature is raised rapidly, condensation may form on the lens and mirror due to the moisture in the atmosphere, resulting in a blurred picture.
   Wait until condensation evaporates and normal picture is shown.
- Do not install the projector in the locations with great difference in temperature. Doing so may cause malfunction. The ranges of the operating and storage temperatures are as shown below:
  - Operating temperature: 41°F–95°F [5°C–35°C] Storage temperature: 10°F–140°F (-10°C-60°C)
- Do not install the projector near high-voltage electric power lines or power sources.
- Do not place the projector on a carpet or bed.
   The internal temperature will rise, causing malfunction.
- To avoid increase in the internal temperature, do not block the intake/exhaust vents.
- Position the projector at a proper angle.
   Incorrect positioning may cause troubles and accidents. Do not roll the projector more than 20 degrees from the horizontal.
- Do not place any heat-sensitive objects on the projector.

### **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.

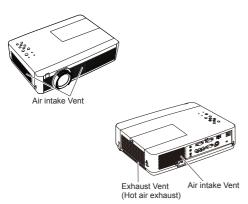


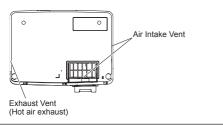
#### **CAUTION**

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 ventilation holes.
- 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.
- Make sure that there is no object under the projector to prevent from covering the bottom openings.

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 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**

Multimedia Projector, Model: LV-8320

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

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.

Canon U.S.A., Inc.

One Canon Plaza, Lake Success, NY 11042-1198, U.S.A.

Tel No. (516)328-5600

#### Canadian Radio Interference Regulations

This Class B digital apparatus complies with Canadian ICES-003.

#### 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:

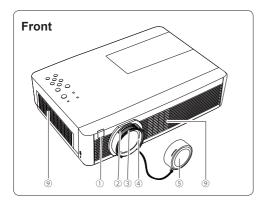
AC Power Cord used in the United States and Canada is listed by the Underwriters Laboratories (UL) and certified by the Canadian Standard Association (CSA).

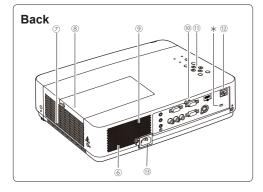
AC Power Cord has a grounding-type AC line plug. This is a safety feature to be sure that the plug will fit into the power outlet. Do not try to defeat this safety feature. Should you be unable to insert the plug into the outlet, contact your electrician.

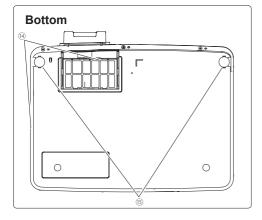


THE SOCKET-OUTLET SHOULD BE INSTALLED NEAR THE EQUIPMENT AND EASILY ACCESSIBLE.

# **Part Names and Functions**







- (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.

S Lens Cap (See page 64 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**
- Air Intake Vents
- **10 Terminals and Connectors**
- 11 Top Controls and Indicators
- 12 LAN Connection Terminal
- **13 Power Cord Connector**
- (14) Filter Covers
- (5) Adjustable Feet

#### ✓ Note:

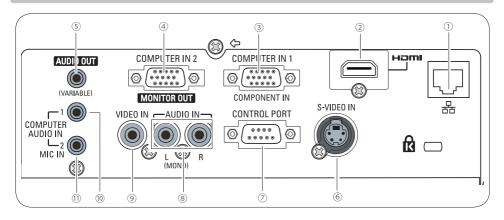
② LAN Connection Terminal is for the Network function. Refer to the user's manual of "Network Set-up and Operation".

#### \* 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 user's manual of "Network Set-up and Operation").

#### (2) HDMI Terminal

Connect the HDMI signal (including sound signal) from video equipment or from computer to this terminal (pp.16, 17).

Hami is registered trademarks of HDMI Licensing, LLC.

#### ③ 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.16,18).

#### **4** COMPUTER IN 2 / MONITOR OUT

- Connect computer output to this terminal (p.16).
- 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.16,18).

