

### Terminal

The COMPUTER IN 2/MONITOR OUT terminal on the back of the projector is switchable for computer input or monitor output. (See page 9) Select **Computer 2** or **Monitor Out** with the Point **▲▼** buttons.

**Computer 2** . . . computer input  
**Monitor Out** . . . monitor out

Terminal function is not available when **Computer 2** is selected to the input source. Change the input source to the others (**Computer 1**, **Video** or **S-video**) so that the Terminal function will be available. (pp.25, 27, 38, 39)

### 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 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 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.**

### Direct on

When this function is set to **On**, the projector will be automatically turned on just by connecting the AC power cord to a wall outlet.

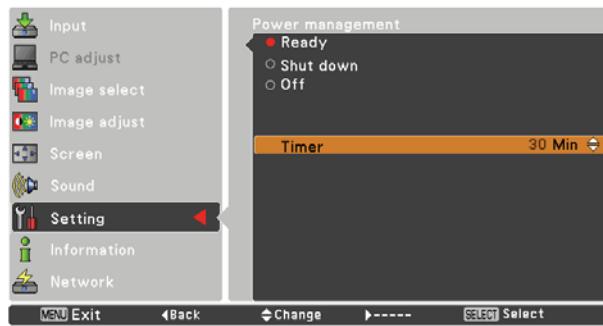
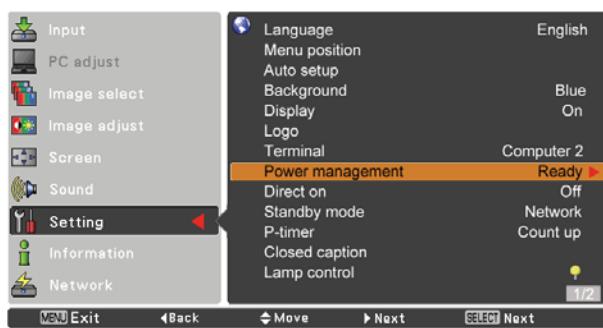
✓ **Note:**

Be sure to turn off the projector properly (see "Turning Off the Projector" on page 20). If the projector is turned off in the incorrect sequence, the Direct on function does not work properly.

### Power management

**No signal**  
**04 : 50**

Time left before Lamp is off.



# Setting

## Standby mode

This function is available when operating the projector via network.

**Eco**..... Select **Eco** when you do not use the projector via network. The projector's network function will stop when turning off the projector.

**Network** .... Supply the power to the network function even after turning off the projector. You can turn on/off the projector via network, modify network environment, and receive an e-mail about projector status while the projector is powered off.

Refer to the owner's manual of "Network Set-up and Operation".

### ✓ Note:

- Factory default is **Network**.
- When selecting **Network**, the cooling fans may be running depending on the temperature inside the projector even if the projector is turned off.

## P-timer

This function allows you to change the setting of the P-timer and execute it.

Select one of the following options:

**Count up**... The P-timer display **000:00** appears on the screen and the count starts **(000:00–180:00)**

**Count down**.. The time set in the Timer setting appears on the screen and the countdown starts.

**Timer**..... Use the Point **▲▼** buttons to set the Timer **(1–180 Min)**. **Timer** is available in Count down only. Factory default value is **10 Min**.

**Start**..... It executes the count up or count down function. Press the **SELECT** button at **Start** and the indication changes into **Stop**. To stop **Count up** or **Count down**, press the **SELECT** button at **Stop** on the screen menu, then the indication changes into **Restart**. Press the **SELECT** button at **Restart** to resume **Count up** or **Count down**.

**Reset**..... Reset the P-timer values.  
Press the **SELECT** button at **Reset** to return to the following value;

**Count up** ... "000:00"

**Count down** ... Timer that you set

**Exit**..... To exit the P-timer operation.

X: disabled O: enabled

	Eco	Network
Serial command	x *1	O
Network	x	O
Monitor Out	x	O
Audio Out	x	x *2
Direct on	O	O

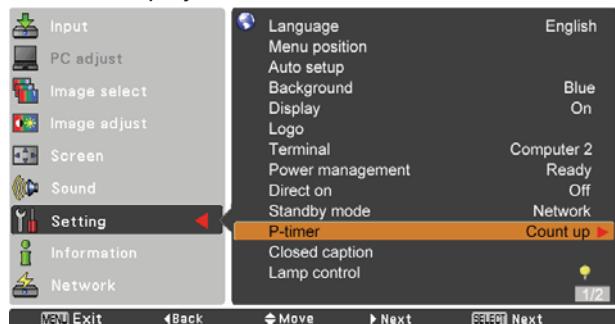
\*1 When Eco is selected, it is only possible to turn on the projector while using the RS-232C serial port.

\*2 When switch the Standby MIC out function On and in Standby mode status, only MIC volume can be output.

## P-timer



P-timer display



## Stop or Cancel the P-timer via Remote Control

To stop the P-timer function, press the P-TIMER button.

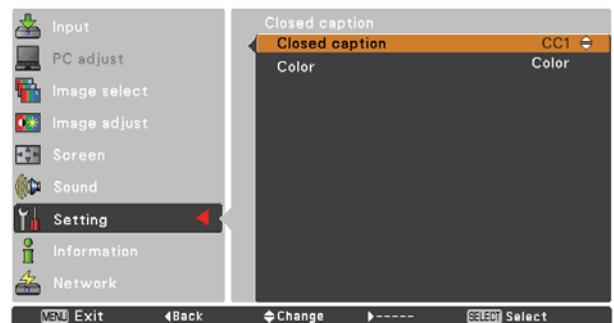
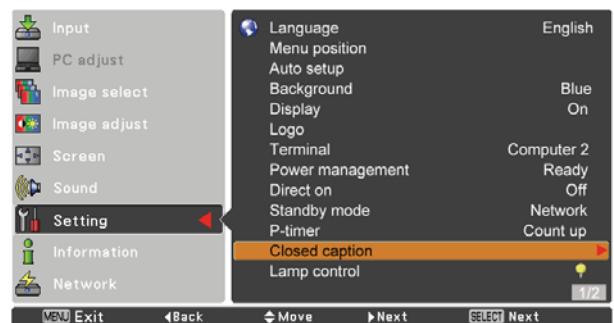
To cancel the P-timer, press and hold the P-TIMER button for a few seconds.

### Closed caption

Closed caption is a function that displays the audio portion of a TV program as text 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**.

If the closed caption is not clear, you can change the text from **Color** to **White**.

### Closed Caption



Press the Point **▲▼** buttons to select **Off, CC1, CC2, CC3 or CC4**, and then Press **SELECT** button.

