



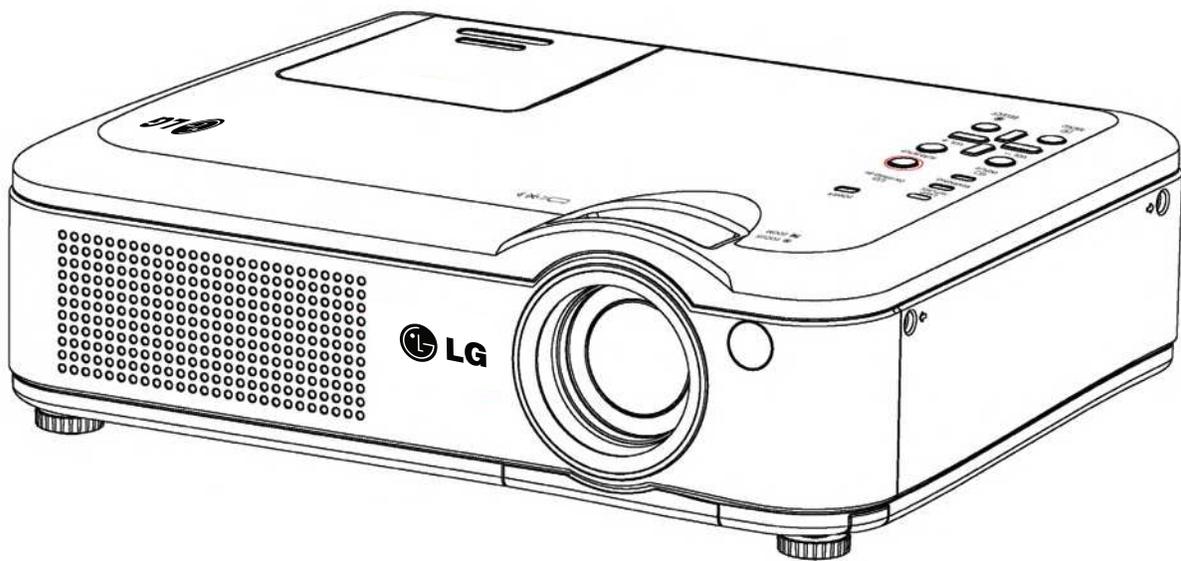
LG

LCD Projector Owner's Manual

Model - BX27C-SL

BX30C-SL

Please read this manual carefully before operating your set and retain it for future reference.



Property Statement

✓**NOTE:**

- Slight difference on OSD menu & photographs between manual & product display could be found.
- Prior notice will not be given for any amendments on this manual.

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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.

Please revise this manual for proper operation & cable connections in case your projector does not work properly, try solutions on **Troubleshooting**. If problems still persist after following all operating instructions, contact the dealer where you purchased the projector or the service center.

The projector lamp is a consumable part. It's normal the brightness reduces gradually and will be lower than new one after working for a period of time. Please turn on/off the projector strictly by the following the steps as described in the **Turn On the Projector** and **Turn Off the Projector** in this manual. Maintain and clean regularly as per required specified in **Maintenance and Cleaning**. Otherwise, the lamp residual heat may result in the short life of the projector and the lamp greedly and may damage them in a short time.

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.	

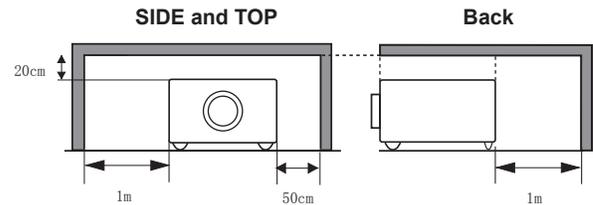
READ AND KEEP THIS OWNER'S MANUAL FOR LATER USE.

Safety Precaution

WARNING: • **THIS PROJECTOR 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.

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

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.

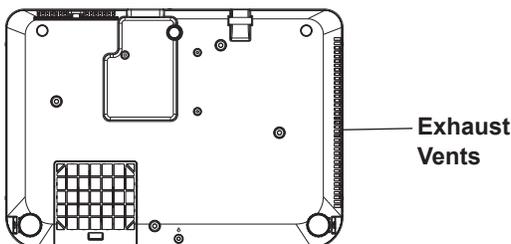
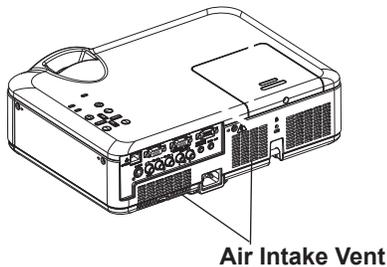
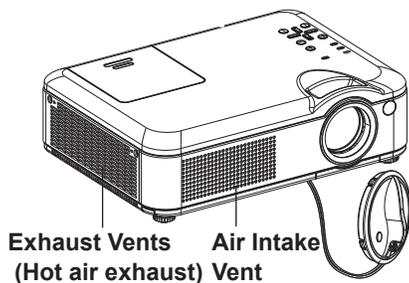


CAUTION

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

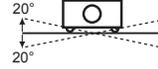
- Do not put any flammable object or spray can near the projector, hot air is exhausted from the air vents.
- Keep the exhaust vent at least 3' (1 m) away from any objects.
- Do not touch a peripheral part of the exhaust vent, especially screws and metallic parts. These areas will become hot while the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

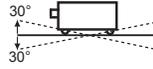


Installing the Projector in Proper Position

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 feet 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 with the lens side up (supplied).

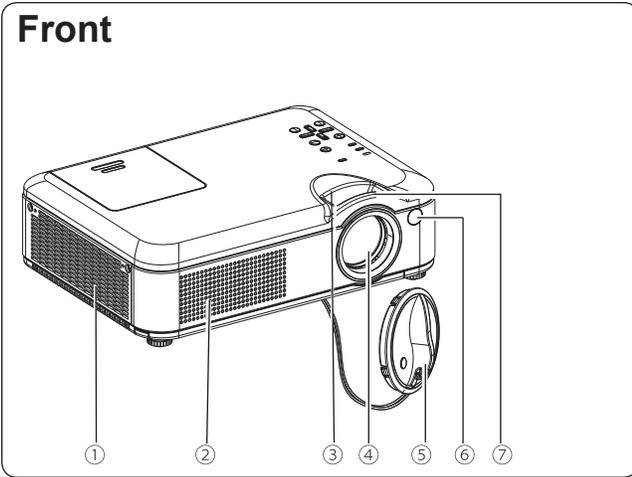


CAUTION IN CARRYING OR TRANSPORTING THE PROJECTOR

- 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.

Part Names and Functions

Front



CAUTION

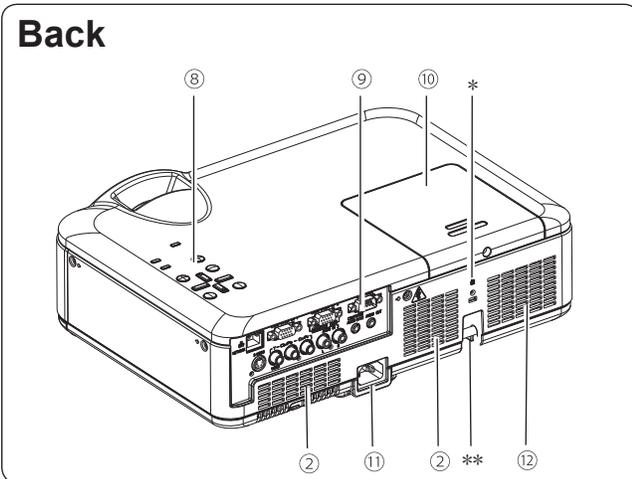
Hot air is exhausted from the exhaust vent. Do not put heat-sensitive objects near this side.

- ① Exhaust Vents
- ② Air Intake Vent
- ③ Zoom Ring (Back)
- ④ Projection Lens
- ⑤ Lens Cap

CAUTION

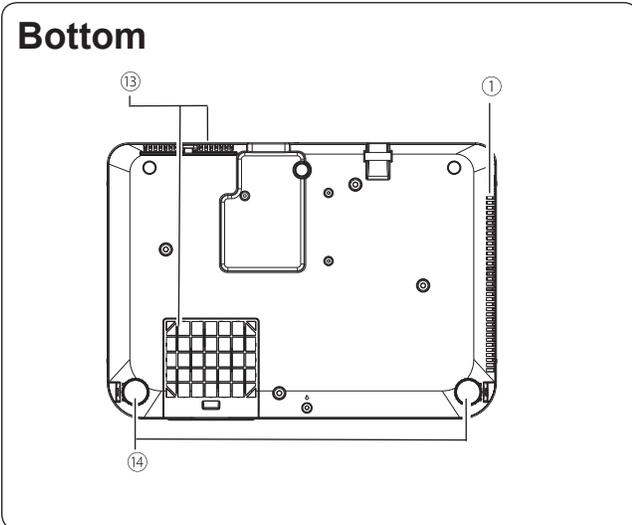
Do not turn on a projector with lens cap attached. High temperature from light beam may damage lens cap and result in fire hazard.

Back



- ⑥ Infrared Remote Receiver
- ⑦ Focus Ring (Front)
- ⑧ Top Controls and Indicators
- ⑨ Terminals and Connectors
- ⑩ Lamp Cover
- ⑪ Power Cord Connector
- ⑫ Speaker
- ⑬ Filter
- ⑭ Adjustable Feet

Bottom



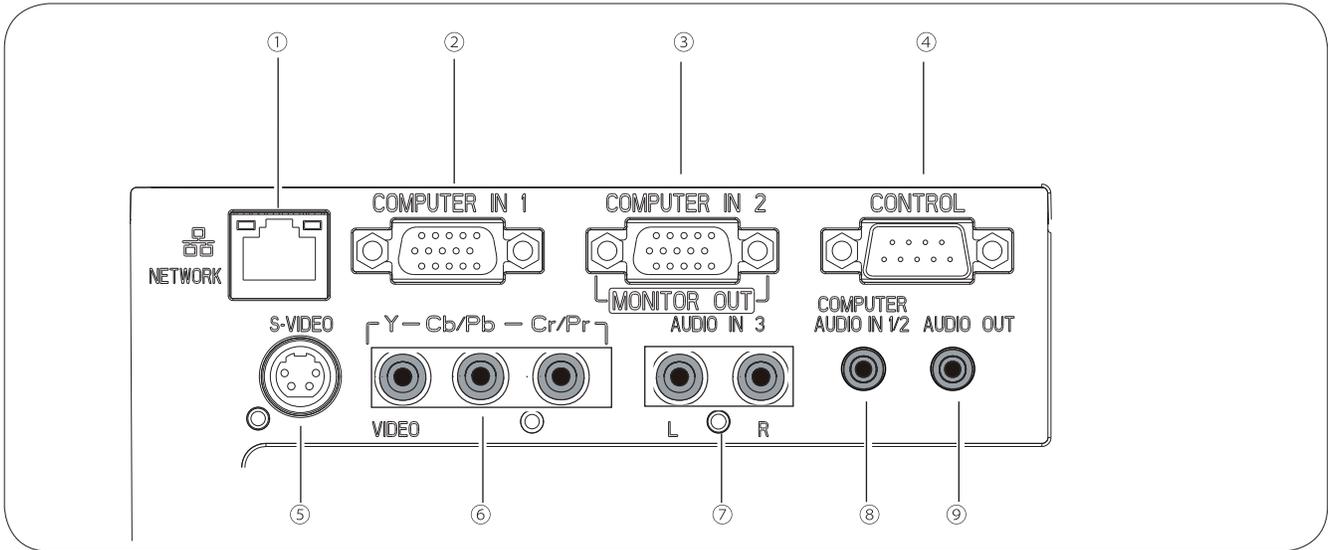
* Kensington Lock

** Security Slot

Anti theft chain may opt to attach this slot to deter theft of the projector.

Part Names and Functions

Rear Terminal



① LAN Connection Terminal

Connect the LAN cable.

② Computer 1 Input

Connect RGB output signal from a computer (page 13).

③ Computer 2 Input/Monitor Output

- Connect RGB output signal from a computer (page 13)
- This terminal can be used to output the incoming analog RGB signal from Computer 1 Input to the other monitor(page 13).

④ Control

Connect with computer by RS232 cable for PC controls.

⑤ S-VIDEO IN

Connect the S-VIDEO output signal from video equipment to this jack (page 14).

⑥ VIDEO IN/COMPONENT

Connect the component output signal to these jacks (page 14).

⑦ AUDIO IN 3

Connect these jacks with audio output of ⑤ & ⑥ source (page 15).

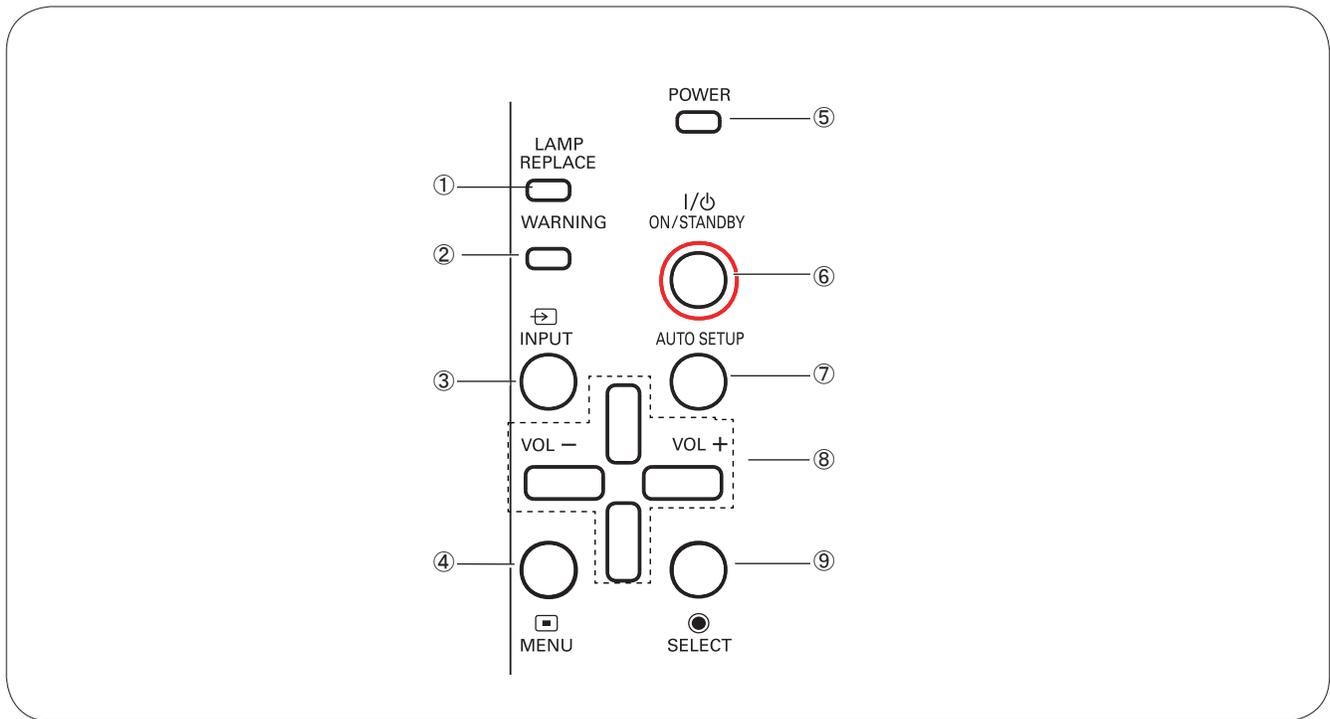
⑧ Computer 1 / Computer 2 Audio Input

Connect these jacks with audio output of ② & ③ source(page 13).

⑨ Audio Output

Connect an external audio amplifier to this jack. This jack receives sources from AUDIO IN jack (⑦ or ⑧) (page 14,15).

Top Control



① **LAMP REPLACE indicator**

Lights yellow when the projection lamp reaches its end of life (page 50).

② **WARNING indicator**

- Lights red when the projector detects an abnormal condition.
- Blinks red when the internal temperature of the projector exceeds the operating range.

③ **INPUT button**

Select an input source (page 25, 32).

④ **MENU button**

Open or close the On-Screen Menu.

⑤ **POWER indicator**

- Lights red when the projector is in stand-by mode.
- Lights green during operations.

⑥ **ON/STANDBY button**

Turn the projector on or off (page 17, 18).

⑦ **AUTO SETUP button**

Correct vertical keystone distortion and adjust computer display parameters such as Fine sync., Total dots, and Picture position.

⑧ **Point ▲▼◀▶ (VOLUME +/-) buttons**

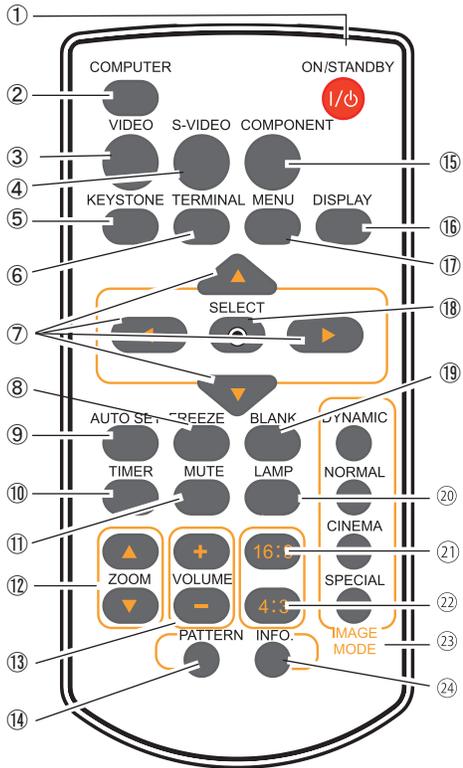
- Select an item or adjust the value in the On-Screen Menu.
- Pan the image in the Digital Zoom +/- mode.
- Adjust the volume level.