#### **5 AUDIO OUT (VARIABLE)**

Connect an external audio amplifier to this jack (pp.16-18).

This terminal outputs sound from AUDIO IN terminal (\$, @ or @), or HDMI terminal (2) (digital audio).

Never plug headphones into this jack.

#### 6 S-VIDEO IN

Connect the S-VIDEO output signal from video equipment to this jack (p.17).

#### **⑦** CONTROL PORT

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

#### (8) AUDIO IN

Connect the audio output signal from video equipment connected to ⑥ or ⑨ to this jack. For a mono audio signal (a single audio jack), connect it to the L (MONO) jack (p.17).

#### 9 VIDEO IN

Connect the composite video output signal to this jack (p.17).

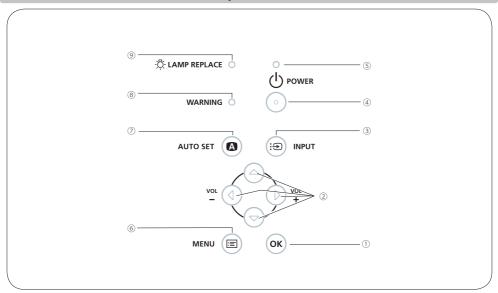
#### (10) COMPUTER AUDIO IN 1

Connect the audio output (stereo) from a computer or video equipment connected to ② or ③ to this jack (pp.16, 18).

#### ① COMPUTER AUDIO IN 2 (MIC IN)

Connect the audio output (stereo) from a computer or video equipment connected to ④ to this jack. Or connect the MIC to the this jack (pp.16, 18).

# **Top Control**



#### ① OK button

- Execute the selected item (p.23).
- Expand or compress the image in the Digital zoom mode (p.37).

#### ② POINT ▲ ▼ ◀ ► (VOLUME -/+) buttons

- Select an item or adjust the value in the On-Screen Menu (p.23).
- Pan the image in the Digital zoom +/- mode (p.37).
- Ädjust the volume level (Point ◀► buttons) (p.26).

#### ③ INPUT button

Select an input source (pp.29, 38-39).

#### 4 POWER button

Turn the projector on or off (pp.20-22).

#### 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.53).

#### **6** MENU button

Open or close the On-Screen Menu (p.23).

#### 7 AUTO SET button

Execute the setting of Auto setup (includes Auto input, Auto PC and Auto Keystone functions) in the setting menu. (pp.25, 47).

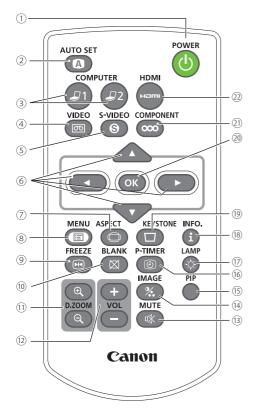
#### **8 WARNING indicator**

- Lights red when the projector detects an abnormal condition.
- Blinks red when the internal temperature of the projector exceeds the operating range (pp.62, 72).

#### 9 LAMP REPLACE indicator

Lights yellow when the projection lamp reaches its end of life (pp.65, 72).

#### Remote controller



① **POWER button**Turn the projector on or off. (pp.20-22)

#### 2 AUTO SET button

Execute the setting of Auto setup (includes Auto input, Auto PC and Auto Keystone functions) in the setting menu. (pp.25, 47)

**③ COMPUTER 1/2 buttons** 

Select the COMPUTER 1 or COMPUTER 2 input source. (pp.29, 39)

#### √Note:

To ensure safe operation, please observe the following precautions:

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

4 VIDEO button

Select the VIDEO input source. (p.38)

**S-VIDEO** button

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

⑥ Point ▲ ▼ ◀► buttons

- Select an item or adjust the value in the On-Screen Menu. (p.26)
- Pan the image in the Digital zoom +/mode. (p.37)
- ASPECT button

Select a screen mode. (pp.28, 36-37, 44-45)

® MENU button

Open or close the On-Screen Menu. (p.26)

9 FREEZE button

Freeze the picture on the screen. (p.27)