# Setting

## Lamp control

### Lamp control

This function allows you to change brightness of the screen.

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

### Lamp life control

Select the lamp operation when the total lighting time of a lamp exceeds the recommended total hours of use.

**Mode 1** ..... The lamp can be turned on even after exceeding the recommended total hours of use.

**Mode 2** ..... The lamp can be turned on even after exceeding the recommended total hours of use. But the projector turns off automatically after 3 minutes.

#### ✓ Note:

- Lamp mode cannot be changed for a while after turning on the projector. Lamp needs some time to stabilize after the power is turned on. Stored lamp mode will be active after the lamp is stabilized.
- If **Mode 2** has been selected and the projection lamp exceeds the recommended total hours of use, the replacement icon will be displayed at the time of power-on. Then the projector will turn off after 3 minutes.

#### Lamp replacement icon



- The Lamp replacement icon will not appear when the Display function is set to **Off** (p.48), during **Freeze** (p.25) or **No show** (p.26).

## Remote control

This projector provides two different remote control codes: the factory-set initial code (Code 1) and the secondary code (Code 2). This switching function prevents remote control interference when operating several projectors or video equipment at the same time.

When operating the projector in "Code 2", both the projector and the remote control must be switched to "Code 2".

#### To change the code for the projector:

Select either "Code 1" or "Code 2" in this Setting Menu.

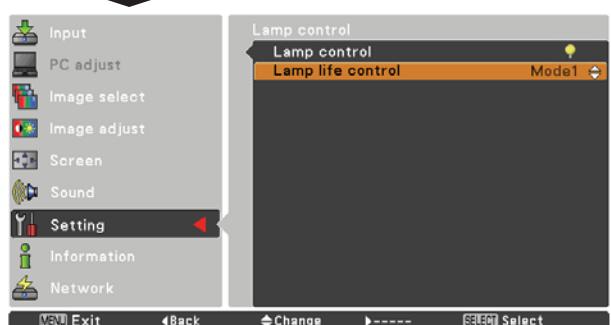
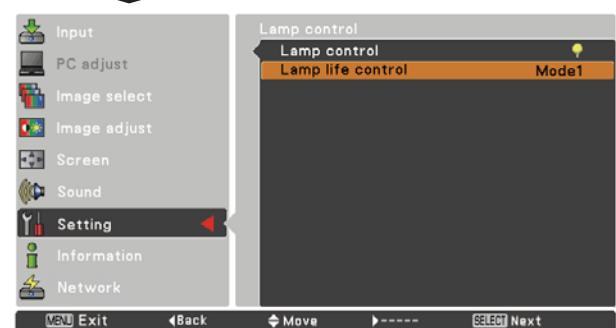
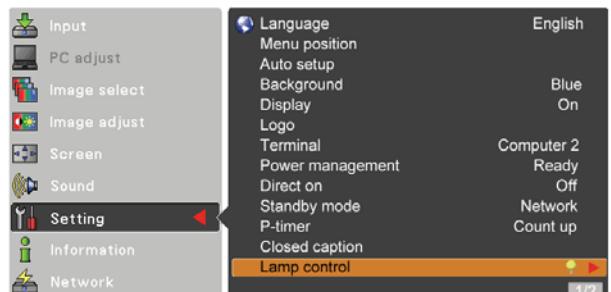
#### To change the code for the remote control:

Press and hold both the MENU and IMAGE buttons together for 5 seconds or more. After changing the code, make sure the remote control operates properly.

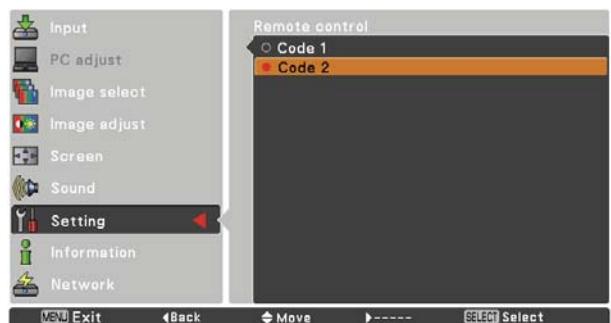
#### ✓ Note:

- When different codes are set on the projector and on the remote control, any operation cannot be made. In that case, switch the code on the remote control to fit the code on the projector.
- If the batteries are removed from the remote control for a long period of time, the remote control code will be reset.

## Lamp life control



## Remote control





### 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

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.



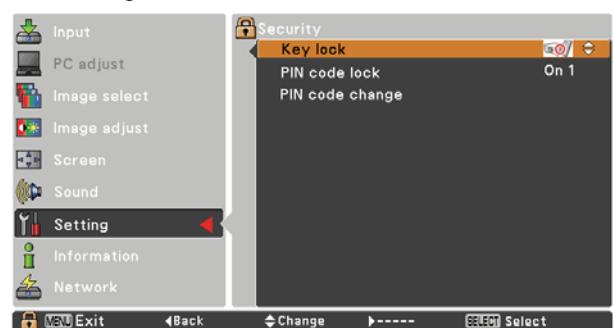
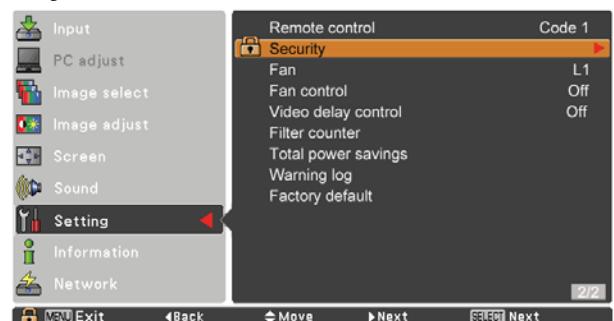
..... Lock the operation of the top control. To unlock, use the remote control.



..... 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.

#### Key lock



#### PIN code lock

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

**Off** ..... Unlocked.

**On1** ..... Enter the PIN code every time turning on the projector.

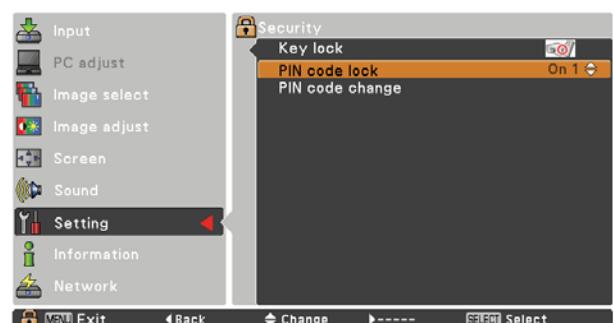
**On2** ..... Enter the PIN code to operate the projector once the power cord is disconnected; as long as the AC power cord is connected, the projector can be operated without a PIN code.