⑨ **SELECT button**

- Enter full menu from shortcut.
- Execute the selected item.
- Expand or compress the image in the Digital zoom Mode.

Part Names and Functions

Remote Control



- ① **ON/STANDBY button**
Turn the projector on or off (page 17,18).
- ② **COMPUTER button**
Select Computer 1 or Computer 2 input (page 25,32).
- ③ **VIDEO button**
Select the VIDEO inout source.
- ④ **S-VIDEO button**
Select the S-VIDEO input source.
- ⑤ **KEYSTONE button**
Correct keystone distortion.
- ⑥ **TERMINAL button**
Enable the Computer IN 2 as Input or output

✓ **NOTE:**

To ensure safe operation, please observe the following precautions:

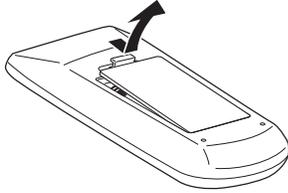
- Do not bend, drop, or expose the remote control to moisture or heat.
- For cleaning, use a soft dry cloth. Do not apply benzene, thinner, spray, or any chemical material.

- ⑦ **Point ▲▼◀▶ button**
 - Select an item or adjust the value in the On-Screen Menu.
 - Pan the image in the Digital zoom +/- mode.
- ⑧ **FREEZE button**
Freeze the picture on the screen.
- ⑨ **Auto Set button**
Correct vertical keystone distortion and adjust computer display parameters such as Fine sync, Total dots, and Picture position.
- ⑩ **TIMER button**
Operate the timer function.
- ⑪ **MUTE button.**
Mute the sound.
- ⑫ **ZOOM ▲▼ button**
Zoom in and out the images.
- ⑬ **VOLUME +/- button**
Adjust the volume level
- ⑭ **PATTERN button**
Test interior display signal
- ⑮ **COMPONENT button**
Select the COMPONENT input source.
- ⑯ **DISPLAY button**
Show current information.
- ⑰ **MENU button**
Open or close menu.
- ⑱ **SELECT button**
 - Execute the selected item.
 - Expand or compress iamges in Digital zoom mode.
- ⑲ **BLANK button**
Temporarily shadow On-Screen images.
- ⑳ **LAMP button**
Select a lamp mode.
- ㉑ **16:9 button**
Select 16:9 On-Screen Display.
- ㉒ **4:3 button**
Select 4:3 On-Screen Display.
- ㉓ **IMAGE MODE button**
Select the image mode.
- ㉔ **INFO. button**
Show lamp information etc.

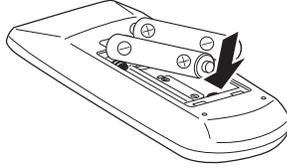
Part Names and Functions

Remote Control Battery Installation

- 1 Open the battery compartment lid.



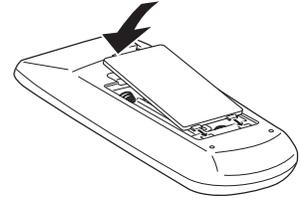
- 2 Install new batteries into the compartment.



Two AAA size batteries

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

- 3 Replace the compartment lid.

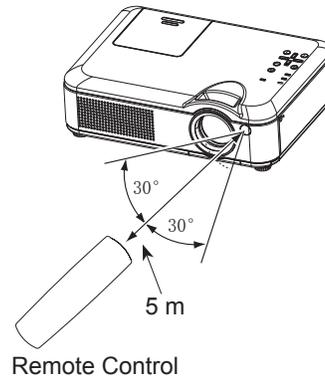


To ensure safe operation, please observe the following precautions:

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

Remote Control Operating Range

Point the remote control toward the projector (Infrared Remote Receiver) when pressing the buttons. Maximum 5 metres and 60 degrees in front of the projector.



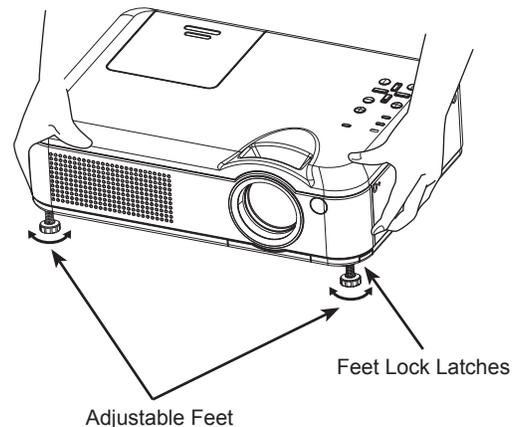
Adjustable Feet

Projection angle can be adjusted up to 10.0 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.



Installation

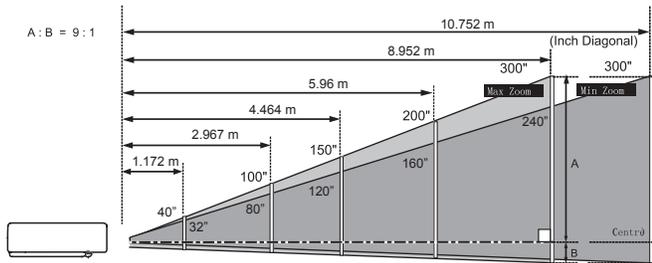
Positioning the Projector

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.

BX27C-SL / BX30C-SL

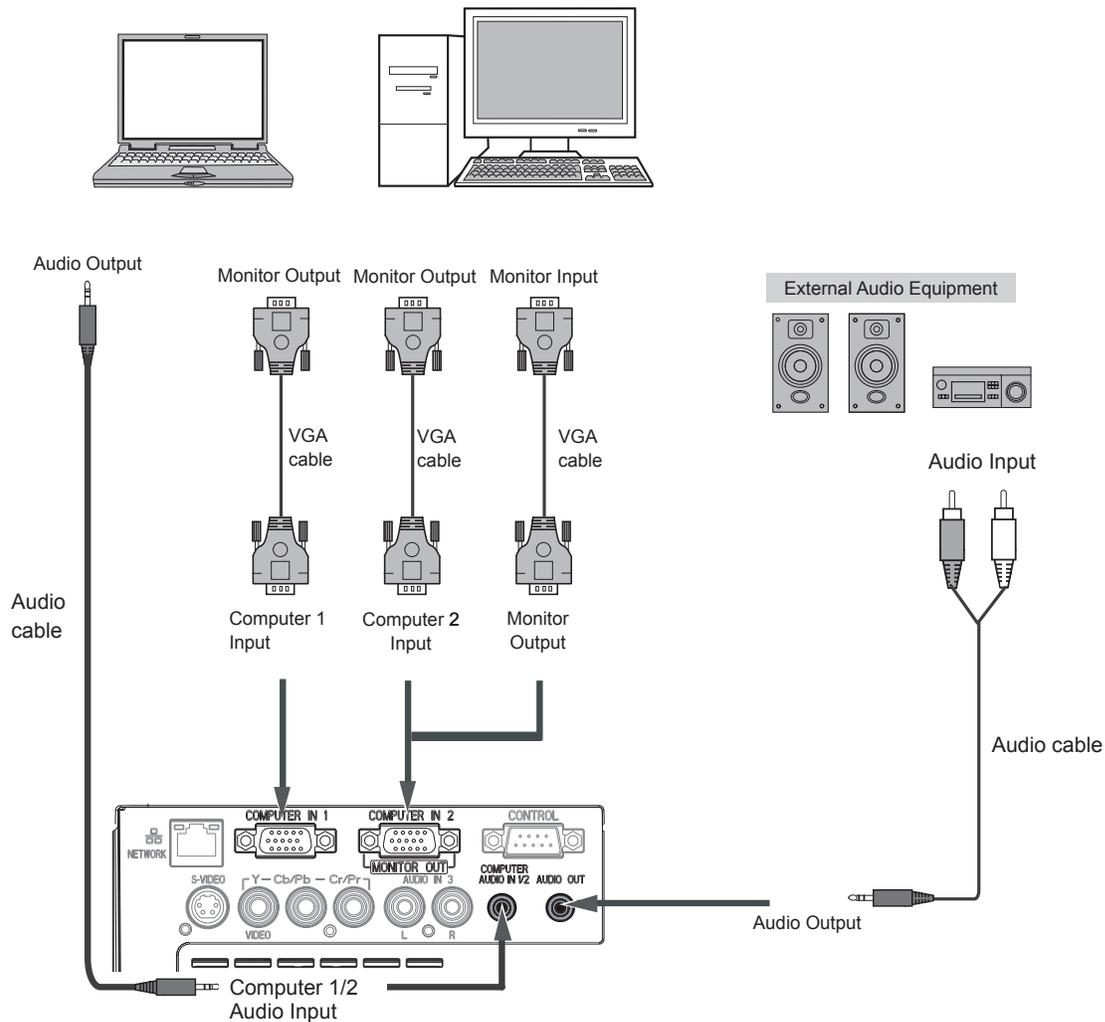


Screen Size (W x H) mm	40"	100"	150"	200"	300"
4 : 3 aspect ratio	813 x 610	2032 x 1524	3048 x 2286	4064 x 3048	6096 x 4572
Zoom (max)	1.172m	2.967 m	4.464 m	5.96 m	8.952 m
Zoom (min)	1.411 m	3.567 m	5.363 m	7.159 m	10.752 m

Connecting to a Computer

Cables used for connection

- VGA Cables (Mini D-sub 15 pin) *
 - Audio Cables
- (*VGA Cable is supplied; other cables are not supplied with the projector.)



✓ Note:

- Input sound to the Computer 1/ Computer 2 AUDIO IN terminal when using the COMPUTER IN 2 / MONITOR OUT and the COMPUTER IN 1 terminal as input.
- When the AUDIO OUT is plugged-in, the projector's built-in speaker is not available.



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

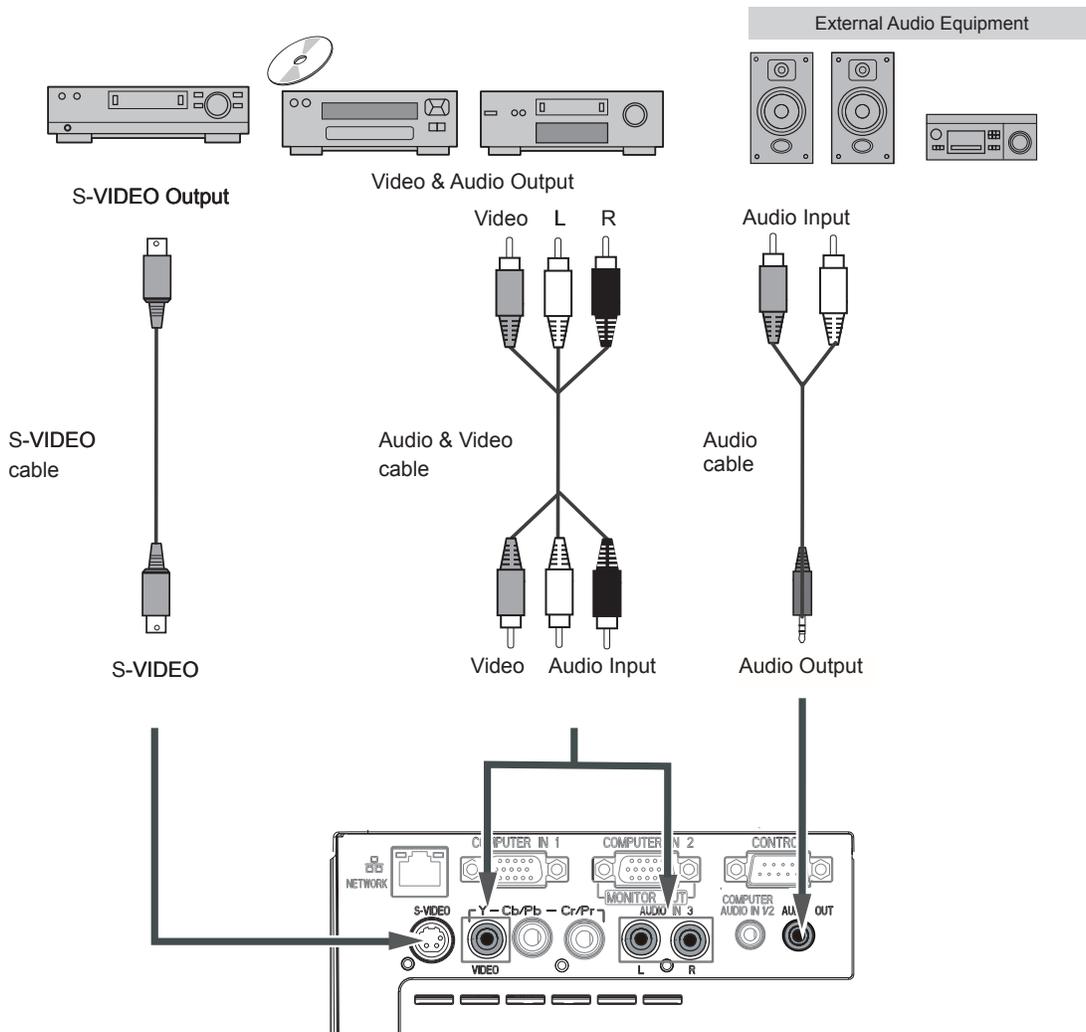
Installation

Connecting to Video Equipment

Cables used for connection

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

(Cables are not supplied with the projector.)



✓NOTE:

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

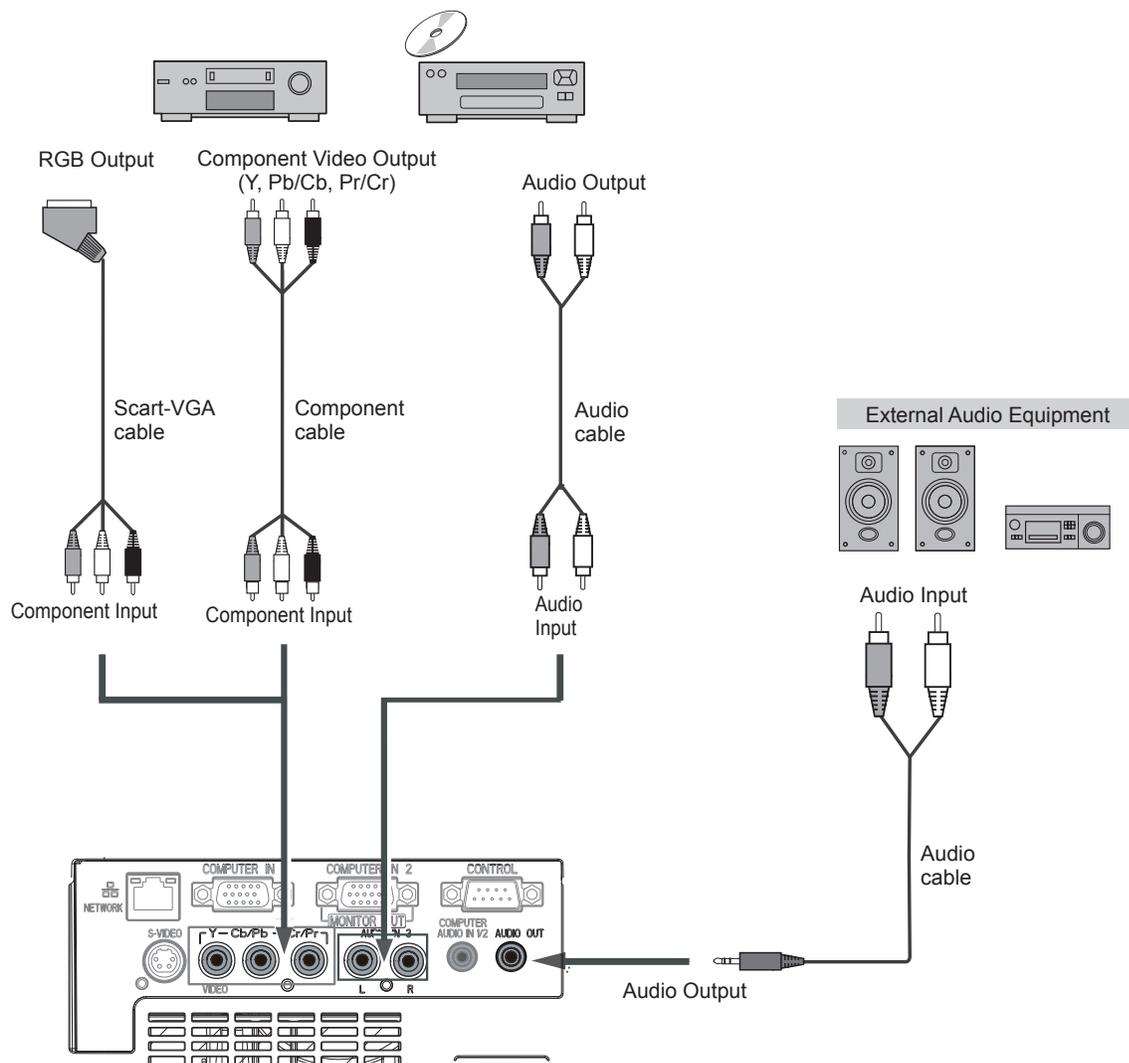


Unplug the power cords of both the projector and external equipment from the AC outlet before connecting cables.

Connecting to Component Video Equipment

Cables used for connection

- Audio Cables
 - Component Cable
 - Component 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.



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

Installation

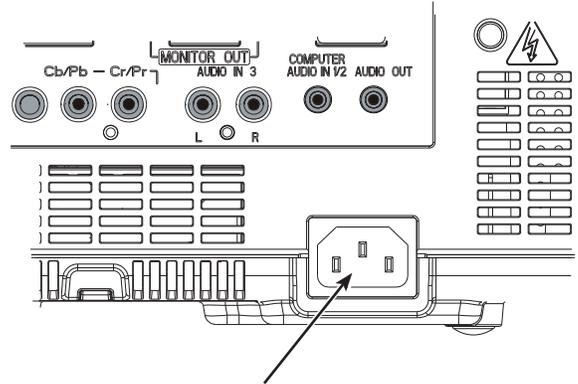
Connecting the AC Power Cord

This projector uses nominal input voltages of 100~240V 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 station.