**10 BLANK button** 

Temporarily turn off the image on the screen. (p.28)

1 D.ZOOM +/- buttons

Zoom in and out the images. (pp.27, 37)

12 VOLUME +/- buttons

Adjust the volume level. (p.26)

MUTE button

Mute the sound. (p.26)

(4) IMAGE button

Select the image mode. (pp.28, 34, 42)

(5) PIP button

Operate the Picture in Picture function. (p.27)

16 P-TIMER button

Operate the P-timer function. (pp.28, 54)

17 LAMP button

Select a lamp mode. (pp.27, 56)

® INFO. button

Operate the information function. (p.61)

**19 KEYSTONE button** 

Correct keystone distortion. (p.25)

② OK button

- Execute the selected item. (p.23)
- Zoom in or out the image in Digital zoom mode. (p.37)
- 21 COMPONENT button

Select the COMPONENT input source. (p.39)

22 HDMI button

Select the HDMI input source. (p.39)

### **Remote controller Battery Installation**

1 Open the battery compartment lid.



2 Install new batteries into the compartment.

Replace the compartment lid.





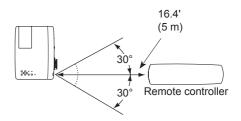
# **WARNING**

To ensure safe operation, please observe the following precautions:

- Use two (2) AAA type 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 controller to moisture or heat.
- Do not drop the remote controller.
- If the battery has leaked on the remote controller, 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 controller Operating Range

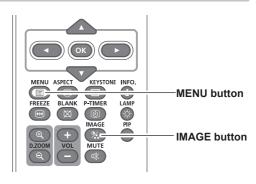
Point the remote controller toward the projector (Infrared Remote Receiver) when pressing the buttons. Maximum operating range for the remote controller is about 16.4'(5 m) and 60 degrees in front of the projector.



#### **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 controllers 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 controller. See "Remote control" in the Setting Menu on page 56.

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**.



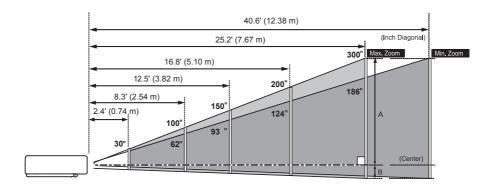
# Installation

# **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.



| A:B = 49:1                       |              |               |               |               |                |
|----------------------------------|--------------|---------------|---------------|---------------|----------------|
| Screen Size                      | 30"          | 100"          | 150"          | 200"          | 300"           |
| (W x H) mm<br>16:10 aspect ratio | 646 x 404    | 2154 x 1346   | 3231 x 2019   | 4308 x 2692   | 6462 x 4039    |
| Zoom (max)                       | 2.4'(0.74 m) | 8.3'(2.54 m)  | 12.5'(3.82 m) | 16.8'(5.10 m) | 25.2'(7.67 m)  |
| Zoom (min)                       | 4.0'(1.21 m) | 13.5'(4.11 m) | 20.3'(6.18 m) | 27.1'(8.25 m) | 40.6'(12.38 m) |

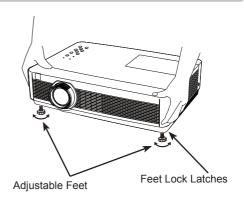
# **Adjustable Feet**

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 25, 37, 45).



### **Connecting to a Computer**

#### Cables used for connection

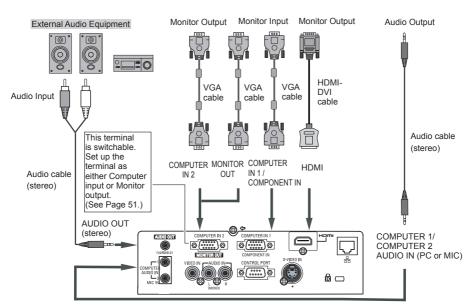
- VGA Cables (Mini D-sub 15 pin) \*
- Audio Cables
- HDMI-DVI cable

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

#### √ Note:

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





#### √ Note:

- When the MIC function is set to Off in the Sound menu, the MIC function is disabled. (p. 26)
- 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. 26)
- 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.