Whenever you change the PIN code lock setting or the PIN code (the four-digit number), you are required to enter the PIN code. The "1234" 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.

When the projector is locked with the PIN code, the Security icon appears on the guide.

#### PIN code lock



## Setting

### Enter a PIN code

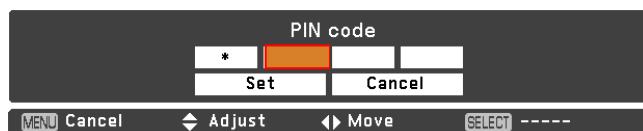
Use the Point **▲▼** buttons to enter a number. Press the Point **▶** button to fix the number and move the red frame pointer to the next box. The number changes to “\*”. If you fixed an incorrect number, use the Point **◀** button to move the pointer to the number you want to correct, and then enter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

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

After entering the four-digit number, move the pointer to “Set.” Press the SELECT button so that you can change the following PIN code lock setting.

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.

### Enter a PIN code



### Change the PIN code lock setting

Use the Point **▲▼** buttons to select **Off**, **On1**, or **On2**, and then press the SELECT button to make a choice.

### PIN code change

The PIN code can be changed to your desired four-digit number. Press the SELECT button to select **PIN code change**. The **Current PIN code** input dialog box appears, use the Point **▲▼** buttons to enter the current 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 76, AND KEEP IT SECURELY. IF YOU FORGET YOUR PIN CODE, THE PROJECTOR CAN NO LONGER BE STARTED.**

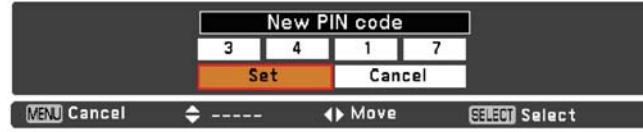
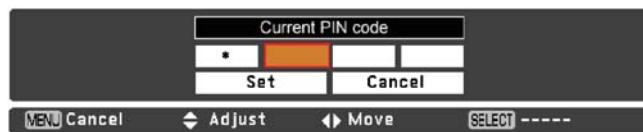
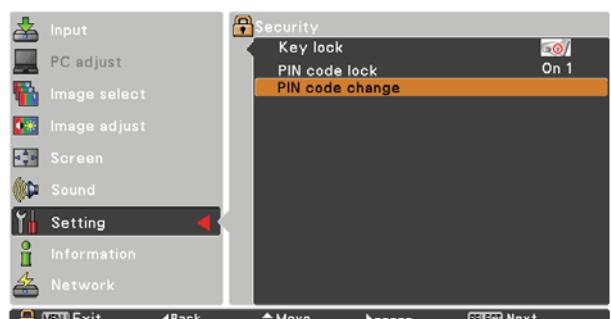
### Fan

This function provides the following options in the cooling fans' operation when the projector is turned off (p.20).

**L1** ..... Normal operation

**L2** ..... Slower and lower-sound than the normal operation (**L1**), but it takes more time to cool the projector down.

### Change the PIN code



### Fan control

Choose the running speed of cooling fans from the following options according to the ground elevation under which you use the projector.

- Off**..... Normal speed. Set this function to **Off** when using the projector in non-high altitude environment.
- On 1**..... Faster than Off mode. Select this mode when using the projector in high altitudes (about 1,200 meters or more above the sea level) where the fans have less cooling effect.
- On 2**..... Faster than On 1 mode. Select this mode when using the projector in higher altitudes than above where the fans have lesser cooling effect.

✓ **Note:**

- The fan noise becomes louder in **On 1** and **On2**.
- Failure to set the running speed of cooling fans properly may affect the projector life.

### Video delay control

When you want to make a digital processing of a projected image faster, set this function.

Use the Point **▲▼** buttons, select an item of Off or On.

✓ **Note:**

**Noise reduction** and **Progressive** can not be selected when Video delay control function is set to **On**.

### Filter counter

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

Use the Point **▲▼** buttons to select Filter counter and then press the Point **▶** or the SELECT button to access the submenu items.

- Filter counter**..... Show the total accumulated time of the filter use timer setting.
- Timer**..... To set a timer, when the projector reaches the time, the Filter warning icon (Fig.1) appears on the screen and the total accumulated time turns red, indicating that the filter replacement is necessary.
- Filter counter reset**... After replacing the filters, be sure to reset the timer. The Filter warning icon will not turn off until the filter counter is reset. For details about resetting the timer, refer to "Resetting the Filter Counter" on page 61.

**Fig.1** Filter warning icon



Filter warning icon appears on the screen at a set time. (Off/1000H/2000H/3000H/4000H/5000H/6000H).

✓ **Note:**

- This icon also appears at turning on.
- The Filter warning icon (Fig.1) will not appear when the Display function is set to **Off** (p.48), during **Freeze**(p.25), or **No show** (p.26).

### Filter counter



Press the **SELECT** button to select **Timer**, and then use the Point **▲▼** buttons to set the timer. Select from (Off/1000H/ 2000H/ 3000H/4000H/5000H/6000H) depending on the use environment.

# Setting

## Total power savings

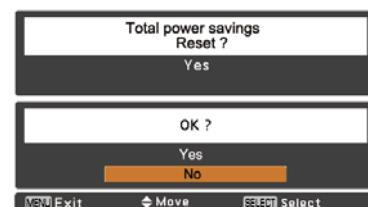
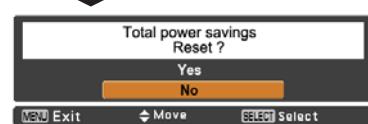
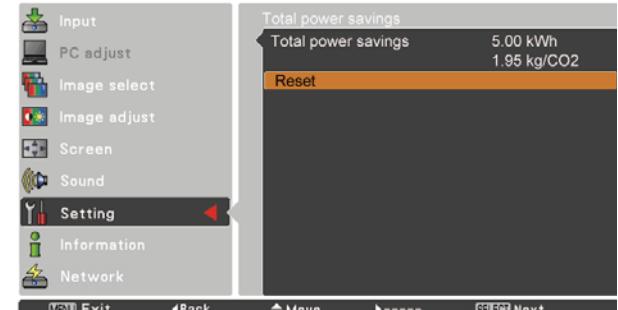
This function displays the saved amount of power and the exhausted CO2 of the projector.