Connect the projector with all peripheral equipment before turning the projector on. (page 14-16)



Connect the AC power cord (supplied) to the projector.



CAUTION

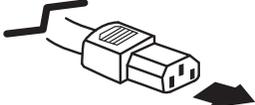
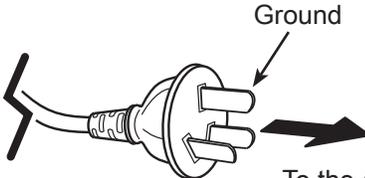
The AC outlet must be near this equipment and must be easily accessible.

✓Note:

Unplug the AC power cord when the projector is not in use for security reasons. 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	Remark	
 <p>To power cord connector on your projector.</p>	 <p>Ground</p> <p>To the AC outlet. (100 - 240 V AC)</p>		European and Korea market
			Chinese market
			UK market
			US market

✓NOTE:

- Inproper cable may influence product performance or even lead to eletric shock, fire and other accidents. Please use original model cables as supplied for safety and best performance of product.
- Frequent cable types: AC power cable, various VGA cable, Audio cable, AV cable, RS232 cable etc.

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.
- 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 30' s countdown starts.
- 4 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:

- When the **Logo select** function is set to **Off**, the logo will not be shown on the screen.
- When **Off** is selected in the **Display** function, Countdown and logo will not be shown on the screen.
- During the countdown period, all operations are invalid.

Enter a PIN code

Use the Pointed ▲ ▼ buttons to enter a number. Press Point ► button to fix the number and move the cursor 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 by pressing ▲ ▼ buttons.

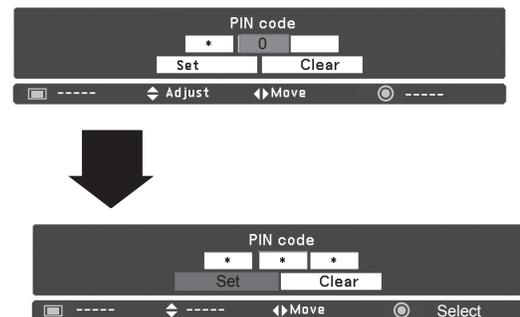
Repeat this step to complete entering a three-digit number. After entering the three-digit number, move the pointer to Set. Press the SELECT button so that you can start to operate the projector.

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. If there is none correct PIN code input within 3 minutes, the projector will power off automatically.

What is PIN code?

PIN 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 three-digit number. Refer to the PIN code lock function in the Setting Menu on pages 43 for locking operation of the projector with your PIN code.



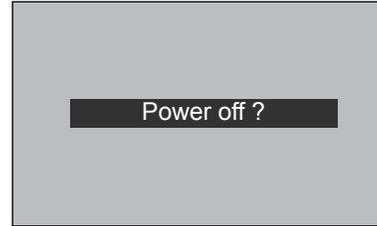
CAUTION ON HANDLING PIN CODE

If you forget your PIN code, the projector can no longer be started. Take a special care in setting a new PIN code; write down the number in a column on page 67 of this manual and keep it on hand. If the PIN code is lost or forgotten, consult your dealer or service center.

Basic Operation

Turning Off the Projector

- 1 Press the ON/STAND-BY button on the top control or on the remote control, and **Power off?** appears on the screen.
- 2 Press the ON/STAND-BY button again to turn off the projector. The POWER indicator starts to blink red, and the cooling fans keep running.
- 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.

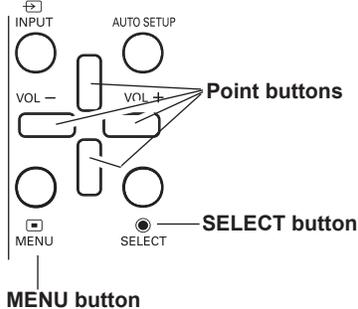
✓NOTE:

- When the On start function is set to On, the projector will be turned on automatically by connecting the AC power cord to an AC outlet
- 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 47.
- While the POWER indicator is blinking, the lamp is being cooled down and the projector cannot be turned on. Wait until the POWER indicator turns red 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.

How to Operate the On-Screen Menu

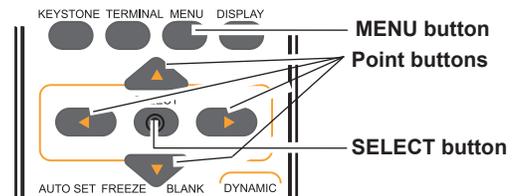
The projector can be adjusted or set via the On-Screen Menu. The menu have been sorted as Menu, Menu has a hierarchical structure, with a main menu that is divided into submenus, which are further divided into other submenus. For each adjustment and setting procedure, refer to respective sections in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

Top Control



*  Stands for “menu” key of top control and remote control.

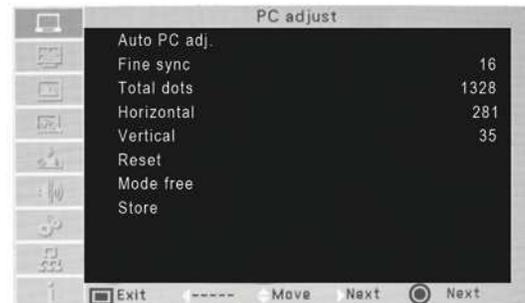
Remote Control



Menu

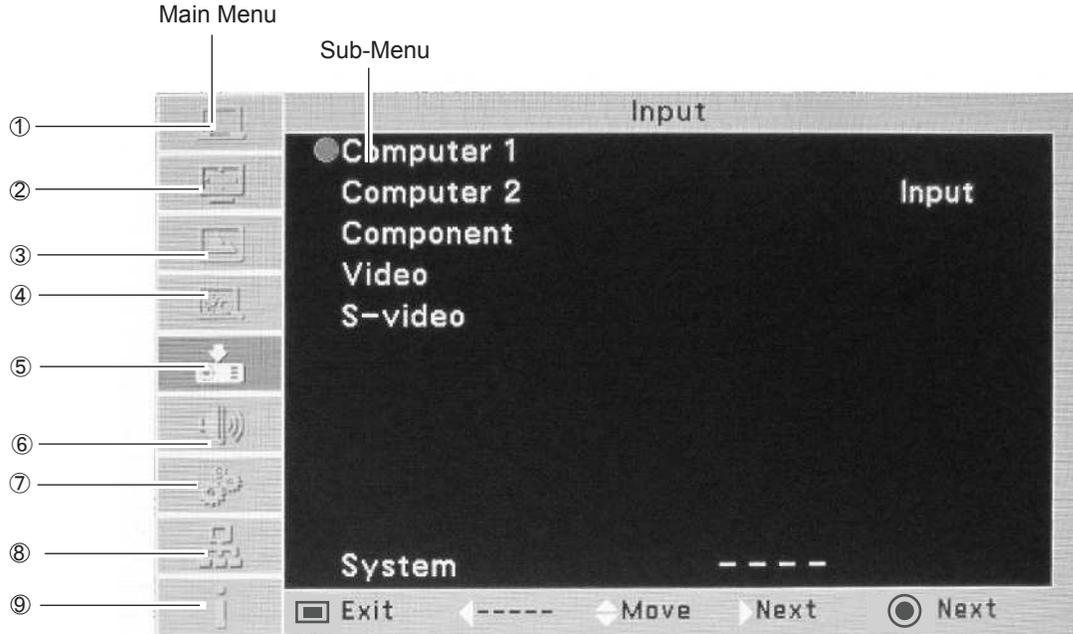
- 1 Press the MENU button on the Top Control to display Menu.
- 2 Press \blacktriangle \blacktriangledown buttons to highlight or select a main menu item. Press Point \blacktriangleright button or SELECT button to access the submenu items.
- 3 Press \blacktriangle \blacktriangledown buttons to select the desired submenu item and press the SELECT button to set or access the selected item.
- 4 Press Point \blacktriangle \blacktriangledown \blacktriangleleft \blacktriangleright button to adjust the setting or switch between each option and press the SELECT button to activate it and return to the submenu.
- 5 Press Point \blacktriangleleft button to return to the main menu. Press the MENU button to exit the On-Screen Menu.

Menu



Basic Operation

Menu Bar



*  Stands for "menu" key of top control and remote control.

 Stands for "select" key of top control and remote control.

① PC adjust

Select Fine sync., Total dots, Horizontal, Vertical and Auto PC adj. to adjust the parameters to match with the PC input signal format.

② Screen

For computer source, image size is set in accordance with input signal format, Normal, 16:9, 4:3 or Digital Zoom +/-.
For video source, image size is set in Normal or 16:9.

③ Image select

For computer source, used to select an image mode from among Dynamic, Normal, Cinema, Blackboard(Green), Colorboard or USER Image.

④ Image adjustment

For computer source, used to adjust computer image [Contrast, Brightness, Color temp., white balance (R/G/B), Sharpness and Gamma].

For Video source, used to adjust picture image [Contrast, Brightness, Color, Tint, white balance (R/G/ B), Sharpness, Gamma, Noise reduction and Progressive].

⑤ Input

Used to select an input source from Computer 1, Computer 2, Component, Video or S-video.

⑥ Sound

Used to adjust the volume or mute the sound.

⑦ Setting

Used to set the projector's operating configurations.

⑧ Network

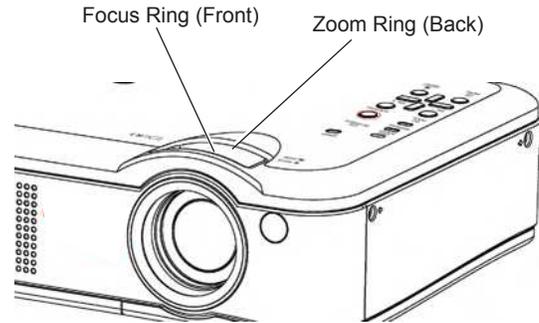
LAN function.

⑨ Information

Display relevant Information.

Zoom and Focus Adjustment

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



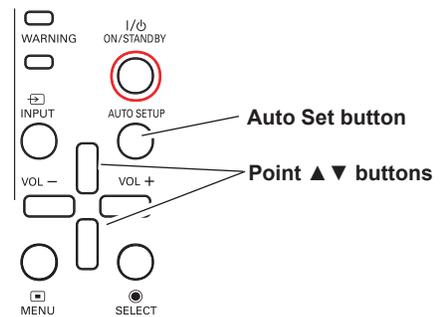
Auto Setup Function

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

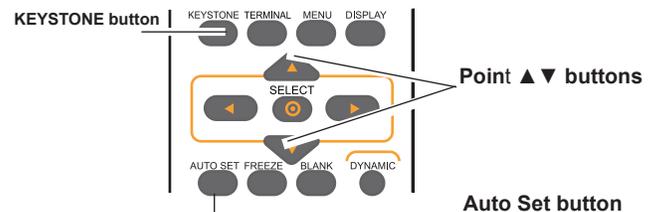
✓NOTES:

- Auto Keystone corrects vertical distortion only; it does not correct horizontal distortion.
- Auto Keystone cannot work when Ceiling On.
- Perfect correction of the image distortion cannot be ensured with the Auto setup function. If the distortion cannot be corrected properly by pressing the AUTO SETUP or AUTO SET button, adjust manually by pressing the KEYSTONE button on the remote control or selecting Keystone in the Setting menu.
- Fine sync., Total dots, Horizontal & 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.
- mark on if there is nothing to do of the key.

Top Control



Remote Control

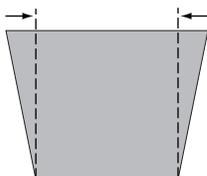


Keystone Correction

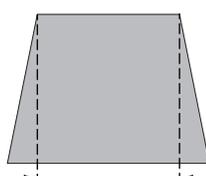
If a projected picture still has keystone distortion after pressing the AUTO SETUP button on the top control or the AUTO SET button on the remote control, correct the image manually as follows:

Press the KEYSTONE button on the remote control. The Keystone dialog box appears. Use the ▲ ▼ buttons to correct keystone distortion. The keystone adjustment can be stored.

Reduce the upper width with the Point ▲ button.



Reduce the upper width with the Point ▼ button.



- An arrow disappears at the maximum correction.
- If you press the KEYSTONE button on the remote control once more while the keystone dialog box is being displayed, the keystone adjustment will be canceled.
- The adjustable range is limited depending on the input signal.

Basic Operation

Sound Adjustment

Direct Operation

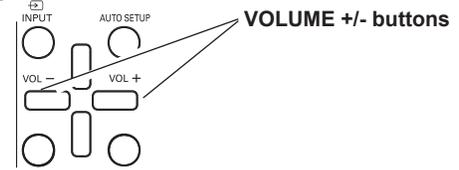
Volume

Press the VOLUME+/- buttons on the top control or on the remote control to adjust the volume.

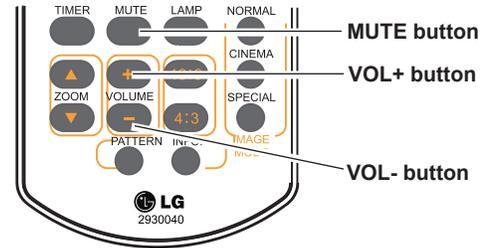
Mute

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

Top Control



Remote Control



Menu Operation

- 1 Press the MENU button to display the Menu. Use the Point ► button to select **Sound**. Press the SELECT button to access the submenu items.
- 2 Press ▲▼ buttons and move the cursor to desired submenu and press SELECT button.

Volume

Press Point ▲ button to turn up the volume; Press Point ▼ button to turn down the volume.

Mute

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

Sound Menu



Remote Control Operation

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

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

Press the COMPUTER 1/2, VIDEO, S-VIDEO and COMPONENT buttons on the remote control to select the input source. Please information for details.

FREEZE button

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

Information button

Display the Lamp counter

ZOOM buttons

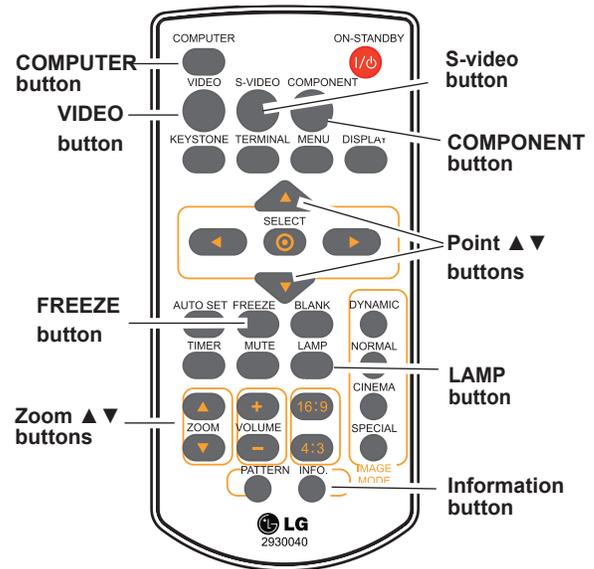
Press the ZOOM ▲▼ buttons on the remote control to enter to the Digital zoom +/- mode.

LAMP button

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

-  Normal..... Normal brightness.
-  Eco..... Lower brightness reduces the lamp power consumption and extends the lamp life.

Remote Control



✓ Note:

See the next page for the description of other buttons.

Basic Operation

BLANK button

Press the **BLANK** button on the remote control to black out the image. To restore to normal, press the BLANK button again or press any other button. The screen changes each time you press the BLANK button as follows.

black out → normal → black out → normal →

TIMER button

Press the **TIMER** button on the remote control. The Timer display 00:00 appears on the screen and the countdown starts (00:00–59:59).

To stop the countdown, press the **TIMER** button. To cancel the Timer function, press the **TIMER** button again.

IMAGE MODE button

Press the **IMAGE MODE** button on the Remote Control to select a desired image mode of the screen.

16:9 button

Choose 16:9 image size on screen display.
Image mode "Normal" will be chosen if 16:9 is unavailable.

4:3 button

Choose 4:3 image size on screen display.
Image mode "Normal" will be chosen if 4:3 is unavailable.

Pattern button

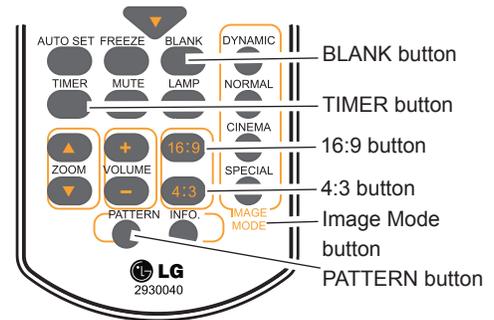
Display of interior signal.



BLANK disappears after 4 seconds if no others button is pressed.



TIME display



✓ **NOTE:**

See the previous page for the description of other buttons.

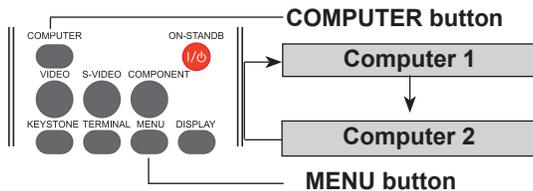
Computer Input

Input Source Selection (Computer 1/Computer 2)

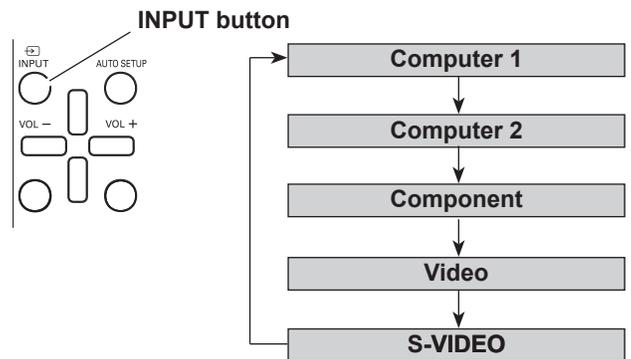
Direct Operation

Choose **Computer 1** or **Computer 2** by pressing the **COMPUTER** button of the Remote Control or on the Top Control.