# **Connecting to VIDEO Equipment**

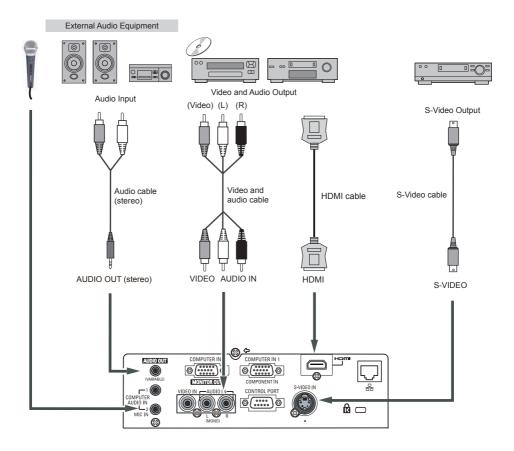
#### Cables used for connection

- Video and Audio Cable (RCA x 3)
- S-VIDEO Cable
- Audio Cable
- HDMI Cable

(Cables are not supplied with the projector. )

#### √ Note:

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



#### √ Note:

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

# **Connecting to COMPONENT VIDEO and SCART Equipment**

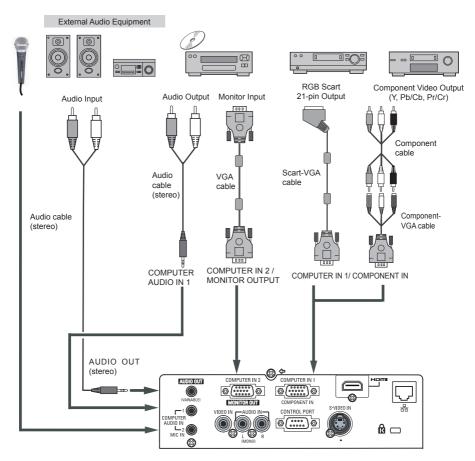
#### Cables used for connection

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

(Cables are not supplied with this projector.)

#### ✓ Note:

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



#### √ Note:

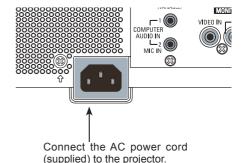
- When the AUDIO OUT is plugged-in, the projector's built-in speaker is not available.
- · See page 76 for ordering optional cables.

# **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. Ground                   |  |  |  |
|  | Ground                          |                                       |                                       |  |  |  |
| To power cord connector on your projector. | To the AC outlet.<br>(120 V AC) | To the AC outlet.<br>(200 - 240 V AC) | To the AC outlet.<br>(200 - 240 V AC) |  |  |  |

# **Basic Operation**

### **Turning On the Projector**

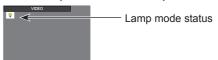
- 1 Complete peripheral connections (with a computer, VCR, etc.) before turning on the projector.
- 2 Connect the projector's AC power cord into an AC outlet. The POWER indicator lights red. Open the lens cap.
- Press the POWER button on the top control or on the remote controller. The POWER indicator 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 mode status icon (p.56) appear on the screen.
- 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 OK 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 mode



(See page 56 for Lamp mode 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**



#### √Note:

- When the Logo select function is set to Off, the logo will not be shown on the screen (p.48).
- When **Countdown off** or **Off** is selected in the Display function, the preparation display will not be shown on the screen (p.48).
- When the Auto input function is set to On 2, the input signal will be searched automatically (p.47).
- 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.48).

#### 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 OK 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 57-58 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 special care in setting a new PIN code. Write down the number as a reminder.

#### PIN Code Input Dialog Box



# **Turning Off the Projector**

- Press the POWER button on the top control or on the remote controller, and Power off? appears on the screen.
- Press the POWER 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 58.) At this time, you can unplug the AC power cord even if the fans are still running.
- When the projector has cooled down enough, the POWER indicator stops blinking and you can turn on the projector.