Use the Point **▲▼** buttons to select Total power savings and then press the Point **▶** or the SELECT button to access the submenu items.

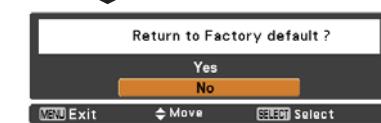
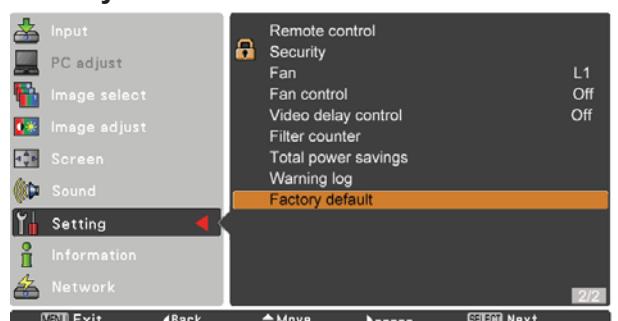
**Total power savings**.....Show the total accumulated power savings of the projector and display the total amount of CO2 exhausted from the projector.

**Reset**.....Reset the figures of the total power savings and the exhausted CO2.

## Total power savings



## Factory default



## Warning log

This function records anomalous operations while the projector is in operation and use it when diagnosing faults. Up to 10 warning logs are displayed with the latest warning message at the top of the list, followed by previous warning messages in chronological order.

### ✓ Note:

When the Factory default function is executed, all the warning log records will be deleted.

## Factory default

This function returns all setting values except for the **PIN code lock**, **Logo PIN code lock**, **User logo**, **Filter counter** and **Total power savings** 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

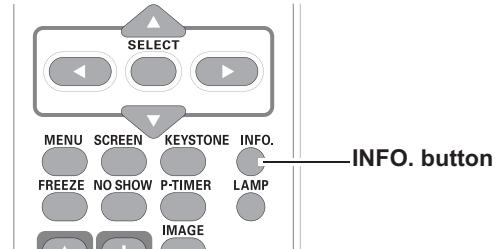
Press the INFO. button on the remote control to display the Information Menu.

### Menu Operation

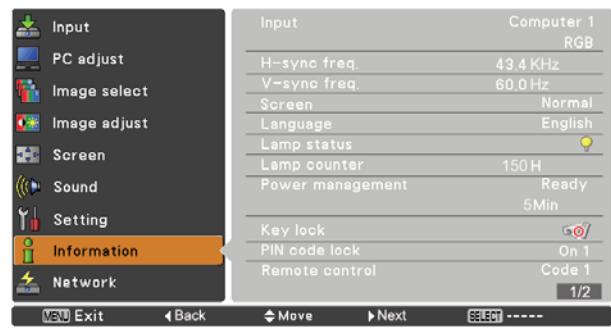
Press the Point **▲▼** buttons to select the Information. The Information Menu is displayed.

See below for displayed information.

### Remote Control



### Information Menu



#### 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, Shut down or Timer is displayed.

#### Key lock

The selected Key lock icon is displayed.

#### PIN code lock

Off or On 1 or On 2 is displayed.

#### Remote control

The selected remote code is displayed.

#### SERIAL NO.

The serial number of the projector is displayed. The serial number is used to service the projector.

#### Total power savings

The saved amount of power and the exhausted CO2 are displayed.

# Maintenance and Cleaning

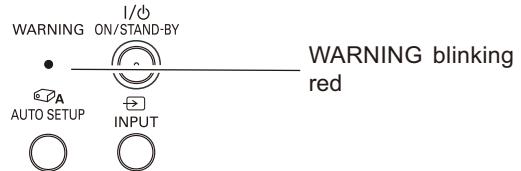
## WARNING indicator

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.

#### Top Control



#### ✓ 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.

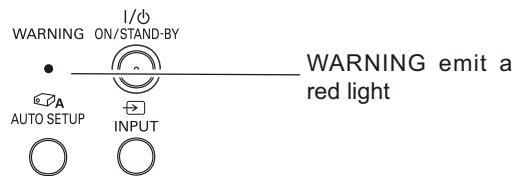
#### Then check the matters below:

- 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 not 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? Replace the filters with new ones.

### 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 center.

#### Top Control



#### CAUTION

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

### Replacing the Filters

Filter prevents dust from accumulating on the optical elements inside the projector. Should the filter 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, replace the filters immediately. Replace the filters by following the steps below.

- 1 Turn off the projector and unplug the AC power cord from the AC outlet.
- 2 Turn over the projector and pull out the filter cover (bottom); pull up the handle and take out the whole filter (bottom.)  
Press up the latches and pull out the filter cover (side); pull out the handle and take out the side filter.
- 3 Put new filters back into the position. Make sure that the filters are fully inserted to the projector.
- 4 Connect the AC power cord to the projector and turn on the projector.



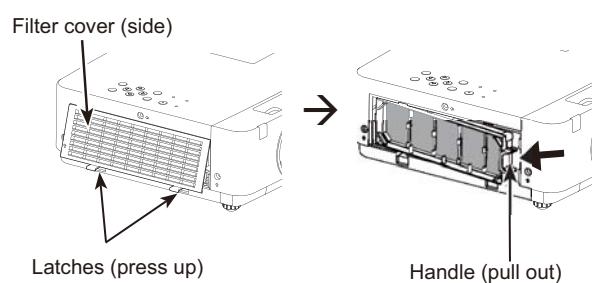
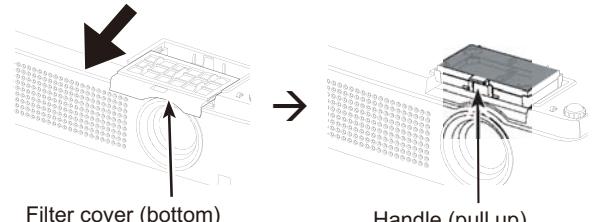
#### CAUTION

- 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.
- Do not wash the filters with water or any other liquid matter. Otherwise the filters may be damaged.

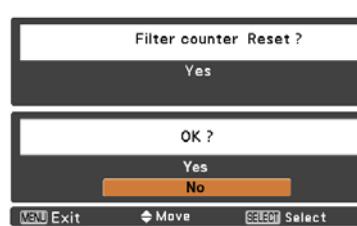
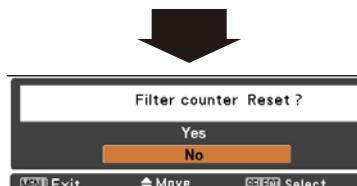
#### RECOMMENDATION

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 center for proper cleaning.