Remote Control



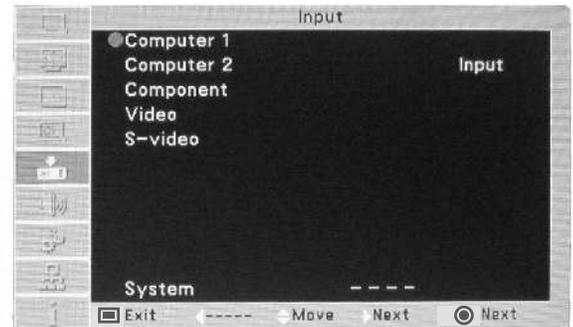
Top Control



Menu Operation

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

Input Menu



Computer Input

Computer System Selection

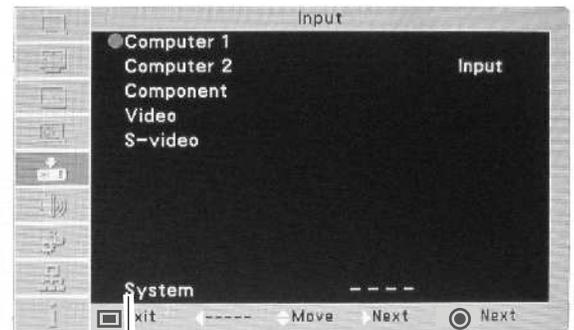
This projector automatically tunes to various types of computers with its Multi-scan system and Auto PC Adjustment. If a computer is selected as a signal source, this projector automatically detects the signal format and tunes to project a proper image without any additional settings.

One of the following messages of the computer system menu may appear when:

Auto 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. If the system menu show: Auto, it can't be selected.

----- There is no signal input from the computer. Check the connection between your computer and the projector.(See "Troubleshooting" on page 52.)

Computer System Menu



The Computer System Menu Selected system is displayed.

Selecting Computer System Manually

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 Point ► or the SELECT button.
- 2 Use the Point ▲▼ buttons to select "System" and then Press Point ► or the SELECT button.
- 3 Use the Point ▲▼ buttons to select the desired system and then press the SELECT button.
- 4 Press Menu button to Exit.

Auto PC Adjustment

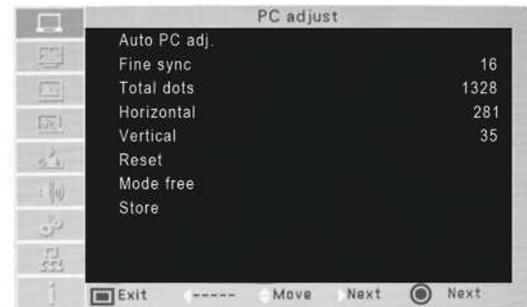
Auto **PC Adjustment** function is provided to automatically adjust Fine sync., Total dots, Horizontal, Vertical to conform to your computer.

Menu Operation

Auto PC Adjustment

- 1 Press the MENU button on the Remote Control to display the On-Screen Menu. Use the Point ▲▼ buttons to select PC adjust and then Press Point ► or the SELECT button.
- 2 Press Point ▲▼ buttons to select “Auto PC Adj” and then press SELECT button.

PC Adjust Menu



To store adjustment parameters

The adjusted parameters from the Auto **PC Adjustment** can be stored in the projector.

✓NOTE:

- Fine sync., Total dots, Horizontal and Vertical position of some computers cannot be fully adjusted with the Auto PC Adjustment function. When the image is not provided properly with this operation, manual adjustments are required.
- Auto PC adj. function is not suitable for the dark side image.

Computer Input

Manual PC Adjustment

Some computers employ special signal formats which may not be tuned by Multi-scan system of this projector. Manual PC Adjustment enables you to precisely adjust several parameters to match those signal formats. The projector has five independent memory areas to store those parameters manually adjusted. It allows you to recall the setting for a specific computer.

- 1 Press MENU button to display on screen menu. Press Point ▲▼ buttons to choose **PC Adjust** button, and then press SELECT button.
- 2 Use the Point ▲▼ buttons to select the desired item and then press the SELECT button to display the adjustment dialog box. Use the Point ◀▶ buttons to adjust the setting value.

PC Adjust Menu



Fine sync

Use the Point ◀▶ buttons to adjust the value, eliminating a flicker from the image displayed

Total dots

Use the Point ◀▶ buttons to adjust the number of total dots in one horizontal period to match your PC image.

Horizontal

Use the Point ◀▶ buttons to adjust the horizontal picture position.

Vertical

Use the Point ◀▶ buttons to adjust the vertical picture position.

Reset:

To reset the adjusted data, you should choose the “Reset” and then Click Yes when the dialogue box appears for confirmation. After that, all adjusted value will return to the initial state.

Mode free:

To delete the saved data, you should select the Mode free and press ▶ or Select. The mode to be deleted will be highlighted. At the time, click Select.

Store:

To store the adjusted data, you should select Store, and press ▶ or Select. Then move the cursor to select the saving mode from the items 1-5. Finally click Select.

✓NOTE:

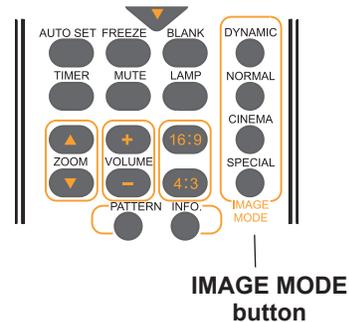
- . When input signal is not included in the RGB Input SIGNAL TABLE on page 56, some Menu of the Manual PC Adjustment function may be disabled.
- . Some menu will be disabled, if the signal is above 140 MHz pixel clocks.

Image Mode Selection

Direct Operation

Select the desired image mode by pressing the IMAGE MODE button on the remote control.

Remote Control



Menu Operation

- 1 Press the MENU button on the Remote Control to display the On-Screen Menu. Use the Point ▲▼ buttons to select **Image Select** and then Press Point ► or the SELECT button.
- 2 Use the Point ▲▼ buttons to select the desired item and then press the SELECT button.

Dynamic

This mode enhance the white-black contrast, you can get a good effect even showed characters in a bright room.

Normal

It is the preset mode of the projector. It balanced the brightness and color, it is good for showing Computer signal to white screen.

Cinema

This mode limited the brightness, and more detail can be seen. It is suitable for seeing a film in a dark environment.

Blackboard (Green)

For the image projected on a blackboard.
This mode help enhance the image projected on a blackboard. This is mainly effective on a green colored board, not truly effective on a black colored board.

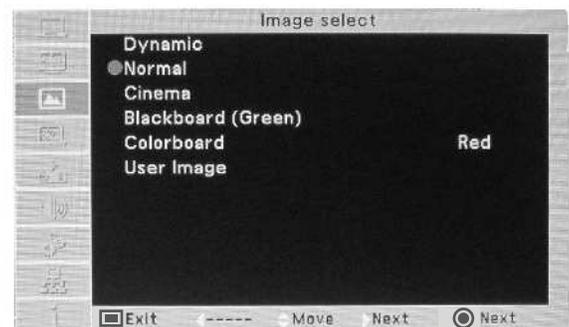
Colorboard

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.

User Image

For viewing with the user preset image mode in the Image Adjust Menu.

Image Select Menu



Computer Input

Image Adjustment

- 1 Press the MENU button to display the On-Screen Menu. Use the Point ▲ ▼ buttons to select **Image Adjust** and then Press Point ► or the SELECT button.
- 2 Use the Point ▲ ▼ buttons select the desired item and then press the SELECT button to display the adjustment dialog box. Use the Point ◀ ▶ buttons to adjust the setting value.

Image Adjust Menu



Contrast

Press Point ◀ button to decrease the contrast; Press Point ► button to increase the contrast.

Brightness

Press Point ◀ button to decrease the brightness; press the Point ► button to increase the brightness

Color temp.

Use the Point ◀ ▶ buttons to select the desired Color temp. level (Low, Mid, or High).Or you change Color temperature with adjusting Red,Green,Blue below:

Red

Press Point ◀ button to lighten red tone; Press Point ► button to deepen red tone.

Green

Press Point ◀ button to lighten green tone; Press Point ► button to deepen green tone.

Blue

Press Point ◀ button to lighten blue tone; Press Point ► button to deepen blue tone.

Sharpness

Press Point ◀ button to decrease the sharpness of the image; Press Point ► button to increase the sharpness of the image.

Gamma

Use the Point ◀ ▶ buttons to adjust the gamma value to obtain a better balance of contrast.

✓NOTE:

- When White balance **Red**, **Green** or **Blue** is adjusted, **Color temp.** will change to **USER**.
- When **Blackboard(Green)** or **Colorboard** is selected in Image select, **Color temp.** will change to **Blackboard** or **Colorboard**.

Screen Size Adjustment

This projector has the picture screen resize function, which enables you to customize the image size.

- 1 Press the MENU button to display the On-Screen Menu. Use the Point ▲▼ buttons to select **Screen** and then Press Point ► or the SELECT button.
- 2 Use the Point ▲▼ buttons select the desired item and then press the SELECT button.

Normal

This function enables the same scale ratio of image as signal source.

16:9

Display a scale ratio 16:9 normal video image.

4:3

Display a scale ratio 4:3 normal video image.

For Zooming in and out the images

Digital zoom +

Select Digital zoom +. The On-Screen Menu disappears and Zoom + appears. Press the SELECT button to expand the image size. The image can be expanded upto 16 times maximum. Use the Point ▲▼◀▶ buttons to pan the image. The Panning function can work only when the image is larger than the screen size.

A projected image can be also expanded by pressing the ▲ or the SELECT button on the remote control.

Digital zoom-

Select Digital zoom -. The On-Screen Menu disappears and zoom - appears. Press the SELECT button to compress image size. The image can be compressed into the 1/4 times of its initial size.

The projected image can be also compressed by pressing the ▼ or the SELECT button on the remote control.

To exit the Zoom +/- mode, press any button except the ZOOM ▲▼ buttons and the SELECT buttons.

To return to the previous screen size, select a screen size from the Screen Size Adjustment Menu or select an input source from the Input Source Selection Menu again, or adjust the screen size with the ZOOM ▲▼ buttons.

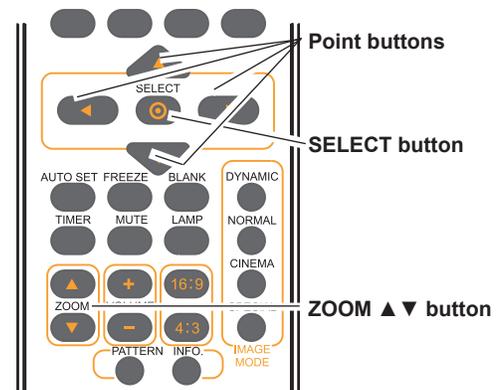
NOTE:

Digital zoom doesn't work when DCLK is higher than 140MHz (refer to the Timing table, page 56).
Digital zoom doesn't work when the SCREEN is 4 : 3 .

Screen Menu



Remote Control

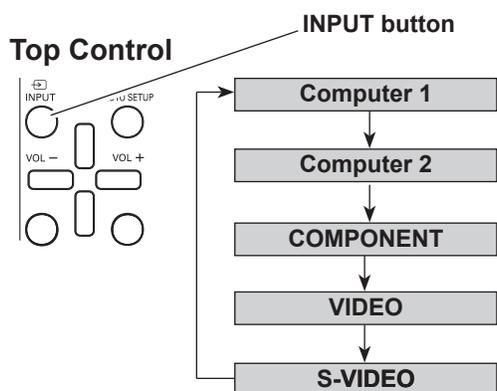


Video Input

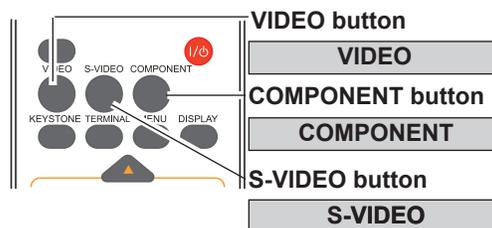
Input Source Selection (VIDEO, S-video, Component)

Direct Operation

Choose **Video**, **S-video** or **Component** by pressing the INPUT button on the top control, or the VIDEO button, the S-video button or the Component button on the remote control.



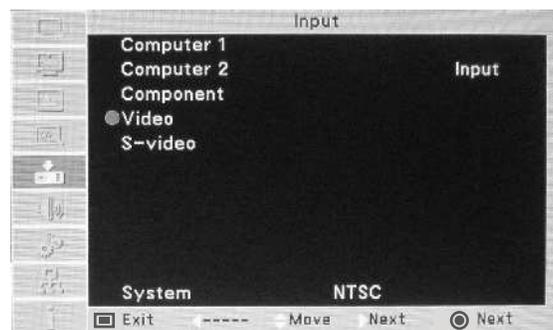
Remote Control



Menu Operation

- 1 Press the MENU button to display the On-Screen Menu. Press Point **▲▼** buttons to select **Input** and then press Point **▶** or the SELECT button.
- 2 Use the Point **▲▼** buttons to select either Video or S-video and then press the SELECT button.

Input Menu



COMPONENT When the input source is coming from video equipment connected to the COMPONENT terminal with a Component Cable, select **Component**.

VIDEO When video input signal is connected to the VIDEO jack, select **Video**.

S-VIDEO When video input signal is connected to the S-VIDEO jack, select **S-video**.

Video System Selection

- 1 Press the MENU button to display the On-Screen Menu. Press Point ▲▼ buttons to select **Input** and then press Point ► button or the SELECT button.
- 2 Press Point ▲▼ buttons to select **COMPONENT**, **VIDEO** or **S-VIDEO** and then press SELECT button.
- 3 Press Point ▲▼ buttons to select **System** and then press Point ► button or SELECT button. Press Point ▲▼ button select the desired system and then press the SELECT button.

VIDEO or S-VIDEO

Auto

The projector automatically detects an incoming video system, and adjusts itself to optimize its performance. When Video System is PAL-M or PAL-N, select the system manually.

PAL/SECAM/NTSC/NTSC4.43/PAL-M/PAL-N

If the projector cannot reproduce proper video image, select a specific broadcast signal format from among **PAL**, **SECAM**, **NTSC**, **NTSC 4.43**, **PAL-M**, and **PAL-N**.

COMPONENT

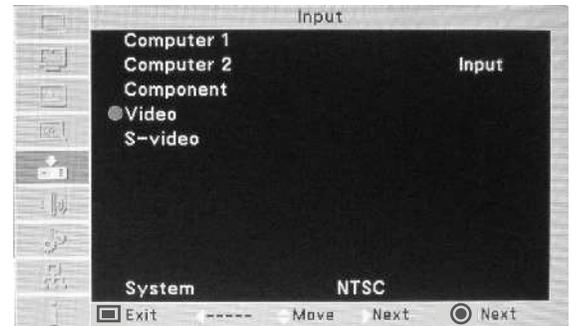
Auto

The projector automatically detects an incoming video signal, and adjusts itself to optimize its performance.

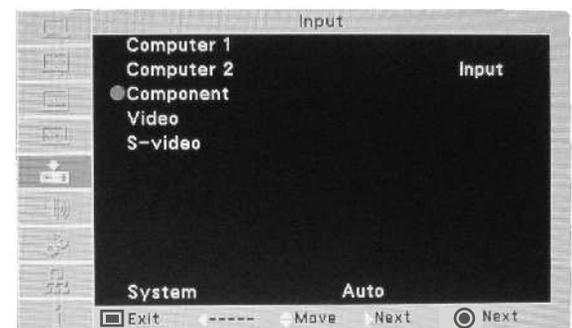
COMPONENT VIDEO SIGNAL FORMAT

If the projector cannot reproduce proper video image, select a specific component video signal format from among **480i**, **576i**, **480p**, **576p**, **720p**, **1035i**, and **1080i**.

VIDEO System Menu (Video or S-video)



VIDEO System Menu (Component)



Video Input

Image Mode Selection

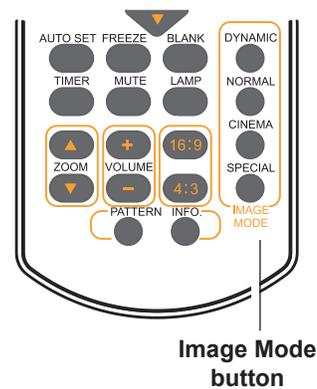
Direct Operation

Select the desired image mode by pressing Image Mode button on the Remote Control.

Menu Operation

- 1 Press the MENU button on the Remote Control to display on screen menu. Press ▲▼ buttons to select **Image Select** and then press Point ► button or the SELECT button.
- 2 Use the Point ▲▼ buttons to select the desired item and then press the SELECT button .

Remote Control



Dynamic

This mode enhance the white-black contrast, you can get a good effect even showed characters in a bright room.

Normal

It is the preset mode of the projector. It balanced the brightness and color, it is good for showing Computer signal to white screen.

Cinema

This mode limited the brightness, and more detail can be seen. It is suitable for seeing a film in a dark environment.

Blackboard (Green)

For the image projected on a blackboard.
This mode help enhance the image projected on a blackboard. This is mainly effective on a green colored board, not truly effective on a black colored board.

Colorboard

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.

USER Image

For viewing with the user preset image mode in the Image Adjust Menu.

Image Select Menu

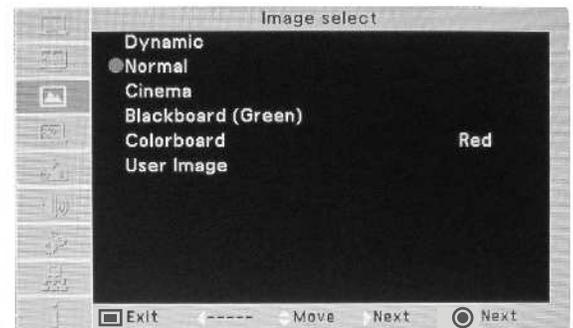


Image Adjustment

- 1 Press the MENU button to display the On-Screen Menu. Press Point ▲▼ button to select Image Adjustment and then press Point ► button or SELECT button.
- 2 Press Point ▲▼ buttons to select the desired item and then press the SELECT button to display the adjustment dialog box. Press Point ◀▶ button adjust the setting value.