#### CAUTION

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

#### **CAUTION**

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 power on function is set to On, the projector will be turned on automatically by connecting the AC power cord to an AC outlet (p.53).
- 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 62.
- 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 poweroff processing for fan cooling is completed, compared with the time the AC power cord is immediately unplugged after the power-off.

#### Power off?

Power off? disappears after 4 seconds.

#### **Direct Power Off Function**

You can disconnect the power cord from the wall outlet or turn off the breaker even during projection without pressing the POWER button.

#### √Note:

When using the Direct Power 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.

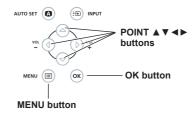
### How to Operate the On-Screen Menu

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.

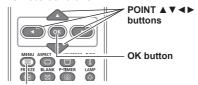
- 1 Press the MENU button on the top control or the remote controller to display the On-Screen Menu.
- 2 Use the Point ▲▼ buttons to highlight or select a main menu item. Press the Point ▶ or the OK button to access the submenu items. (The selected item is highlighted in orange.)
- 3 Use the Point ▲▼ buttons to select the desired submenu item and press the OK 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 OK button to activate it and return to the submenu.
- Fress the Point 

   button to return to the main menu. Press the MENU button to exit the On-Screen Menu.

#### **Top Control**



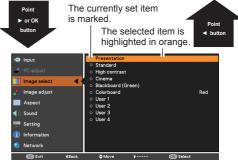
#### Remote controller



**MENU** button

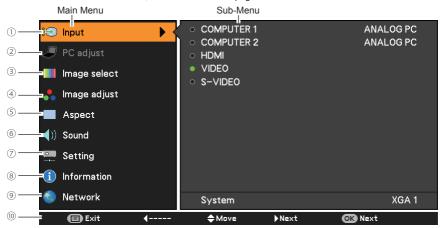
#### On-Screen Menu





#### Main Menu

For detailed functions of each menu, see "Menu Tree" on pages 70-72.



1 Input

Used to select an input source from COMPUTER 1, COMPUTER 2, HDMI, VIDEO or S-VIDEO. (pp.29, 39)

2 PC adjust

Select Auto PC, Fine sync, Total dots, Horizontal position, Vertical position, 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.31-33)

3 Image select

For both of computer and Video sources, used to select an image mode from among **Presentation**, **Standard**, **High contrast**, **Cinema**, **Blackboard**(**Green**), **Colorboard** and **User 1-4**. (pp.34, 41)

4 Image adjust

For Computer source, used to adjust computer image [Contrast, Brightness, Color temp., White balance (R/G/B), Sharpness, Gamma, Reset and Store]. (p.35)
For VIDEO source, used to adjust picture image [Contrast, Brightness, Color, Tint, Color temp., White balance (R/G/B), Sharpness, Gamma, Noise reduction, Progressive, Reset and Store]. (pp.42-43)

S Aspect

For Computer source, used to adjust size of the image [Normal, Full, 16:9, Zoom, True, Custom, Custom adj., Digital zoom +/-, Keystone, Ceiling, Rear, Screen aspect and Reset] (pp.36-37) For VIDEO source, used to set size of image [Normal, Full, 16:9, Zoom, Natural wide, Custom, Custom adj., Keystone, Ceiling, Rear, Screen aspect and Reset] (pp.44-45)

6 Sound

Used to adjust the volume or mute the sound or set configurations to the MIC functions (p.26).

(7) Setting

Used to set the projector's operating configurations. (pp.46-60)

® Information

Display the input source information. (p.61)

Notwork

See user'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 Auto input, Auto PC and Auto Keystone functions) in the setting menu by just pressing the AUTO SET button. Refer to page 47 for the setting of the Auto setup function.

#### √Note:

- 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 Setting 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 SET button, adjust manually by pressing the KEYSTONE button on the remote controller or selecting Keystone in the Aspect menu (pp.37, 45).
- Fine sync, Total dots, Horizontal position 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.32-33).

# **Keystone Correction**

If a projected picture still has keystone distortion after pressing the AUTO SET button, correct the image manually as follows:

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

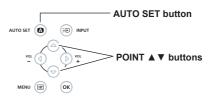
Reduce the upper width with the Point button



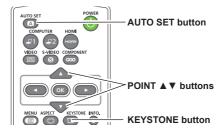
Reduce the lower width with the Point ▼ button.