#### Filter counter



The Filter counter Reset? appears.

Select Yes, then another confirmation box appears.

Select Yes again to reset the Filter counter.

### Resetting the Filter Counter

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

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

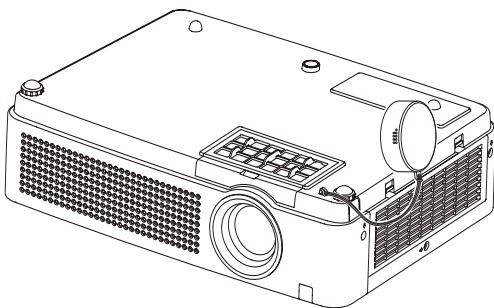
## Maintenance and Cleaning

### Attaching the Lens Cap

When moving this projector or while not using it over an extended period of time, replace 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.

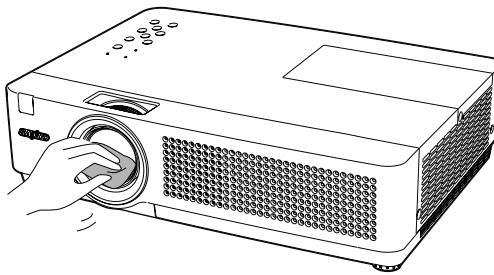


### Cleaning the Projection Lens

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.

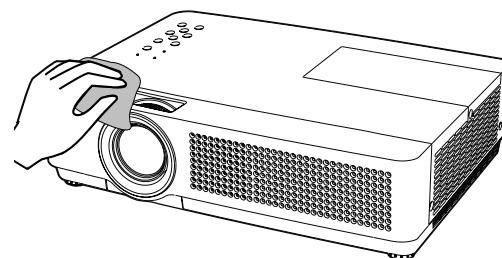


### Cleaning the Projector Cabinet

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.



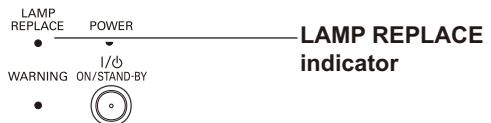
### CAUTION

Do not use any flammable solvents or air sprays on the projector and in its vicinity. The explosion or fire hazard may occur even after the AC power cord is unplugged because the temperature inside the projector is extremely high due to the lamps. In addition, there is a risk that the internal parts may be damaged not only by the flammable air spray but also by the cold air.

### 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.

#### Top Control



Lamp replacement icon



#### ✓ Note:

- When Mode 2 is selected in the Lamp life control menu, if the projection lamp of the projector reaches its end of life, the lamp replacement icon appears on the screen, and the projector is turned off automatically after 3 minutes.
- The Lamp replacement icon will not appear when the Display function is set to **Off** (p.48), during **Freeze** (p.25), or **No show** (p.26).



### 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

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.



### CAUTION

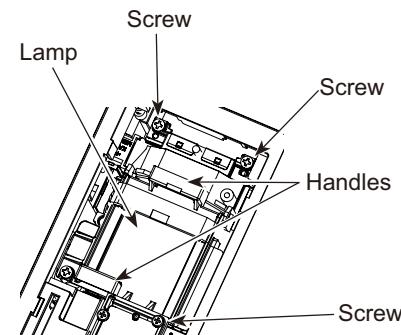
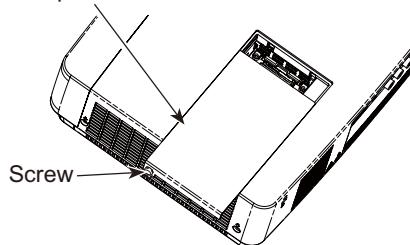
When replacing the lamp because it has stopped illuminating, there is a possibility that the lamp may be broken.

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.

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 three (3) 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 three (3) 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 Cover



## Maintenance and Cleaning

### **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 your projector** : PLC-XU4000
- **Replacement Lamp Type No.** : POA-LMP148  
(Service Parts No. 610 352 7949)



### **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 center 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 as described on pages 14-16.
- 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
<b>No power.</b>	<ul style="list-style-type: none"><li>– Plug the power cord of the projector into the AC outlet.</li><li>– See if the POWER indicator lights red.</li><li>– 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. See page 18.</li><li>– Check the WARNING indicator. If the WARNING indicator lights red, projector cannot be turned on. See page 60.</li><li>– Check the projection lamp. See page 63.</li><li>– Unlock the Key lock function for the projector. See page 55.</li></ul>
<b>The initial display is not shown.</b>	<ul style="list-style-type: none"><li>– Make sure <b>Off</b> or <b>Countdown off</b> are not chosen at display function. See page 48.</li></ul>
<b>The initial display is not same as the default set.</b>	<ul style="list-style-type: none"><li>– Make sure <b>User</b> or <b>Off</b> are not chosen at Logo (select) function. See page 48.</li></ul>
<b>Input signal switches automatically. (or does not switch automatically)</b>	<ul style="list-style-type: none"><li>– Make sure Input search function is adjusted properly. See page 47.</li></ul>
<b>An icon other than Input mode or Lamp mode icon appears.</b>	<ul style="list-style-type: none"><li>– That is the Lamp replacement icon or the Filter warning icon. See pages 57 or 63.</li></ul>
<b>Image is out of focus.</b>	<ul style="list-style-type: none"><li>– Adjust focus of the projector. See page 23.</li><li>– Provide proper distance between the projector and the projection screen. See page 13.</li><li>– Check the projection lens to see if it needs cleaning. See page 62.</li><li>– 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.</li></ul>
<b>Image is Left/Right reversed.</b>	<ul style="list-style-type: none"><li>– Check the Ceiling/Rear function. See pages 37, 45.</li></ul>
<b>Image is Top/Bottom reversed.</b>	<ul style="list-style-type: none"><li>– Check the Ceiling function. See pages 37, 45.</li></ul>
<b>Picture is not bright enough.</b>	<ul style="list-style-type: none"><li>– Check if the <b>Contrast</b> or <b>Brightness</b> are adjusted properly. See pages 34, 42.</li><li>– Check if <b>Image mode</b> is selected properly. See pages 33, 41.</li><li>– Check the lamp control function. See pages 25, 54.</li><li>– Check the <b>LAMP REPLACE</b> indicator. If it lights, the end of lamp life is approaching. Replace the lamp with a new one promptly. See page 63.</li></ul>