Contrast

Press Point ◀ button decrease Contrast; Press Point ► button increase Contrast.

Brightness

Press Point ◀ button decrease Brightness; Press Point ► button increase Brightness.

Color

Press Point ◀ button decrease the intensity of the color; Press Point ► button increase the intensity of the color.

Tint (only in NTSC)

Press Point ◀▶ button to adjust the tint value to get a proper color balance.

Red

Press Point ◀ button lighten red tone; Press Point.► button deepen red tone.

Green

Press Point ◀ button lighten green tone; Press Point.► button deepen green tone.

Blue

Press Point ◀ button lighten blue tone; Press Point.► button deepen blue tone.

Sharpness

Press Point ◀ button to decrease the sharpness of the image; Press Point ► button to increase the sharpness of the image.

Gamma

Use the Point ◀▶ buttons to adjust the gamma value to obtain a better balance of contrast.

Noise reduction

Enable this item to reduce the snow interference and achieve more smooth and clear image.

Progressive

An interlaced video signal can be displayed in progressive mode. Select one of the following options.

OffDisabled.

L1 For an active picture.

L2 For a still picture.

FilmFor watching a film. With this function, the projector reproduces pictures faithful to the original film quality.

Image Adjust Menu



Video Input

Screen Size Adjustment

This projector has the picture screen resize function, which enables you to customize the image size.

- 1 Press Menu button on the Remote Control to display on screen menu. Press ▲▼ buttons select **Screen** and then press Point ► button or SELECT button.
- 2 Press ▲▼ buttons select the desired item and then press the SELECT button.

Normal

This function enables the same scale ratio of image as signal source.

16 : 9

Provide the image at the 16:9 wide screen ratio.

Screen Menu



Setting

Setting

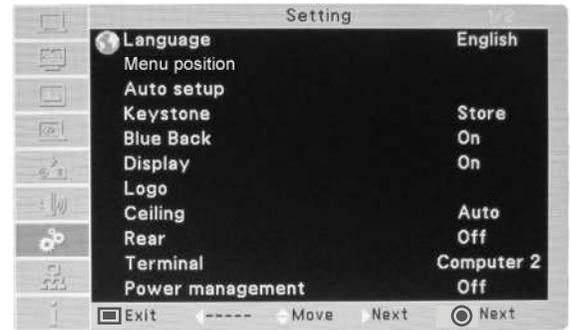
This projector has a Setting menu that allows you to set up the other various functions described below.

- 1 Press Menu button on the Remote Control to display on screen menu. Press ▲▼ buttons select the **Setting** and then press Point ► button or SELECT button to access the submenu items.
- 2 Use the Point ▲▼ buttons to select the desired item and then press the Point ► or SELECT buttons to access the selected item.
- 3 Use the Point ▲▼ buttons select the desired item and then press the SELECT button.

Language

Language used in the On-Screen Menu is available in 17 languages.

Setting Menu



Menu position

1. This function is used to change the position of the On-Screen Menu. Select **Menu position** and press the SELECT button.
2. Use the point ▲▼ to select the desired position: Upper left, Upper right, Center, Lower left, Lower right.

Setting

Auto setup

This function enables Input search, Auto Keystone correction and Auto PC adjustment by pressing the AUTO SETUP button on the top control or the AUTO SET button on the remote control. Settings for those functions can be altered as follows:

Input search

This function detects the input signal automatically. When a signal is found, the search will stop. Use the Point ▲▼ buttons to select one of the following options.

OffInput search will not work.

On.....Input search works under the following situation.

- When turning on the projector by pressing the ON/STAND-BY button on the top control or the remote control.
- When pressing the AUTO SET button on the remote control.
- When pressing the AUTO SETUP button on the top control.
- When the current input signal is cut off.

*If the Blank or Freeze function is active, cancel it to activate the Input search. It is also unavailable when On-Screen menu is displayed.

Auto PC adj.

On.....Press Auto Set button on the Top Control or remote control to enable Auto PC Adjustment function.

Off Disables Auto PC Adjustment.

Auto Keystone

Off Disables Auto Keystone.

Auto Always works and corrects keystone distortion according to the projector's tilt.

ManualActivate this function by pressing Auto Set on the Top Control or the Remote Control.

Keystone Correction

This function is used to store or reset the keystone correction when the AC power cord is unplugged. Press Point ► button or SELECT button to access the submenu items.

Use the Point ▲▼ buttons to switch between each option.

Store Keep the keystone correction even when the AC power cord is unplugged.

Reset Release the keystone correction when the AC power cord is unplugged.

To correct keystone distortion, press the SELECT button.

Keystone appears on the screen. Use the Point ▲▼ buttons to correct keystone distortion.

Blue back

Select the background screen for when no input signal is detected. Press the Point ▲▼ buttons to switch between each option.

On..... Display Blue background

Off..... Display Black background

✓NOTE:

- Only the last selected input source can be detected.
- If the INPUT button on the top control or the COMPUTER 1/2 buttons, VIDEO or S-video or COMPONENT buttons on the remote control is pressed during Input search is in progress, Input search will stop and go back to the previous input signal.
- **Input Search, Auto PC Adj. and Auto Keystone** cannot be set **Off** at the same time.
- **Auto Keystone** corrects vertical distortion only, not correct horizontal distortion.
- please use the keystone manually when the auto keystone can not adjust the image square perfectly.
- **Auto Keystone** doesn't work when the **Ceiling On**.
- Perfect correction of the image distortion cannot be ensured with the Auto setup function. If the distortion is not corrected properly by pressing the AUTO SETUP or AUTO SET button, adjust manually by pressing the KEYSTONE button on the remote control or selecting **Keystone** in the Setting menu.
- **Fine sync., Total dots, Horizontal and Vertical** position of some computers cannot be fully adjusted with the Auto PC Adjustment function. When the image is not provided properly with this operation, manual adjustments are required.
-  mark on if there is nothing to do of the auto set up key.

Display

This function decides to display logo or not.

On..... Show logo .

Off..... Show the input image instead of the logo.

Logo (Logo and Logo PIN code lock settings)

This function allows you to customize the screen logo with Logo select, Capture, Logo PIN code lock and Logo PIN code change functions.

✓NOTE:

When On is selected in the Logo PIN code lock function, Logo select and Capture functions cannot be selected.

Logo select

This function decides on the starting-up display from among following options.

User Show the image you captured.

Default Show the factory-set logo.

Off Show the countdown display only.

Capture

This function enables you to capture an image being projected to use it for a starting-up display.

Select **Capture** and press the SELECT button. A confirmation box appears and select **Yes** to capture the projected image.

After capturing the projected image, go to the Logo select function and set it to **User**. Then the captured image will be displayed when you turn on the projector next time.

Logo PIN code lock

This function prevents an unauthorized person from changing the screen logo.

Off The screen logo can be changed freely from the Logo Menu.

On The screen logo cannot be changed without a Logo PIN code.

If you want to change the **Logo PIN code lock** setting, press the SELECT button and the Logo PIN code dialog box appears. Enter a Logo PIN code by following the steps below.

Setting

Logo PIN code lock

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 three-digit number.

After entering the three-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 Logo PIN code, **Logo PIN code** and the number (***) will turn red for a moment. Enter the correct Logo PIN code all over again.

Change the Logo PIN code lock setting

Use the Point ▲▼ buttons to switch **On** or **Off**, and then press the SELECT button to make a choice.

Logo PIN code change

Logo PIN code can be changed to your desired three-digit number. Press the SELECT button to select **Logo PIN code change**. **Logo Pin code** dialog box appears, use the Point ▲▼ buttons to enter the correct code. The New Logo PIN code input dialog box appears. Set a new Logo PIN code, confirmation box appears, choose **yes** to set the new Logo Pin code.

Be sure to note the new Logo PIN code and keep it on hand. If you lost the number, you could no longer change the Logo PIN code setting.

CAUTION:
WHEN YOU HAVE CHANGED THE LOGO PIN CODE, WRITE DOWN THE NEW PIN CODE IN COLUMN OF THE LOGO PIN CODE NO. MEMO ON PAGE 67, AND KEEP IT SECURELY. IF THE LOGO PIN CODE IS LOST OR FORGOTTEN THEN ITS SETTING CAN NO LONGER BE CHANGED.

Ceiling

This function is used to project the image from a ceiling-mounted projector.

OffDisable this function.

AutoThe picture will be reversed automatically according to the mounted position.

On.....The picture will be reversed.

Rear

This function is used to project the image from rear of the screen.

OffDisable this function.

On.....Picture will be horizontally reversed.

Terminal

The COMPUTER IN 2/MONITOR OUT terminal on the back of the projector is switchable for computer input or monitor output. (See page 8) Select Computer2 or Monitor Out with the Point ▲ ▼ buttons.

Computer 2.....Computer 2 Input

Monitor OutMonitor Output

Power management

For reducing power consumption as well as maintaining the lamp life, the Power management function turns off the projection lamp when the projector is not operated and without signal for a certain period.

Select one of the following options:

Ready When the lamp has been fully cooled down, the POWER indicator changes to green blinking. In this condition, the projection lamp will be turned on very fast if the input signal is reconnected or any button on the top control or remote control is pressed.

Shut down When the lamp has been fully cooled down, the power will be turned off.

Off Power management function is off.

Timer If the input signal is interrupted and no button is pressed for more than 30 seconds, the timer display with No signal appears. It starts the countdown until the lamp is turned off. Use the Point ▲ ▼ buttons to set the Timer(1~30min.).

✓ NOTE:

Factory default is Ready: 5 Min.

Power management



Time left before Lamp is off.

On Start

This function enables projector auto power on with detection connection with AC power cord.

Setting

Standby mode

There are two standby modes in the projector.

Eco Low power standby mode, in this mode, network, serial control and monitor output functions are disabled.

Normal in this model, network, serial control and monitor output functions can be used.

Closed Caption

Closed Caption is a text version of the program sound or other information displayed on the screen. If the input signal contains closed captions, you can turn on the feature and switch the channels. Press the Point ▲ ▼ buttons to select Off, CC1, CC2, CC3 or CC4.

✓ NOTE:

The Closed Caption is available only under the situation below.

- When the input signal is NTSC of composite and S-video, and the system is set according to the signal or set on **Auto**.
- The system must be set on **NTSC** or **Auto** in Video System Selection. (Page 33)
- The icon of Closed Caption is displayed in gray while it is not available.
- The Closed caption is unavailable when On-Screen menu and Timer are displayed.

Lamp Control

This function allows you to change brightness of the screen.



Normal Normal brightness



Eco Lower brightness reduces the lamp power consumption and extends the lamp life.

Test Pattern

This function enables you to test & set interior signals. There are 12 types of test pattern: gray scale, raster gray, color bar, red, green, blue, black, white, cross hatch.

Security (Key lock and PIN code lock)

This function allows you to use the Key lock and PIN code lock function to set the security for the projector operation.

Key lock (Except ON-STANDBY Key)

This function locks the top control and remote control buttons to prevent operation by unauthorized persons. Select **Key lock** and then press the SELECT button, and select the desired item by pressing the Point ▲ ▼ buttons.



..... Unlocked.



..... Lock the operation of the top control. To unlock, use the remote control.



..... Lock the operation of the remote control. To unlock, use the top control.

If the top control accidentally becomes locked and you do not have the remote control nearby or there is something wrong with your remote control, contact the dealer where you purchased the projector or the service center.

“   ” mark on while RC key pressed when RC locked.

“   ” mark on while top control pressed when top control locked.

PIN code lock

This function prevents the projector from being operated by unauthorized persons and provides the following setting options for security.

Off Unlocked.

On Enter the PIN code every time turning on the projector.

Whenever you change the PIN code lock setting or the PIN code (the three-digit number), you are required to enter the PIN code. The “111” is set as the initial PIN code at the factory.

If you want to change the PIN code lock setting, Press the SELECT button and the PIN code dialog box appears.

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 three-digit number.

After entering the three-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.

Change the PIN code lock setting

Use the Point ▲▼ buttons to select Off or On, and then press the **SELECT** button to make a choice.

PIN code change

The PIN code can be changed to your desired three-digit number. Press ▲▼ SELECT button to select PIN code change. Pin code dialog box appears, use the Point ▲▼ buttons to enter the correct code. The New PIN code input dialog box appears. Set a new PIN code.

CAUTION:

WHEN YOU HAVE CHANGED THE PIN CODE, WRITE DOWN THE NEW PIN CODE IN COLUMN OF THE PIN CODE NO. MEMO ON PAGE 67, AND KEEP IT SECURELY. ONCE YOU ENTER WRONG PIN CODE, THE PROJECTOR CAN NOT BE STARTED.

Setting

Cooling fast

There are the following options in the cooling fans operation when the projector is turned off.

ON ... Faster and louder-sound than the normal operation, but it takes less time than off option.

OFF... Normal operation with about 60 seconds cooling times.

High land

This projector provides Fan control function in the "Setting" menu. Choose the running speed of cooling fans from the following options according to the ground elevation where you use the projector.

Off.....Normal speed.Set this function to "Off " when using the projector in non-high altitude environment.

On.....Faster than Off mode.Select this mode when using the projector in high altitudes (above 2000m) where the fans are weak in cooling effect.

Filter Counter

This function is used to set a frequency for the filter cleaning.

When the projector reached a specified time between cleanings, a Filter warning icon appears on the screen, notifying the cleaning is necessary. After cleaning the filter, be sure to select RESET and set the timer. The Filter warning icon will not turn off until the filter counter is reset.

Filter counter: The time of filter using after last cleaning.

Timer: The time between cleanings,100 hours,200 hours,300 hours.

Filter counter reset: Reset the filter counter.

Filter warning



Filter warning icon

Factory default

This function returns all setting values except for the **User logo**, **PIN code lock**, **Logo PIN code lock**, **Lamp counter** and **Filter counter** to the factory default settings.

Information

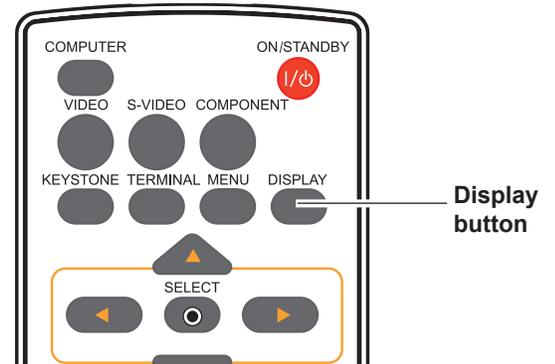
Input Source Information Display

The Information Menu is used for checking the status of the image signal being projected and the operation of the projector.

Direct Operation

Press the **DISPLAY** button on the remote control to display information.

Remote Control



Menu Operation

Press Input on the Top Control and then press SELECT button to display on screen menu. Press the Point ▲▼ buttons to select the Information. The Information Menu is displayed.

See below for displayed information.

Input

The selected input source is displayed.

H-sync freq .

The horizontal frequency of the input signal is displayed in KHz, or - - - -KHz when no signal.

V-sync freq .

The vertical frequency of the input signal is displayed in Hz, or - - - - Hz when no signal. Numbers of Hz doubles when during Interlace.

Screen

The selected screen size is displayed.

Language

The selected language is displayed.

Lamp status

The selected lamp mode is displayed.

Lamp counter

The cumulative lamp operating time is displayed.

Power management

Off, Ready, or Shut down is displayed.

Key lock(Except ON-STANDBY key)

Display Off  , Remote Control  or the Projector  .



Maintenance and Cleaning

WARNING indicator

The Warning indicator shows the state of the function which protects the projector. Check the state of the Warning indicator and the POWER indicator to take proper maintenance.

The projector is shut down and the warning indicator is blinking red.

When the temperature inside the projector reaches a certain level, the projector will be automatically shut down to protect the inside of the projector. The POWER indicator is blinking while the projector is being cooled down. When the projector has cooled down enough (to its normal operating temperature), it can be turned on again by pressing the ON/STAND-BY button.

✓ **NOTE:**

The WARNING indicator continues to blink even after the temperature inside the projector returns to normal. When the projector is turned on again, the WARNING indicator stops blinking.

Then check the matters below:

- Did you provide appropriate space for the projector to be ventilated? Check the installing condition to see if the air vents of the projector are blocked.
- Has the projector been installed near an Air-Conditioning/ Heating Duct or Vent? Move the installation of the projector away from the duct or vent.
- Is the filter clean? Clean the filter periodically.

The projector is shut down and the warning indicator lights red.

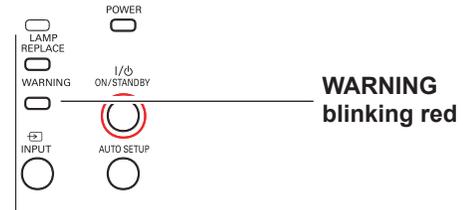
When the projector detects an abnormal condition, it is automatically shut down to protect the inside of the projector and the Warning indicator lights red. In this case, unplug the AC power cord and reconnect it, and then turn the projector on once again to verify operation. If the projector cannot be turned on and the Warning indicator still lights red, unplug the AC power cord and contact the service station.



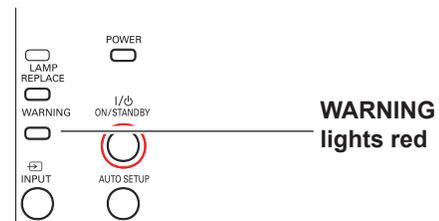
CAUTION

DO NOT LEAVE THE PROJECTOR WITH THE AC POWER CORD CONNECTED UNDER AN ABNORMAL CONDITION. IT MAY RESULT IN FIRE OR ELECTRIC SHOCK.