#### **Top Control**



#### Remote controller



# Keystone 💠

- •The white arrows indicate that there is no correction.
- A blue arrow indicates the direction of correction.
- •An arrow disappears at the maximum correction.
- •If you press the KEYSTONE button on the remote controller 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.

### **Sound Adjustment**

#### Direct Operation

#### Volume

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

#### Mute

Press the MUTE button on the remote controller 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 OK button to access the submenu items.
- 2 Use the Point ▲ ▼ buttons to select the desired submenu item and press OK 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 OK button to switch the mute function **On/Off**. When the sound is turned off, **On** is displayed. Press the VOLUME +/– buttons again or adjust MIC gain's volume to turn the sound back on.

#### MIC

Use the Point ▲ ▼ buttons to switch the MIC function On/Off, and then press the OK 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.

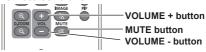
#### STANDBY MIC OUT

When setting the STANDBY MIC OUT function to **On** and in Standby mode status, only MIC input volume can be output.

#### **Top Control**



#### Remote controller



Approximate level of Volume Dialog Box the volume.



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 16-18)**

|                    | AUDIO IN            |                        |                                    |                            |  |
|--------------------|---------------------|------------------------|------------------------------------|----------------------------|--|
| MIC<br>Setup       | RCA L/R<br>terminal | COMPUTER<br>AUDIO IN 1 | COMPUTER<br>AUDIO IN 2<br>(MIC IN) | HDMI<br>(digital<br>audio) |  |
| MIC Off            | Video<br>audio      | PC 1 audio             | PC 2 audio                         | HDMI<br>audio              |  |
| MIC On for Video   | Video<br>audio      |                        | МІС                                |                            |  |
| MIC On<br>for PC 1 |                     | PC 1 audio             | МІС                                |                            |  |
| MIC On<br>for PC 2 |                     | PC 2 audio             | МІС                                |                            |  |
| MIC on<br>for HDMI |                     | PC 1<br>audio(*1)      | МІС                                | HDMI<br>audio(*2)          |  |

- \*1 HDMI setup = Computer 2
- \*2 HDMI setup = HDMI

#### √Note:

- When Off is selected in MIC function, the MIC GAIN and STANDBY MIC OUT functions are not available.
- Only when 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.

### **Remote controller Operation**

Using the remote controller 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, HDMI, VIDEO, S-VIDEO and COMPONENT buttons

Press the COMPUTER 1/2, HDMI, VIDEO, S-VIDEO and COMPONENT buttons on the remote controller to select the input source. See pages 29, 39 for details.

#### **FREEZE** button

Press the FREEZE button on the remote controller 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 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 mode, Key lock, PIN code lock, Remote control and SERIAL NO. and Total power savings. (p.61)

#### **D.ZOOM** buttons

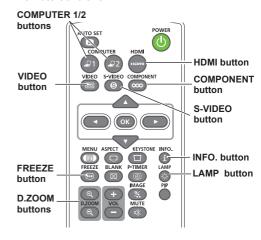
Press the D.ZOOM buttons on the remote controller to enter to the Digital zoom +/- mode. See page 37 for details.

#### I AMP button

Press the LAMP button on the remote controller 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.
- ©2 Eco 2.....50% of the normal brightness.

#### Remote controller



#### √Note:

See the next page for the description of other buttons

#### **BLANK** button

Press the BLANK button on the remote controller to black out the image. To restore to normal, press the BLANK button again or press any button. When the projected image is captured and is set as **User** in the Logo selection (p. 48), the screen changes each time you press the BLANK button as follows.

black out  $\rightarrow$  the captured image  $\rightarrow$  normal  $\rightarrow$  .....

#### √Note:

When use the MUTE button to release the Blank function, the mute function can not be operated at the same time.

#### P-TIMER button

Press the P-TIMER button on the remote controller to operate the Count up/Count down function. Refer to p.54 for detail of Setting for the P-timer function.