## Appendix

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<b>No image.</b>	<ul style="list-style-type: none"><li>– Check the connection between your computer or video equipment and the projector. See pages 14-16.</li><li>– 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.</li><li>– It takes about 30 seconds to display an image after turning on the projector. See page 18.</li><li>– Check the Input signal, color system, video system or computer system mode.</li><li>– Make sure the temperature is not out of the specified Operating Temperature (41°F–95°F [5°C–35°C]).</li><li>– When <b>No Show</b> is operating, the image cannot be displayed. Press the NO SHOW button or any other button on the remote control.</li></ul>
<b>No sound</b>	<ul style="list-style-type: none"><li>– Check the audio cable connection from audio input source.</li><li>– Adjust the audio source.</li><li>– Press the Volume + button. See page 24.</li><li>– Press the Mute button. See page 24.</li><li>– When the AUDIO OUT is plugged-in, the projector's built-in speaker is not available.</li><li>– Is the image projected? You will hear the sound only when the image is projected.</li></ul>
<b>The color is strange.</b>	<ul style="list-style-type: none"><li>– Check the Input signal, color system, video system or computer system mode.</li><li>– Make sure the <b>Blackboard</b> is not selected on Image select menu. See pages 33, 41.</li></ul>
<b>Some displays are not seen during the operation.</b>	<ul style="list-style-type: none"><li>– Check the Display function. See page 46.</li></ul>
<b>Auto PC adjustment function does not work.</b>	<ul style="list-style-type: none"><li>– Check the Input signal. Auto PC adjustment function can not work <b>480p, 575p, 720p, 480i, 575i, 1035i or 1080i</b> is selected. See Page 30.</li></ul>
<b>The setting does not remain after turning off power.</b>	<ul style="list-style-type: none"><li>– Make sure you selected <b>Store</b> after adjusting setting. Some settings can not be stored if not registered with "Store". See pages 35, 43.</li></ul>
<b>Power management does not work.</b>	<ul style="list-style-type: none"><li>– Power management function can not work while <b>Freeze</b> or <b>No Show</b> function is running. See page 51.</li></ul>
<b>Capture function does not work.</b>	<ul style="list-style-type: none"><li>– Check the connection and the input signal to see if there is signal.</li></ul>
<b>Auto setup does not work properly.</b>	<ul style="list-style-type: none"><li>– Make sure <b>Off</b> is not selected at any function of <b>Auto setup</b>. See page 47.</li><li>– Make sure <b>On</b> is not selected at the Ceiling function. See page 37 or 45.</li></ul>
<b>Auto keystone function does not work even when the projector is tipped.</b>	<ul style="list-style-type: none"><li>– Make sure the Auto keystone function is not set to <b>Manual</b>. Press the AUTO SETUP button on the top control. See pages 23, 47.</li></ul>

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<b>The image is distorted or runs off.</b>	– Check <b>PC adjust</b> menu or <b>Screen</b> menu and adjust them. See pages 31-32, 35-36.
<b>PIN code dialog box appears at start-up.</b>	– PIN code lock is being set. Enter a PIN code (the “1234” or numbers you have set). See pages 19, 55-56.
<b>The Remote Control does not work.</b>	– 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. See page 54. – Unlock the Key lock function for the remote control function. See page 55.
<b>Indicator blinks or lights.</b>	– Check the status of the projector with referring to " <b>Indicators and projector Condition</b> ". See page 70.
<b>The exclamation mark appears on the screen.</b>	– Your operation is invalid. Operate correctly.
<b>Top control does not work.</b>	– The top control is not available if the top control is locked at <b>Key lock</b> under <b>Security</b> of <b>SETTING</b> section. See page 55.
<b>Unable to unlock the Logo PIN code lock, Security key lock or Security PIN code lock.</b>	– Contact the dealer where you purchased the projector or the service center.

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### **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.



The CE Mark is a Directive conformity mark of the European Community (EC).



Pixelworks ICs used.

Licensed under USP5,717,422 USP6,816,141



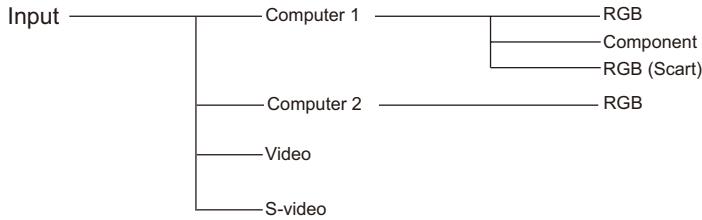
This symbol on the nameplate means the product is Listed by Underwriters Laboratories Inc. It is designed and manufactured to meet rigid U.L. safety standards against risk of fire, casualty and electrical hazards.

## Appendix

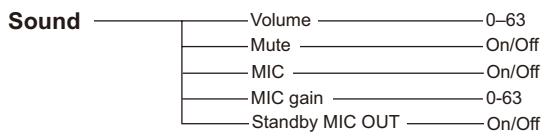
### Menu Tree

#### Computer Input/Video Input

##### Input



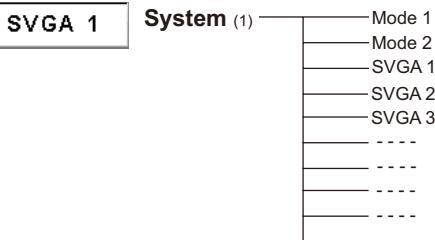
##### Sound



##### Image Select

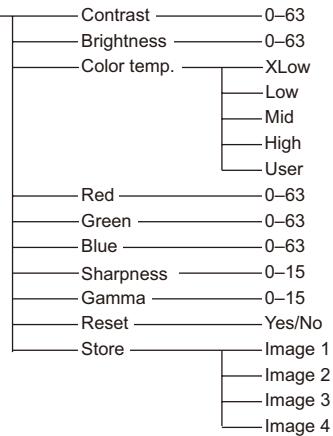


##### Computer Input

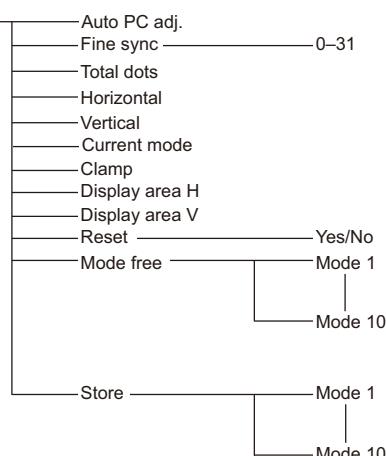


\* Systems displayed in the System Menu vary depending on an input signal.