Top Control



Top Control



Maintenance and Cleaning

Cleaning the Filters

Filter prevents dust from accumulating on the optical elements inside the projector. Should the filters become clogged with dust particles, it will reduce cooling fans' effectiveness and may result in internal heat buildup and adversely affect the life of the projector. If a "Filter warning" icon appears on the screen, clean the filters immediately. Clean the filters by following the steps below.

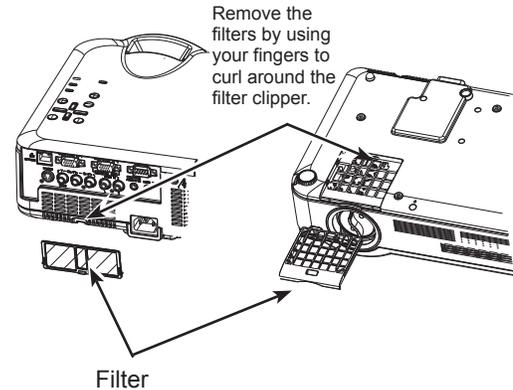
- 1 Turn off the projector, and unplug the AC power cord from the AC outlet.
- 2 Turn the projector over and remove the filters. (Two Filters available on this projector.)
- 3 Clean the filters softly by using a brush.
- 4 Replace the filters properly. Make sure that the filters are fully inserted to the projector.



CAUTION

Do not operate the projector with the filters removed. Dust may accumulate on the optical elements degrading picture quality.

Do not put anything into the air vents. Doing so may result in malfunction of the projector.



RECOMMENDATION

we recommend avoiding dusty/smoky environments when you operate the projector. Usage in these environments may cause poor image quality.

When using the projector under dusty or smoky conditions, dust may accumulate on a lens, LCD panels, or optical elements inside the projector degrading the quality of a projected image. When the symptoms above are noticed, contact your authorized dealer or service station for proper cleaning.

Resetting the FilterCounter

Be sure to reset the Filter counter after cleaning or replacing the filters.

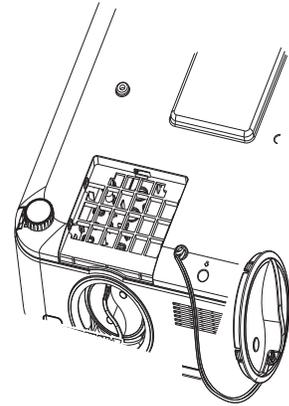
- 1 Press the MENU button to display the On-Screen Menu. Press ▲▼ buttons to select the **Setting** Menu and then press the Point ► button or **SELECT** button.
- 2 Press ▲▼ buttons to select Filter counter and then press Point ► or **SELECT** button. Press ▲▼ buttons to select **Filter counter Reset** and then press **SELECT** button. The Filter counter Reset? appears. Select **Yes** to continue.
- 3 Another confirmation dialog box appears, select **Yes** to reset the Filter counter.

Attaching the Lens Cap

When moving this projector or while not using it over an extended period of time, attach the lens cap.

Attach the lens cap according to the following procedures.

- 1** Thread the string through the hole on the lens cap and then tie a knot in the string to secure it in place.
- 2** To pass the other end of the string into the hole on the top of the projector and pull at it.

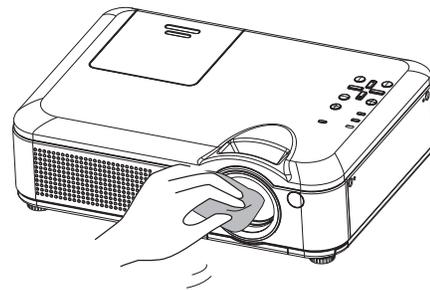


Cleaning the Projection Lens

Unplug the AC power cord before cleaning.

Gently wipe the projection lens with a cleaning cloth that contains a small amount of non-abrasive camera lens cleaner, or use a lens cleaning paper or commercially available air blower to clean the lens.

Avoid using an excessive amount of cleaner. Abrasive cleaners, solvents, or other harsh chemicals might scratch the surface of the lens.

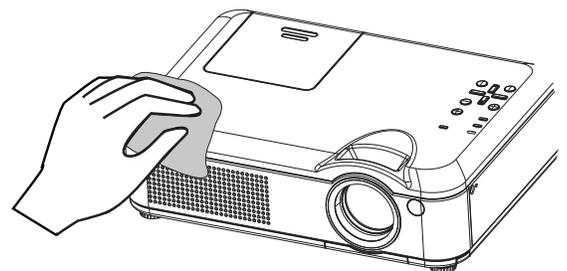


Cleaning the Projector Cabinet

Unplug the AC power cord before cleaning.

Gently wipe the projector body with a soft dry cleaning cloth. When the cabinet is heavily soiled, use a small amount of mild detergent and finish with a soft dry cleaning cloth. Avoid using an excessive amount of cleaner. Abrasive cleaners, solvents, or other harsh chemicals might scratch the surface of the cabinet.

When the projector is not in use, put the projector in an appropriate carrying case to protect it from dust and scratches.



Maintenance and Cleaning

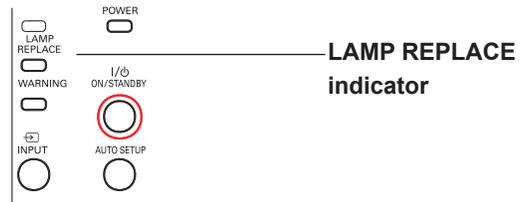
Lamp Replacement

When the projection lamp of the projector reaches its end of life, the Lamp replacement icon appears on the screen and LAMP REPLACE indicator lights yellow. Replace the lamp with a new one promptly. The timing when the LAMP REPLACE indicator should light is depending on the lamp mode.



Lamp replacement icon

Top Control



CAUTION

Allow a projector to cool for at least 45 minutes before you open the Lamp Cover. The inside of the projector can become very hot.



CAUTION

When replacing the lamp because it has stopped illuminating, there is a possibility that the lamp may be broken.

If replacing the lamp of a projector which has been installed on the ceiling, you should always assume that the lamp is broken, and you should stand to the side of the lamp cover, not underneath it. Remove the lamp cover gently. Small pieces of glass may fall out when the lamp cover is opened. If pieces of glass get into your eyes or mouth, seek medical advice immediately.

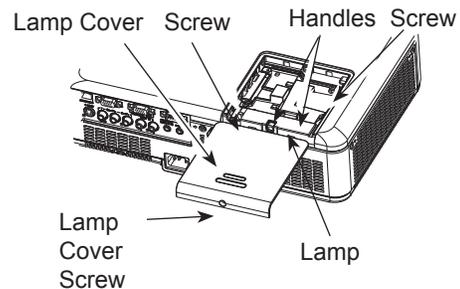


CAUTION

For continued safety, replace with a lamp of the same type. Do not drop a lamp or touch a glass bulb! The glass can shatter and may cause injury.

Follow these steps to replace the lamp.

- 1** Unplug the AC power cord. Let the projector cool for at least 45 minutes.
- 2** Loosen the screw and open the lamp cover.
- 3** Loosen the two (2) screws that secure the lamp. Lift the lamp out of the projector by using the handle.
- 4** Replace the lamp with a new one and secure the two (2) screws. Make sure that the lamp is set properly. Close the lamp cover and secure the screw.
- 5** Connect the AC power cord to the projector and turn on the projector.



Lamp Model Replacement

ORDER REPLACEMENT LAMP

Replacement lamp can be ordered through your dealer. When ordering a projection lamp, give the following information to the dealer:

- **Model No. of projector** : **BX27C-SL / BX30C-SL**
- **Replacement Lamp Type No.** : **1300046500**



LAMP HANDLING PRECAUTIONS

This projector uses a high-pressure lamp which must be handled carefully and properly. Improper handling may result in accidents, injury, or create a fire hazard.

- Lamp life may differ from lamp to lamp and according to the environment of use. There is no guarantee of the same life for each lamp. Some lamps may fail or terminate their life in a shorter period of time than other similar lamps.
- If the projector indicates that the lamp should be replaced, i.e., if the LAMP REPLACE indicator lights up, replace the lamp with a new one IMMEDIATELY after the projector has cooled down. (Follow carefully the instructions in the Lamp Replacement section of this manual.) Continuous use of the lamp with the LAMP REPLACE indicator lighted may increase the risk of lamp explosion.
- A Lamp may explode as a result of vibration, shock or degradation as a result of hours of use as its lifetime draws to an end. Risk of explosion may differ according to the environment or conditions in which the projector and lamp are being used.

IF A LAMP EXPLODES, THE FOLLOWING SAFETY PRECAUTIONS SHOULD BE TAKEN .

If a lamp explodes, disconnect the projector's AC plug from the AC outlet immediately. Contact an authorized service station for a checkup of the unit and replacement of the lamp. Additionally, check carefully to ensure that there are no broken shards or pieces of glass around the projector or coming out from the cooling air circulation holes. Any broken shards found should be cleaned up carefully. No one should check the inside of the projector except those who are authorized trained technicians and who are familiar with projector service. Inappropriate attempts to service the unit by anyone, especially those who are not appropriately trained to do so, may result in an accident or injury caused by pieces of broken glass.

Appendix

Troubleshooting

Before calling your dealer or service center for assistance, check the items below once again.

- Make sure you have properly connected the projector to peripheral equipment.
- Make sure all equipment is connected to AC outlet and the power is turned on.
- When the projector does not project an image from the connected computer, restart the computer.

Problem:	– Solutions
No power	<ul style="list-style-type: none">– Plug the power cord of the projector into the AC outlet.– See if the POWER indicator lights red.– Wait until the POWER indicator stops blinking to turn on the projector again. The projector can be turned on after the POWER indicator turns red.– Check the WARNING indicator. If the WARNING indicator lights red, projector cannot be turned on.– Check the projection lamp.– Unlock the Key lock function for the projector.
The initial display is not shown	<ul style="list-style-type: none">– Make sure Off or Countdown off are not chosen at display function.
The initial display is not same as the default set .	<ul style="list-style-type: none">– Make sure User or Off are not chosen at Logo (select) function.
Input signal switches automatically. (or does not switch automatically)	<ul style="list-style-type: none">– Make sure Input search function is adjusted properly.
when the projector is on and you press the input button, an icon other than the Lamp mode icon appears.	<ul style="list-style-type: none">– That is the Filter warning icon.
An icon other than Input mode or Lamp mode icon appears .	<ul style="list-style-type: none">– That is the Lamp replacement icon or the Filter warning icon.
Image is out of focus.	<ul style="list-style-type: none">– Adjust focus of the projector.– Provide proper distance between the projector and the projection screen.– Check the projection lens to see if it needs cleaning.– Moving the projector from a cool to warm place may result in moisture condensation on the projection lens. In such cases, leave the projector off and wait until condensation evaporates.
Image is Left/Right reversed. Image is Top/Bottom reversed.	<ul style="list-style-type: none">– Check the Ceiling/Rear function.– Check the Top/Bottom (Ceiling) function.
Picture is not bright enough.	<ul style="list-style-type: none">– Check if the Contrast or Brightness are adjusted properly.– Check if Image mode is selected properly.– Check the lamp control function.– Check the LAMP REPLACE indicator. If it lights, the end of lamp life is approaching. Replace the lamp with a new one promptly.

No image	<ul style="list-style-type: none">– Check the connection between your computer or video equipment and the projector.– See if the input signal is correctly output from your computer. Some laptop computers may need to change the setting for monitor output when connecting to a projector. See your computer's instruction manual for the setting.– It takes about 30 seconds to display an image after turning on the projector. See page 17.– Check the Input signal, color system, video system or computer system mode.– Make sure the temperature is not out of the specified Operating Temperature (41°F–100°F [5°C–40°C]).– When No Show is operating, the image cannot be displayed. Press the BLANK button or any other button on the remote control.
No sound	<ul style="list-style-type: none">– Check the audio cable connection from audio input source.– Adjust the audio source.– Press the Volume + button.– Press the Mute button.– When the AUDIO OUT is plugged-in, the projector's built-in speaker is not available.– Is the image projected? You will hear the sound only when the image is projected.
The color is strange.	<ul style="list-style-type: none">– Check the Input signal, color system, video system or computer system mode.– Make sure the Blackboard is not selected on Image select menu.
Some displays are not seen during the operation.	<ul style="list-style-type: none">– Check the Display function.
Auto PC adjustment function does not work.	<ul style="list-style-type: none">– Check the Input signal. Auto PC function can not work when 480p, 576p, 720p, 480i, 576i, 1035i or 1080i is selected. See Page 27.
The setting does not remain after turning off power.	<ul style="list-style-type: none">– Make sure you selected Store after adjusting setting. Some settings can not be stored if not registered with "Store".
Power management does not work.	<ul style="list-style-type: none">– Power management function can not work while Freeze or Blank function is running.
Capture function does not work.	<ul style="list-style-type: none">– Check the connection and the input signal to see if there is signal.
Auto setup does not work properly.	<ul style="list-style-type: none">– Make sure Off is not selected at any function of Auto setup.– Make sure On is not selected at the Ceiling function.
Auto keystone function does not work even when the projector is tipped.	<ul style="list-style-type: none">– Make sure the Auto keystone function is not set to Manual. Press the AUTO SETUP button on the top control.

Appendix

The image is distorted or runs off .	– Check PC adjustment menu or Screen and adjust them.
PIN code dialog box appears at start-up .	– PIN code lock is being set. Enter a PIN code.
The Remote Control does not work .	– Check the batteries. – Make sure no obstruction is between the projector and remote control. – Make sure you are not too far from the projector when using the remote control. Maximum operating range is 16.4'(5 m). – Make sure the code of the remote control is conformed to the projector's code. – Unlock the Key lock function for the remote control function.
Indicator blinks or lights.	– Check the status of the projector with referring to "Indicators and projector Condition".
The exclamation mark appears on the screen	– Your operation is invalid. Operate correctly.
Top control does not work.	– The top control is not available if the top control is locked at Key lock under Security of SETTING section.
Unable to unlock the Logo PIN code lock, Security key lock or Security PIN code lock	– Contact the dealer where you purchased the projector or the service centre.

WARNING:

High voltages are used to operate this projector. Do not attempt to open the cabinet.

If problems still persist after following all operating instructions, contact the dealer where you purchased the projector or the service center. Specify the model number and explain about the problem. We will advise you how to obtain service.

Indicators and Projector Condition

Check the indicators for projector condition.

Indicators		Projector Condition
POWER red/green	WARNING RED	
		The projector is off. (The AC power cord is unplugged.)
		The projector is in stand-by mode. Press the ON/STAND-BY button to turn on the projector.
		The projector is operating normally.
		The projector is preparing for stand-by or the projection lamp is being cooled down. The projector cannot be turned on until cooling is completed and the POWER indicator stops blinking.
		The projector is in the Power management mode.
		The temperature inside the projector is abnormally high. The projector cannot be turned on. When the projector is cooled down enough and the temperature returns to normal, the POWER indicator stops blinking and the projector can be turned on. (The WARNING indicator keeps blinking.)
		The projector detects an abnormal condition and cannot be turned on. Unplug the AC power cord and plug it again to turn on the projector. If the projector is turned off again, unplug the AC power cord and contact the dealer or the service center for service and checkup. Do not leave the projector on. It may cause an electric shock or a fire hazard.

 ••• green

 ••• red

 ••• off

 ••• blinks green

 ••• blinks red

When the projection lamp reaches its end of life, the LAMP REPLACE indicator lights yellow. When this indicator lights yellow, replace the projection lamp with a new one promptly.

Appendix

Compatible Computer Specifications

Basically this projector can accept the signal from all computers with the V-, H-Frequency mentioned below.

RGB input

No	Specification				Proposed
	Resolution	H-freq(kHz)	V-freq(Hz)	Pixel clock(MHz)	
1	720*400	31.469	70.08	28.32	PC98
2	640*400	37.86	85.08	31.5	VGA
3	640*480	31.469	59.94	25.17	VGA
4	640*480	37.861	72.8	31.5	VGA
5	640*480	37.5	75	31.5	VGA
6	640*480	43.27	85.01	36	VGA
7	800*600	35.156	56.25	36	SVGA
8	800*600	37.879	60.31	40	SVGA
9	800*600	48.077	72.18	50	SVGA
10	800*600	46.875	75	49.5	SVGA
11	800*600	53.67	85.06	56.25	SVGA
12	832*624	49.72	74.55	57.28	SVGA
13	1024*768	48.363	60	65	XGA
14	1024*768	56.476	70.06	75	XGA
15	1024*768	58.03	71.99	74.74	XGA
16	1024*768	60.023	75.02	78.75	XGA
17	1024*768	68.677	84.997	94.5	XGA
18	1152*900	61.795	65.95	92.94	SXGA
19	1152*900	71.4	75.64	105.1	SXGA
20	1280*1024	63.981	60.02	108	SXGA
21	1280*1024	78.12	72	135	SXGA
22	1280*1024	79.98	75.02	135	SXGA
23	1280*1024	91.15	85.02	157.5	SXGA
24	1280*768	47.776	59.87	79.5	WXGA
25	1280*768	60.29	74.89	102.25	WXGA
26	1280*768	68.63	84.84	117.5	WXGA
27	1360*768	47.73	60.03	86.67	WXGA
28	1366*768	47.13	59.658	72.014	WXGA
29	1280*960	60	60	108	WXGA
30	1400*1050	65.317	59.979	121.75	SXGA+
31	1600*1200	75	60	162	UXGA

Component Video Input (Y, P_B, P_R)

No	Specification				Proposed
	Resolution	H-freq(kHz)	V-freq(Hz)	Pixel clock(MHz)	
1	720*576	15.625	50	13.5	SDTV 576I
2	720*480	15.735	59.94	13.5	SDTV 480I
3	720*576	31.25	50	27	EDTV 576P
4	720*480	31.47	59.94	27	EDTV 480P
5	1280*720	37.5	50	74.25	HDTV 720P/50Hz
6	1280*720	45	60	74.25	HDTV 720P/60Hz
7	1920*1080	28.125	50	74.25	HDTV 1080I/50Hz
8	1920*1080	33.75	60	74.25	HDTV 1080I/60Hz
9	1920*1035	33.75	60	74.25	HDTV 1035I

✓ **Note:**

The specifications are subject to change without notice.