To stop the count time, press the P-TIMER button.

To cancel the P-timer function, press and hold the P-TIMER button.

#### **IMAGE** button

Press the IMAGE button on the remote controller to select a desired image mode of the screen. See pages 34, 42 for details.

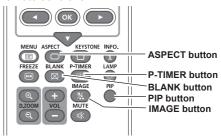
#### ASPECT button

Select the screen size (See pages 36-37, 44-45 for details).

#### PIP button

Turn on or turn off the Picture in Picture function.

#### Remote controller



#### √Note:

See the previous page for the description of other buttons.

#### BLANK



Blank disappears after 4 seconds.

#### P-Timer



# **Computer Input**

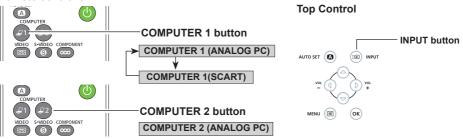
# Input Source Selection (ANALOG PC: COMPUTER 1/COMPUTER 2)

### **Direct Operation**

Choose either **COMPUTER 1 (ANALOG PC)** or **COMPUTER 2 (ANALOG PC)** by pressing the COMPUTER 1 or COMPUTER 2 button on the remote controller. Or you can press the INPUT button on the top control to choose the desired input source.

Before using these buttons, correct input source should be selected through Menu operation as described below.

#### Remote controller



#### Menu Operation

- Press the MENU button to display the On-Screen Menu. Use the Point ▲ ▼ buttons to select Input and then press the Point ▶ button or the OK button.
- 2 Use the Point ▲ ▼ buttons to select COMPUTER 1.

#### **OR**

Use the Point ▲ ▼ buttons to select **COMPUTER 2** and then press the OK button.

When COMPUTER 1 is selected, press the Point ▶ button to access the submenu items. Use the Point ▲ ▼ buttons to select the ANALOG PC input source and then press the OK button.

### Input Menu

COMPUTER 1







#### √Note:

When the Auto input function is set to **On 1** or **On 2** in the Auto setup function, the input signal will be searched automatically (p.47).

### **Computer System Selection**

This projector automatically tunes to various types of computers with its Multi-scan system and Auto PC Adjustment. If a computer is selected as a signal source, this projector automatically detects the signal format and tunes to project a proper image without any additional settings. (Signal formats provided in this projector are shown on page 73-74.)

One of the following messages may appear when:

#### Auto

When the projector cannot recognize the connected signal conforming to the provided PC systems, Auto is displayed on the System Menu box and the Auto PC Adjustment function works to display proper images. If the image is not projected properly, a manual adjustment is required (pp. 32-33).

----

There is no signal input from the computer. Check the connection between your computer and the projector. (See "Troubleshooting" on pp. 67-69)

Mode 1

The preset system is manually adjusted in the PC adjust Menu. The adjusted data can be stored in **Mode 1-10** (pp. 32-33).

SVGA 1

PC Systems provided in this projector is chosen. The projector chooses a proper system provided in the projector and displays it.

\*Mode 1 and SVGA 1 are examples.

#### PC System Menu



Selected system in the PC System Menu is displayed.

### Selecting Computer System Manually

PC system can also be selected manually.

- 1 Press the MENU button to display the On-Screen Menu. Use the Point ▲ ▼ buttons to select Input and then press the Point ► button or the OK button.
- 2 Use the Point ▲ ▼ buttons to select System and then press the Point ► button or the OK button.
- 3 Use the Point ▲ ▼ buttons to select the desired system and then press the OK button.

Customized Mode (1–10) set in the PC adjust Menu (pp. 32-33).

PC System Menu

System Mode 1

PC adjust

Image select

Node 2

NGA 1

NGA 2

NGA 2

NGA 2

Image adjust

System Mode 1

NGA 2

NGA 2

NGA 1

NGA 1

NGA 1

NGA 1

NGA 2

NGA 1

NGA 2

NGA 1

NGA 2

NGA 1

Systems in this dialog box can be selected.