RS232 Control Method

NOTE: Connect the PC & projector with serial port cable (female-to-female pins) for projector computer control.

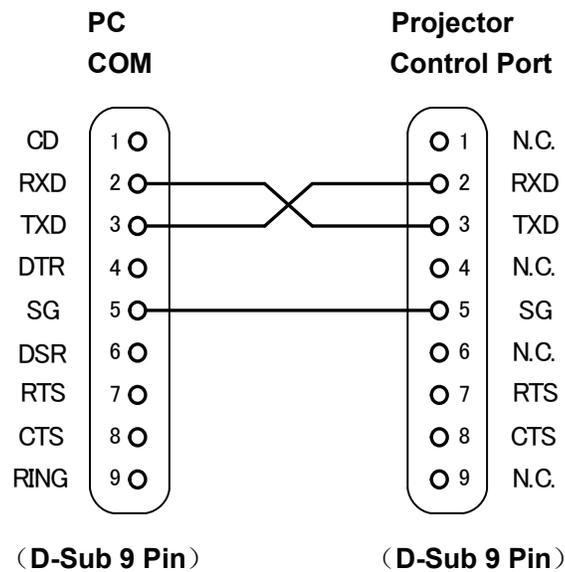
1. Connection

1.1. Port Setting

Item	Vaule
Methord	Asynchronous communication
Bits per seconds	19200
Data bits	8
Parity	none
Stop bits	1
Flow control	none

1.2.Wiring

RS232 cross cable is used.



Appendix

1. Commands:

Case sensitive, each command end by[CR](Carriage). The time out for each command is one second. If you want to cancel the time out setting for temporary. Please sent "#!"[CR]. (It's should be send within one second.)

Command	Item	Command	Item
A00	POWER ON	AW LAMPMODE NORMAL	Lamp mode normal
A01	POWER OFF (Power OFF immediately)	AW LAMPMODE ECO	Lamp mode eco
A02	POWER OFF	A30	Digital zoom +
A05	VGA1	A31	Digital zoom -
A06	VGA2	A09	Volume +
A07	Component	A0A	Volume -
A33	Video	AW SCREEN WIDE	16:9
A34	S-Video	AW SCREEN FULL	4:3
AW TERMINAL COMPUTER	Terminal 2:Input	A19	Dynamic
AW TERMINAL MONITOR	Terminal 2:Output	A11	Normal(Image select)
A8E	Keystone ↑	A12	Cinema
A8F	Keystone ↓	A39	Special
A1C	Menu on	A3A	Pointer right
A1D	Menu off	A3B	Pointer left
AR1	Input mode read	A3C	Pointer up
AW AUTOSETUP START	Auto setup	A3D	Pointer down
A43	Freeze on	A3F	Select
A44	Freeze off		
A0D	Blank on		
A0E	Blank off		
A8A	Timer		
A0B	Mute on		
A0C	Mute off		

2.1 POWER ON

Command	"A00"[CR] (Hex:0x41 0x30 0x30 0x0d)	
Details	Power ON when projector standby	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

√ Note : ACK means "000" or "-" when the return message is "OK".

2.2 POWER OFF (Power OFF immediately)

Command	"A01"[CR] (Hex:0x41 0x30 0x31 0x0d)	
Details	Power OFF immediately	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.3 POWER OFF

Command	"A02"[CR] (Hex:0x41 0x30 0x32 0x0d)	
Details	"Power off?" displays while send the command, just like press the "POWER"key.	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.4 VGA 1

Command	"A05"[CR] (Hex:0x41 0x30 0x35 0x0d)	
Details	Change the input to "Computer1".	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.5 VGA 2

Command	"A06"[CR] (Hex:0x41 0x30 0x36 0x0d)	
Details	Change the input to "Computer2".	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.6 component

Command	"A07"[CR] (Hex:0x41 0x30 0x37 0x0d)	
Details	Change the input to "Component".	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.7 Video

Appendix

Command	"A33"[CR] (Hex:0x41 0x33 0x33 0x0d)	
Details	Change the input to "Video".	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.8 S-Video

Command	"A34"[CR] (Hex:0x41 0x33 0x34 0x0d)	
Details	Change the input to "S-Video".	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.9 Terminal

Command	"AW TERMINAL COMPUTER"[CR] (Hex: 0x41 0x57 0x20 0x54 0x45 0x52 0x4D 0x49 0x4E 0x41 0x4C 0x20 0x43 0x4F 0x4D 0x50 0x55 0x54 0x45 0x52 0x0d)	
Details	Change to "Terminal 2: Input".	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.10 Terminal

Command	"AW TERMINAL MONITOR"[CR] (Hex: 0x41 0x57 0x20 0x54 0x45 0x52 0x4D 0x49 0x4E 0x41 0x4C 0x20 0x4D 0x4F 0x4E 0x49 0x54 0x4F 0x52 0x0d)	
Details	Change to "Terminal 2: Output".	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.11 Keystone ↑

Command	"A8E"[CR] (Hex:0x41 0x38 0x45 0x0d)	
Details	Keystone ↑	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.12 Keystone ↓

Command	"A8F"[CR] (Hex:0x41 0x38 0x46 0x0d)	
Details	Keystone ↓	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.13 Menu on

Command	"A1C"[CR] (Hex:0x41 0x31 0x43 0x0d)	
Details	Open the on-screen menu.	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.14 Menu off

Command	"A1D"[CR] (Hex:0x41 0x31 0x44 0x0d)	
Details	Close the on-screen menu.	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.15 Input mode read

Command	"AR1"[CR] (Hex:0x41 0x52 0x31 0x0d)	
Details	Get the current input mode. 1-Computer1 2-Computer2 3-Component 4-Video 5-S-Video	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.16 Auto setup

Command	"AW AUTOSETUP START"[CR] (Hex: 0x41 0x57 0x20 0x41 0x55 0x54 0x4F 0x53 0x45 0x54 0x55 0x50 0x20 0x53 0x54 0x41 0x52 0x54 0x0d)	
Details	Start the auto setup function.	

Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.17 Freeze on

Command	"A43"[CR] (Hex:0x41 0x34 0x33 0x0d)	
Details	Freeze on.	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.18 Freeze off

Command	"A44"[CR] (Hex:0x41 0x34 0x34 0x0d)	
Details	Freeze off.	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.19 Blank on

Command	"A0D"[CR] (Hex:0x41 0x30 0x44 0x0d)	
Details	All the on-screen OSD disappeared.	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.20 Blank off

Command	"A0E"[CR] (Hex:0x41 0x30 0x45 0x0d)	
Details	Close the Blank function.	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.21 Timer

Command	"A8A"[CR] (Hex:0x41 0x38 0x41 0x0d)	
Details	Start → pause → disappear → Start ...	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.22 Mute on

Command	"A0B"[CR] (Hex:0x41 0x30 0x42 0x0d)	
Details	Mute on.	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.23 Mute off

Command	"A0C"[CR] (Hex: 0x41 0x30 0x43 0x0d)	
Details	Mute off.	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.24 Lamp mode

Command	"AW LAMPMODE NORMAL"[CR] (Hex: 0x41 0x57 0x20 0x4C 0x41 0x4D 0x50 0x4D 0x4F 0x44 0x45 0x20 0x4E 0x4F 0x52 0x4D 0x41 0x4C 0x0d)	
Details	Change the lamp mode to "Normal".	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.25 Lamp mode

Command	"AW LAMPMODE ECO"[CR] (Hex: 0x41 0x57 0x20 0x4C 0x41 0x4D 0x50 0x4D 0x4F 0x44 0x45 0x20 0x45 0x43 0x4F 0x0d)	
Details	Change the input to "Eco".	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

Appendix

2.26 Digital Zoom +

Command	"A30"[CR] (Hex:0x41 0x33 0x30 0x0d)	
Details	Digital zoom +	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.27 Digital Zoom -

Command	"A31"[CR] (Hex:0x41 0x33 0x31 0x0d)	
Details	Digital zoom -	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.28 Volume +

Command	"A09"[CR] (Hex:0x41 0x30 0x39 0x0d)	
Details	Increased the volume.	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.29 Volume -

Command	"A0A"[CR] (Hex:0x41 0x30 0x41 0x0d)	
Details	Decreased the volume.	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.30 16:9

Command	"AW SCREEN WIDE"[CR] (Hex: 0x41 0x57 0x20 0x53 0x43 0x52 0x45 0x45 0x4E 0x20 0x57 0x49 0x44 0x45 0x0d)	
Details	Screen "Wide" size	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.31 4:3

Command	"AW SCREEN FULL"[CR] (Hex: 0x41 0x57 0x20 0x53 0x43 0x52 0x45 0x45 0x4E 0x20 0x46 0x55 0x4C 0x4C 0x0d)	
Details	Screen "Full" size.	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.32 Dynamic

Command	"A19"[CR] (Hex:0x41 0x31 0x39 0x0d)	
Details	Image select "Dynamic" mode.	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.33 Normal

Command	"A11"[CR] (Hex:0x41 0x31 0x31 0x0d)	
Details	Image select "Normal" mode.	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.34 Cinema

Command	"A12"[CR] (Hex:0x41 0x31 0x32 0x0d)	
Details	Image select "Cinema" mode.	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.35 Special

Command	"A39"[CR] (Hex:0x41 0x33 0x39 0x0d)	
Details	Image select "Colorboard" mode.	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

Appendix

2.36 Pointer right

Command	"A3A"[CR] (Hex:0x41 0x33 0x39 0x0d)	
Details	Pointer right	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.37 Pointer left

Command	"A3B"[CR] (Hex:0x41 0x33 0x39 0x0d)	
Details	Pointer left	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.38 Pointer up

Command	"A3C"[CR] (Hex:0x41 0x33 0x39 0x0d)	
Details	Pointer up	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

2.39 Point down

Command	"A3D"[CR] (Hex:0x41 0x33 0x39 0x0d)	
Details	Pointer down	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

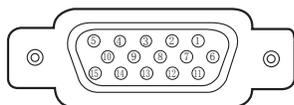
2.40 Select

Command	"A3F"[CR] (Hex:0x41 0x33 0x39 0x0d)	
Details	Select	
Return	OK	[ACK] [CR]
	NG	"? "[CR]

Configurations of Terminals

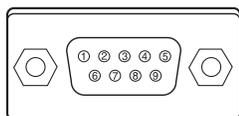
COMPUTER IN 1/COMPUTER IN 2/MONITOR OUT (Analog)

Terminal: Analog RGB (Mini D-sub 15 pin)



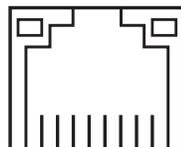
1	Red (R/Cr) Input/Output	9	+5V Power/-----
2	Green (G/Y) Input/Output	10	Ground (Vert.sync.)
3	Blue (B/Cb) Input/Output	11	Ground/-----
4	-----	12	DDC Data/-----
5	Ground (Horiz.sync.)	13	Horiz. sync. Input/Output
6	Ground (Red)	14	Vert. sync. Input/Output
7	Ground (Green)	15	DDC Clock/-----
8	Ground (Blue)		

CONTROL PORT CONNECTOR (D-sub 9 pin)



	Serial
1	-----
2	R X D
3	T X D
4	-----
5	GND
6	-----
7	-----
8	-----
9	-----

LAN TERMINAL



1	TX +	5	-----
2	TX -TX -	6	RX -RX -
3	RX +	7	-----
4	-----	8	-----

PIN Code Number Memo

Write down the PIN code number in the column below and keep it with this manual securely. If you forgot or lost the number and unable to operate the projector, contact the service station.

PIN Code Lock No.

--	--	--

Factory default set No: 111*

Logo PIN Code Lock No.

--	--	--

Factory default set No: 111*

*Should the three-digit number be changed, the factory set number will be invalid.

LAN Control

Preparation:

1. Equipments: PC, projector, cables
2. Connection procedures:
Connect the projector to routers or switches of the LAN by direct or cross cable. If it fails to connect PC and projector by parallel cable, please switch to cross cable as suggested.
3. After the computer is booted and the projector is plugged in, indicator lights of LAN interface and computer interface will flash continuously.

< NOTE >

- Use a standard LAN cable with this Projector. Cat5 or better with a RJ45 connector.
- Many network connection problems during set up can often be fixed by re-setting the router or modem. After connecting the player to the home network, quickly power off and/or disconnect the power cable of the home network router or cable modem. Then power on and/or connect the power cable again.
- A 10 Base-T or 100 Base-TX LAN port is required for connection to this Projector. If your internet service does not allow for such a connection, you will not be able to connect the Projector.
- To connect to the wireless router, a router that supports wireless connection is necessary, and the wireless connection function of the corresponding router must be activated.
- To connect to a wireless router, verify the SSID and security setting of the wireless router. Please refer to the user guide of the corresponding router for SSID and security setting of the wireless router.
- When Ad-hoc is used, it may not be able to connect according to the device (for example : notebook computer) that is connected.
- The connection method may vary according to the manufacturer of the wireless router.

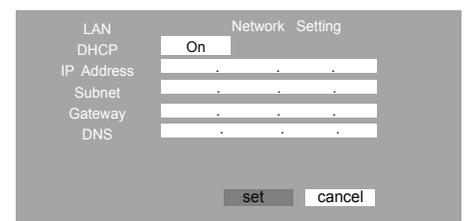
Operation procedures:

1. Press MENU button of the remote or the projector.
The MENU will display. Use arrow button ▲▼ to select network icon.
2. Press SELECT or ► to enter network setting .
3. Use arrow button ▲▼ to select network settings and then press SELECT.
4. Network Setting with DHCP "On"



Set DHCP to On: Assign an IP address to the projector from an external DHCP server automatically.

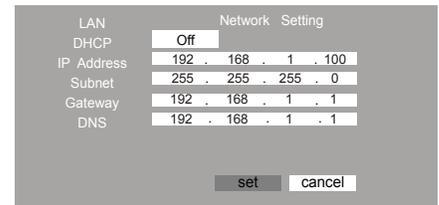
- (1) Press SELECT, use ▲▼ to choose "DHCP On" and then press SELECT again.
- (2) Select SET by ▲▼ and then Press SELECT.
Then it will display "waiting..."on the screen. Wait until it disappears.



5. Network Setting with DHCP "Off"

Set DHCP to Off: Assign an IP address manually. Set IP Address as the IP Address format of PC.

- (1) Press SELECT, use ▲ ▼ to choose "DHCP Off" and then press SELECT again.
- (2) Press the ▲ ▼ to select the option to adjust, and press the SELECT button.
- (3) Press the ◀ ▶ button to select the instructions to adjust the block.
- (4) Press the ▲ ▼ direction button to adjust value.
 - Select an IP address.
 - Select subnet mask number.
 - Select the default gateway of the network connected to the projector.
 - Select DNS number.
- (5) Select SET by ▲ ▼ and then Press SELECT.
Then it will display "waiting..." on the screen. Wait until it disappears.



< Note >

- If Network Setting is not working, check your network conditions. Check the LAN cable connection.
- If the Network Setting is not completed, network functions may not operate normally.
- IP Auto Setting: Select it if there is a DHCP (Dynamic Host Configuration Protocol) server on the local area network (LAN) via wired connection, the Projector will automatically be allocated an IP address. The IP address will automatically be determined. Connection to DHCP may not be possible when the firewall is installed or according to the model of the computer.
- IP Manual Setting: Select it if there is no DHCP server on the network and you want to set the IP address manually.
- Press the menu button to exit the menu screen.

LAN Control

Web page Operation :

1. Check IP address:

Enter network menu and select network information. Press select to check IP address.

2. Enter the IP address into the address bar (figure 8).

ex) <http://192.168.1.100>



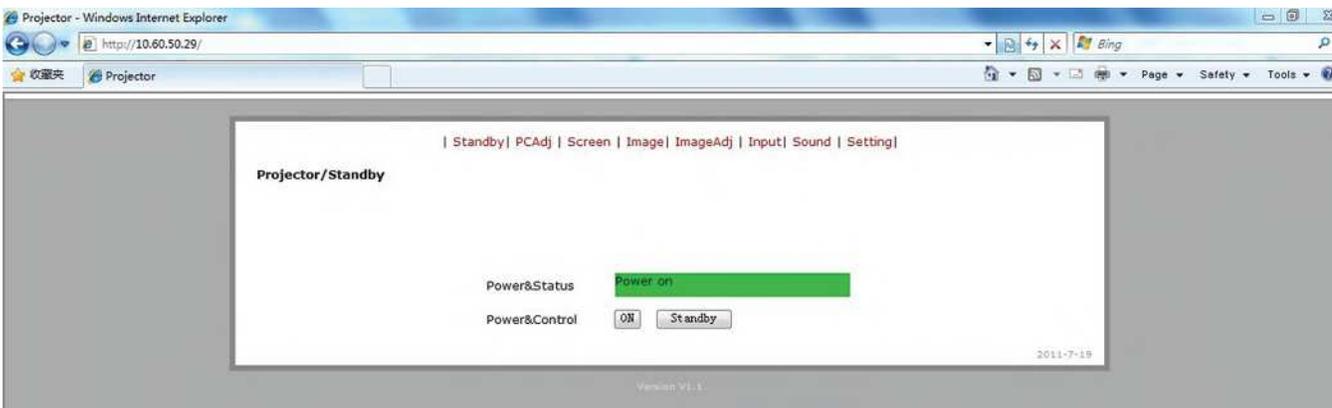
(figure 8)

< Note >

- Information on this page needs to be updated every time, when the Web page does not respond correctly.

3. Set the corresponding items of the projector by the website

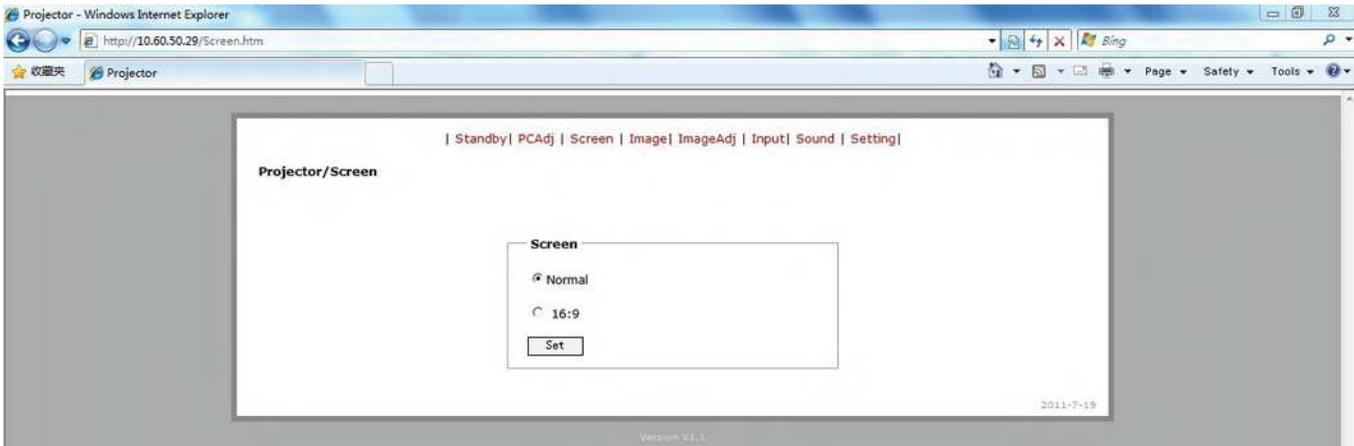
1) Standby: Enable the power On or Off by selecting the "On" or "Standby"



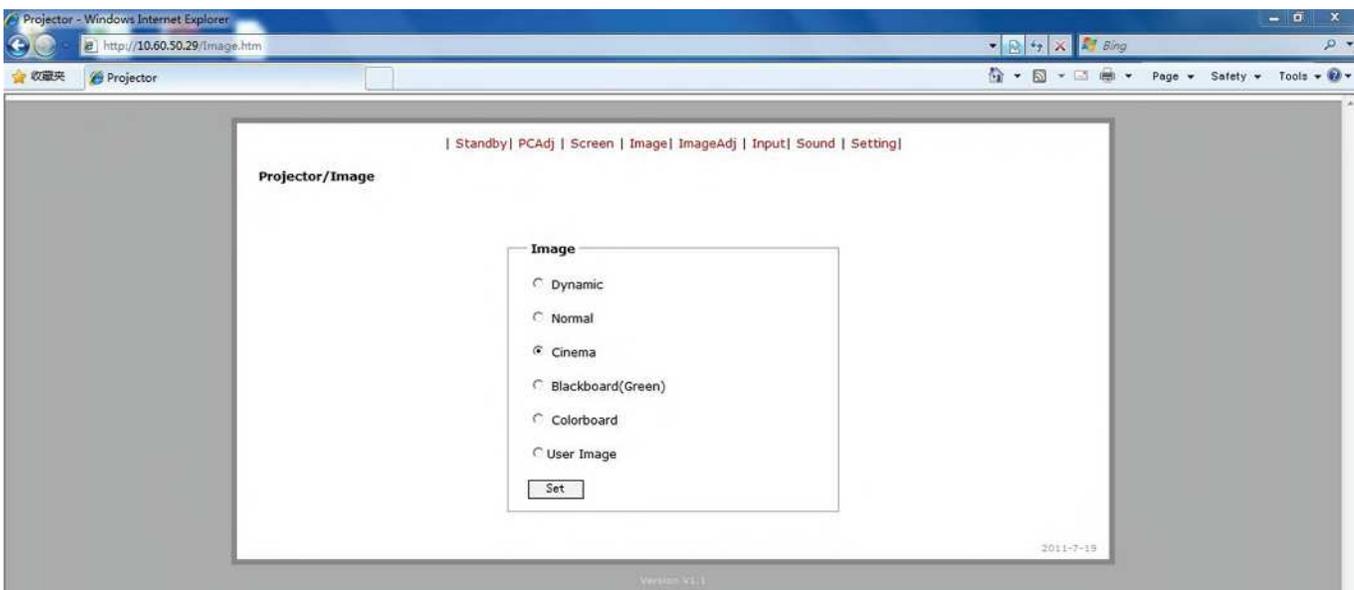
2) PCAdj: Auto PC (RGB) adjustment will be done by "Auto PC A_{adj}".



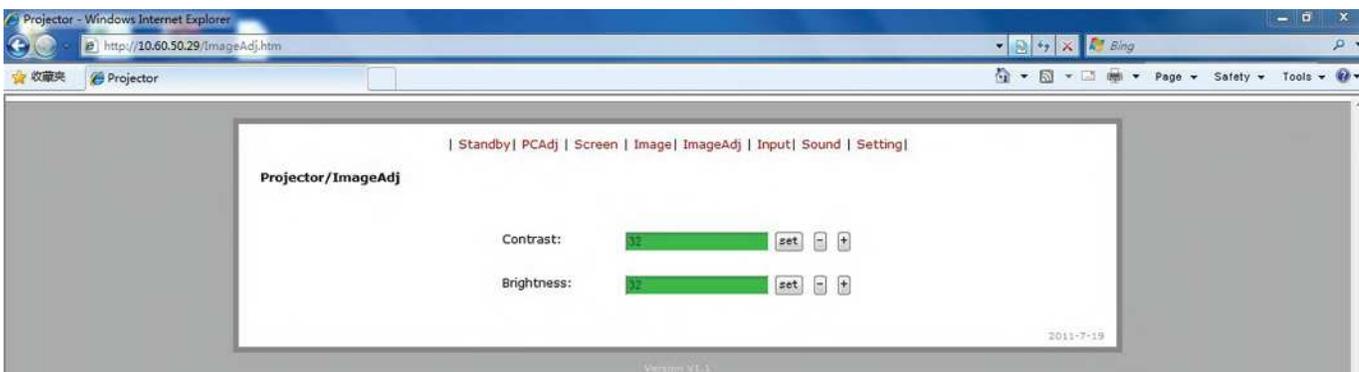
3) Screen: Adjust the screen aspect ratio.



4) Image : Preset Image mode can be selected.

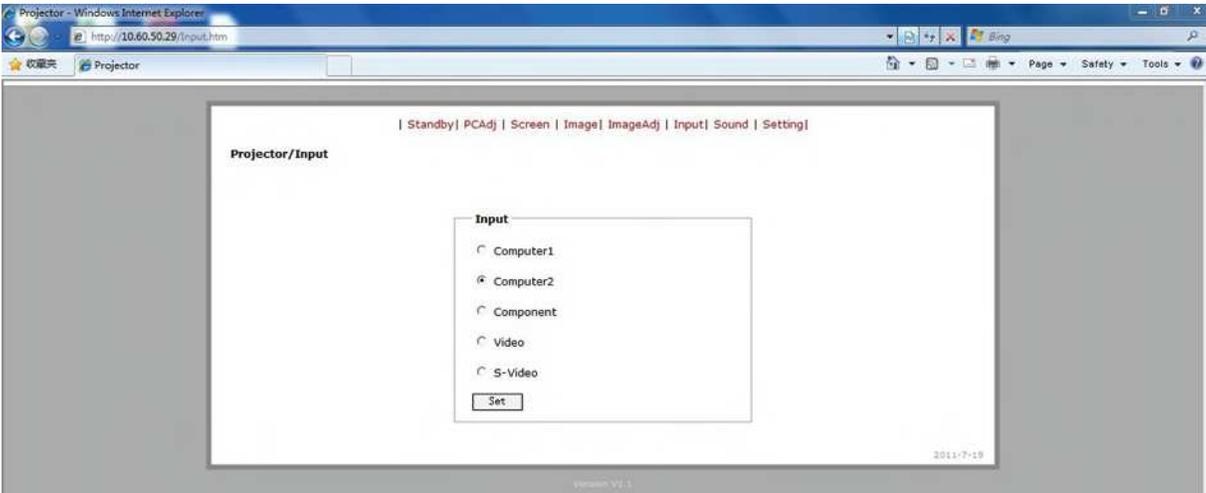


5) ImageAdj : Contrast and Brightness Values can be adjusted.



LAN Control

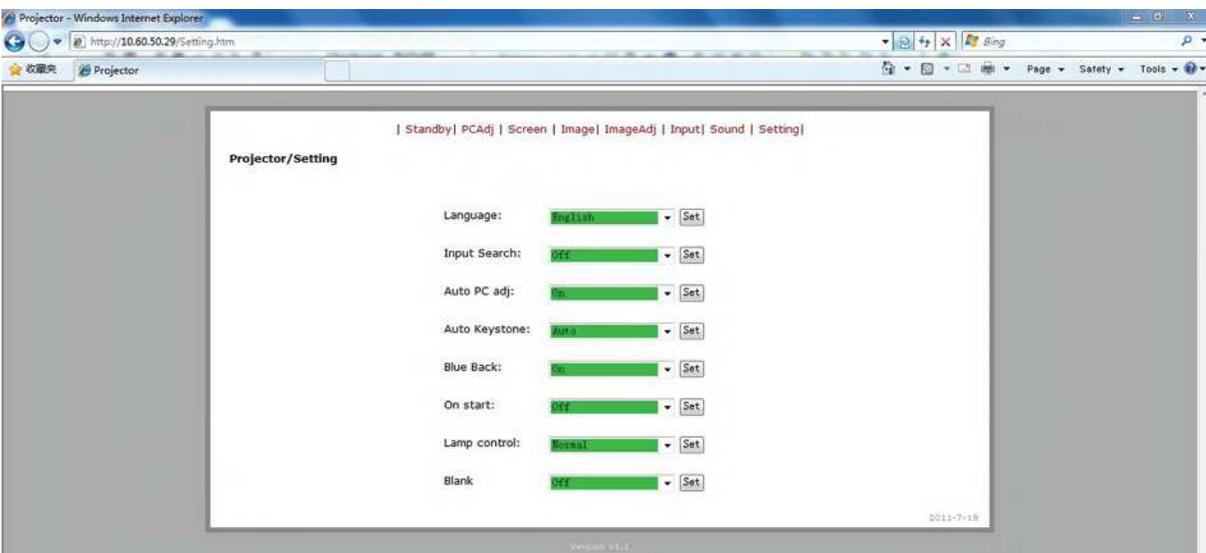
6) Input: Select the input source.



7) Sound: Sound Volume and Mute can be adjusted.



8) Setting: Select other setting status.



< Note >

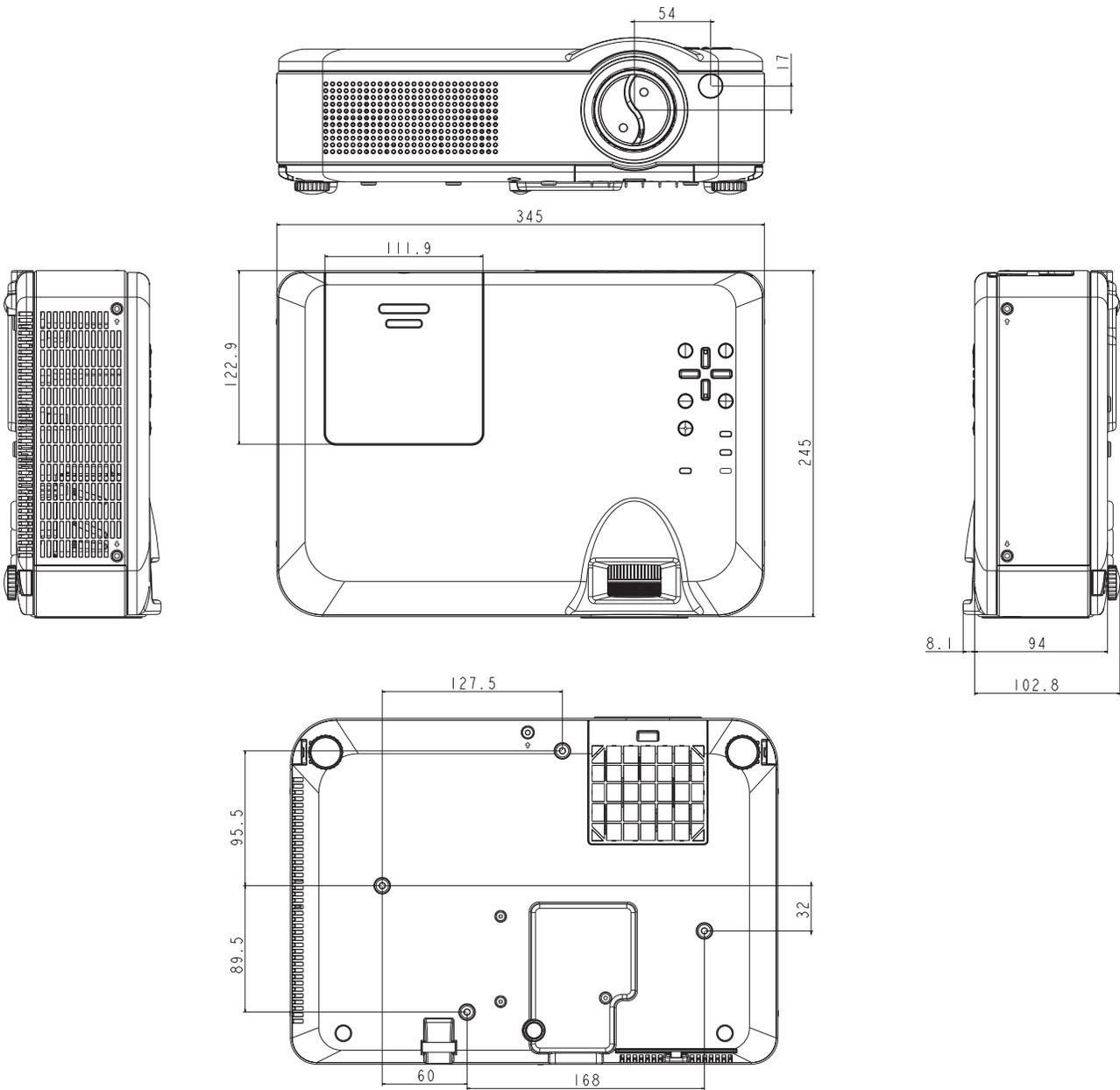
- Information on this page needs to be updated every time, when the Web page does not respond correctly.

ex) Click the Refresh Menu in the Web page for updating the information.

Dimensions

UNIT: MM

↙ Screw holes for ceiling installation
Screw: M4
Depth: 10.0



Appendix

MEMO

Technical Specifications

Mechanical Information

Dimensions (W x H x D)	345mm x 102.8mm x 245mm
Net Weight	3.2 kg
Feet Adjustment	0° to 10°

Panel Resolution

LCD Panel System	0.63" TFT Active Matrix type, 3 panels
Panel Resolution	1,024 x 768 dots
Number of Pixels	2,359,296 (1,024 x 768 x 3 panels)

Signal Compatibility

Color System	PAL, SECAM, NTSC, NTSC4.43, PAL-M, and PAL-N
High Definition TV Signal	480i, 480p, 576i, 576p, 720p, 1035i, and 1080i
Scanning Frequency	H-sync. 15 kHz–100 kHz, V-sync. 50–100 Hz

Optical Information

BX27C-SL

Projection Image Size (Diagonal)	Adjustable from 30" to 300"
Projection Distance	WIDE: 0.875m-8.943 TELE: 1.054-10.737
Projection Lens	F 2.3 -2.5 lens with f 18.82mm-22.60mm with Manual zoom and focus
Projection Lamp	230 W

BX30C-SL

Projection Image Size (Diagonal)	Adjustable from 30" to 300"
Projection Distance	WIDE:0.873m-8.953m TELE:1.052m-10.753m
Projection Lens	F 1.75-1.9 lens with f 18.85mm-22.63mm with Manual zoom and focus
Projection Lamp	230 W

Interface

Component (Video) Input Jack	RCA Type x 3
S-VIDEO Jack	Mini DIN 4 pin x 1
Audio Input Jacks	RCA Type x 2
Computer 1/Computer 2 Audio Input Jacks	Mini Jack (stereo) x 1
Computer In 1 Input Terminal	Mini D-sub 15 pin x 1
Computer In 2/Monitor Output Terminal	Mini D-sub 15 pin x 1
Control Port Connector	D-sub 9 pin x 1
Audio Output Jack	Mini Jack (stereo) x 1 (variable)
LAN Connection Terminal	100 Base-TX (100Mbps)/10 Base-T (10Mbps), RJ45

Audio

Internal Audio Amp	7.0W RMS 4Ω
Built-in Speaker	1 speaker, ø1.1"(28 mm)

Power

Voltage and Power Consumption	AC 100–240 V (3.8A Max. Ampere), 50/60 Hz
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Operating Environment

Operating Temperature	41°F-95°F (5°C-35°C)
Storage Temperature	14°F-140°F (-10°C-60°C)

Remote Control

Battery	AAA or LR03 1.5V ALKALINE TYPE x 2
Operating Range	16.4' (5 m)±30°
Dimensions	2.0" (W) x 0.7" (H) x 4.3" (D) (52 mm x 18 mm x 110 mm)
Net Weight	2.37 oz 67g (including batteries)

Accessories

Owner's Manual (CD)
AC Power Cord
Remote Control and Batteries
VGA Cable
Lens Cap and String
Carrying Bag
Warranty Card

- The specifications are subject to change without notice.



The model and serial number of the projector is located on the back or one side of the projector. Record it below should you ever need service.

MODEL _____

SERIAL _____