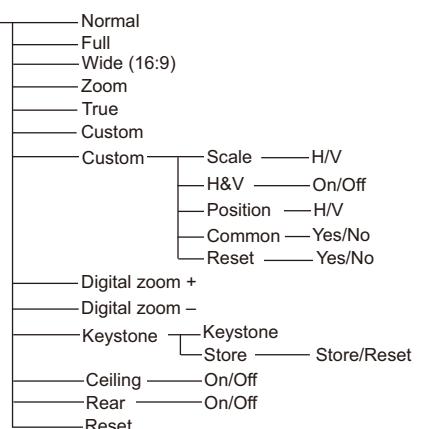
##### Image Adjust

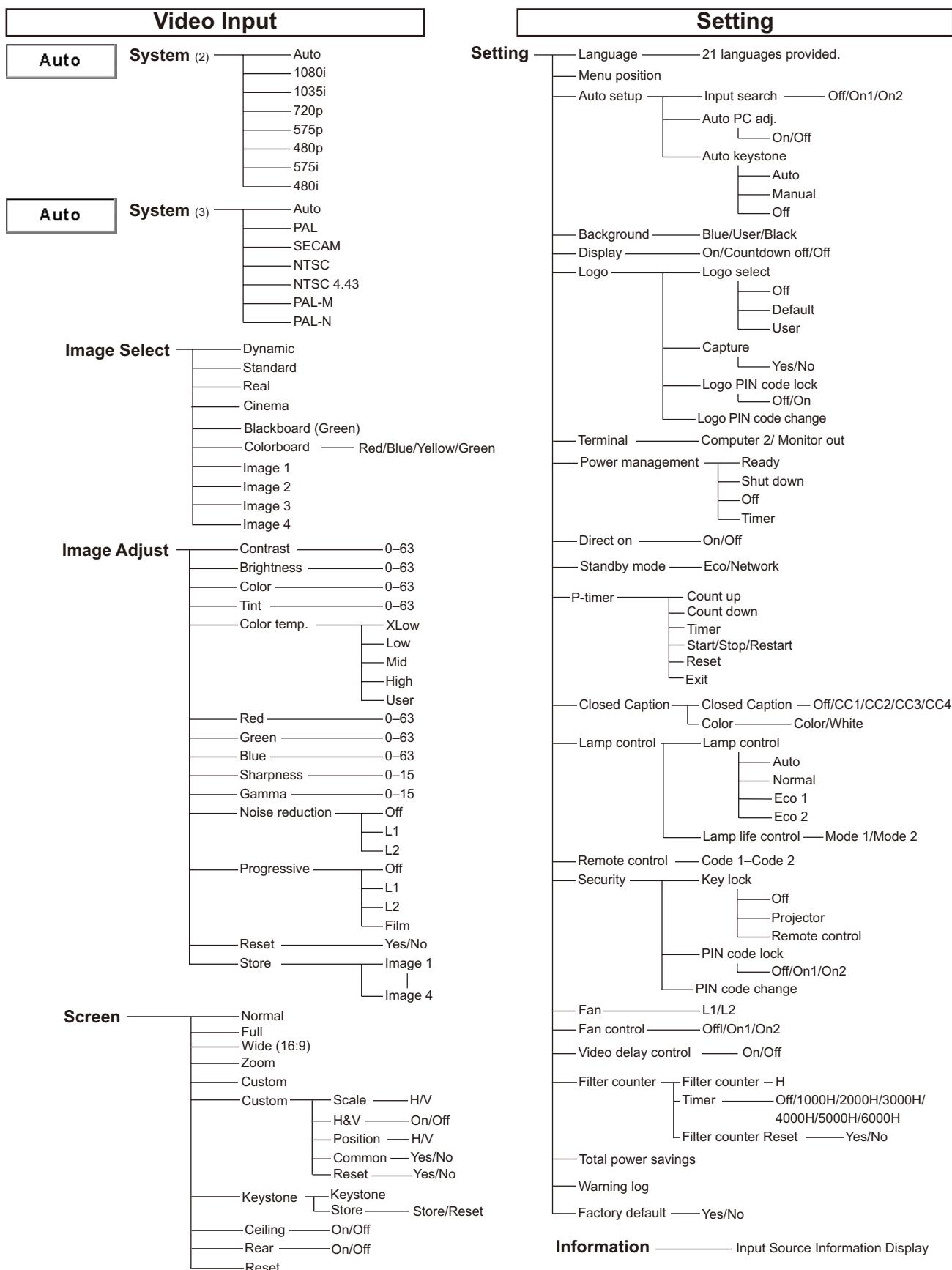


##### PC Adjust



##### Screen





## Appendix

### Indicators and Projector Condition

Check the indicators for projector condition.

Indicators			Projector Condition
POWER red/green	WARNING red	LAMP REPLACE yellow	
●	●	●	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 has been cooled down enough and the temperature returns to normal. When turning on the projector, the WARNING indicator stops 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.

## Compatible Computer Specifications

Basically this projector can accept the signal from all computers with the V-, H-Frequency mentioned below and less than 140 MHz of Dot Clock.

When selecting these modes, PC adjustment can be limited.

ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (KHz)	V-Freq. (Hz)	ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (KHz)	V-Freq. (Hz)
VGA 1	640 x 480	31.47	59.88	SXGA 5	1280 x 1024	63.74	60.01
VGA 2	720 x 400	31.47	70.09	SXGA 6	1280 x 1024	71.69	67.19
VGA 3	640 x 400	31.47	70.09	SXGA 7	1280 x 1024	81.13	76.107
VGA 4	640 x 480	37.86	74.38	SXGA 8	1280 x 1024	63.98	60.02
VGA 5	640 x 480	37.86	72.81	SXGA 9	1280 x 1024	79.976	75.025
VGA 6	640 x 480	37.50	75.00	SXGA 10	1280 x 960	60.00	60.00
VGA 7	640 x 480	43.269	85.00	SXGA 11	1152 x 900	61.20	65.20
MAC LC13	640 x 480	34.97	66.60	SXGA 12	1152 x 900	71.40	75.60
MAC 13	640 x 480	35.00	66.67	SXGA 13	1280 x 1024	50.00	86.00 (Interface)
480p	640 x 480	31.47	59.88	SXGA 14	1280 x 1024	50.00	94.00 (Interface)
575p	768 x 575	31.25	50.00	SXGA 15	1280 x 1024	63.37	60.01
575i	768 x 576	15.625	50.00 (Interlace)	SXGA 16	1280 x 1024	76.97	72.00
480i	640 x 480	15.734	60.00 (Interlace)	SXGA 17	1152 x 900	61.85	66.00
SVGA 1	800 x 600	35.156	56.25	SXGA 18	1280 x 1024	46.43	86.70 (Interface)
SVGA 2	800 x 600	37.88	60.32	SXGA 19	1280 x 1024	63.79	60.18
SVGA 3	800 x 600	46.875	75.00	SXGA 20	1280 x 1024	91.146	85.024
SVGA 4	800 x 600	53.674	85.06	SXGA+ 1	1400 x 1050	63.970	60.190
SVGA 5	800 x 600	48.08	72.19	SXGA+ 2	1400 x 1050	65.350	60.120
SVGA 6	800 x 600	37.90	61.03	SXGA+ 3	1400 x 1050	65.120	59.900
SVGA 7	800 x 600	34.50	55.38	MAC21	1152 x 870	68.68	75.06
SVGA 8	800 x 600	38.00	60.51	MAC	1280 x 960	75.00	75.08
SVGA 9	800 x 600	38.60	60.31	MAC	1280 x 1024	80.00	75.08
SVGA 10	800 x 600	32.70	51.09	WXGA 1	1366 x 768	48.36	60.00
SVGA 11	800 x 600	38.00	60.51	WXGA 2	1360 x 768	47.70	60.00
MAC 16	832 x 624	49.72	74.55	WXGA 3	1376 x 768	48.36	60.00
MAC 19	1024 x 768	60.24	75.08	WXGA 4	1360 x 768	56.16	72.00
XGA 1	1024 x 768	48.36	60.00	WXGA 6	1280 x 768	47.776	59.87
XGA 2	1024 x 768	68.677	84.997	WXGA 7	1280 x 768	60.289	74.893
XGA 3	1024 x 768	60.023	75.03	WXGA 8	1280 x 768	68.633	84.837
XGA 4	1024 x 768	56.476	70.07	WXGA 9	1280 x 800	49.600	60.050
XGA 5	1024 x 768	60.31	74.92	WXGA 10	1280 x 800	41.200	50.000
XGA 6	1024 x 768	48.50	60.02	WXGA 11	1280 x 800	49.702	59.810
XGA 7	1024 x 768	44.00	54.58	WXGA 12	1280 x 800	63.98	60.02
XGA 8	1024 x 768	63.48	79.35	WUXGA 1	1920 x 1200	74.556	59.885
XGA 9	1024 x 768	36.00	87.17 (Interlace)	WUXGA 2	1920 x 1200	74.038	59.950
XGA 10	1024 x 768	62.04	77.07	WSXGA+ 1	1680 x 1050	65.290	59.954
XGA 11	1024 x 768	61.00	75.70	WXGA+ 1	1440 x 900	55.935	59.887
XGA 12	1024 x 768	35.522	86.96 (Interlace)	WXGA+ 2	1440 x 900	74.918	60.000
XGA 13	1024 x 768	46.90	58.20	UXGA 1	1600 x 1200	75.00	60.00
XGA 14	1024 x 768	47.00	58.30	UXGA 2	1600 x 1200	81.25	65.00
XGA 15	1024 x 768	58.03	72.00	UXGA 3	1600 x 1200	87.5	70.00
SXGA 1	1152 x 864	64.20	70.40	UXGA 4	1600 x 1200	93.75	75.00
SXGA 2	1280 x 1024	62.50	58.60	720p	1280 x 720	37.50	50.00
SXGA 3	1280 x 1024	63.90	60.00	720p	1280 x 720	45.00	60.00
SXGA 4	1280 x 1024	63.34	59.98	1035i	1920 x 1035	33.75	60.00 (Interface)
				1080i	1920 x 1080	33.75	60.00 (Interface)
				1080i	1920 x 1080	28.125	50.00 (Interface)

✓ Note:

The specifications are subject to change without notice.

## Appendix

### Technical Specifications

#### Mechanical Information

Projector Type	Multi-media Projector
Dimensions (W x H x D)	13.78" x 3.44" x 10.01" (350.0 mm X 87.5 mm X 254.3 mm) (Not including protrusions)
Net Weight	7.48 lbs (3.4 kg)
Feet Adjustment	0° to 12°

#### 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
SD/HD TV Signal	480i, 480p, 575i, 575p, 720p, 1035i and 1080i
Input Scanning Frequency	H-sync. 15 kHz–100 kHz, V-sync. 50–100 Hz

#### Optical Information

Projection Image Size (Diagonal)	Adjustable from 40" to 300"
Throw Distance	4.6' ~ 41.7' (1.4 m ~ 12.7 m)
Projection Lens	F 1.60 ~ 1.76 lens with f 22.3 mm ~ 26.8 mm with manual zoom and focus
Projection Lamp	245 W

#### Interface

Video Input Jack	RCA Type x 1
S-video Input 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 2
Computer In 1/Component Input Terminal	Mini D-sub 15 pin x 1
Computer In 2/Monitor Output Terminal	Mini D-sub 15 pin x 1
Control Port	D-sub 9 pin x 1
Audio Output Jack	Mini Jack (stereo) x 1 (variable)
LAN Connection Terminal	RJ-45

#### Audio

Internal Audio Amp	10.0 W RMS
Built-in Speaker	1 speaker, ø1.1"(37 mm)

#### Power

Voltage and Power Consumption	AC 100–240 V (3.8-1.8 A 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 (67 g) (including batteries)

### Accessories

Owner's Manual (CD-ROM)

Quick Reference Guide

AC Power Cord

Remote Control and Batteries

VGA Cable

Lens Cap with String

PIN Code Label

Soft Carrying Case

Filter Cover for Ceiling Mount

- The specifications are subject to change without notice.
- LCD panels are manufactured to the highest possible standards. Even though 99.99% of the pixels are effective, a tiny fraction of the pixels (0.01% or less) may be ineffective by the characteristics of the LCD panels.

### Optional Parts

The parts listed below are optionally available. When ordering those parts, specify the item name and Model No. to the sales dealer.

Model No.

**COMPONENT~VGA Cable** : POA-CA-COMPVGA

**SCART~VGA Cable** : POA-CA-SCART

## Appendix

### PJ Link Notice

This projector is compliant with PJLink Standard Class 1 of JBMIA (Japan Business Machine and Information System Industries Association). This projector supports all commands defined by PJLink Class 1 and is verified conformance with PJLink Standard Class 1.

For PJ Link password, see the owner's manual of "Network Set-up and Operation."

Projector Input		PJLink Input	Parameter
Computer 2 (Analog)		RGB 3	13
Computer 1	RGB	RGB 1	11
	Component	VIDEO 2	22
	RGB (Scart)	RGB 2	12
Video	Video	VIDEO 1	21
	S-video	VIDEO 5	25

PJLink is a registered trademark of JBMIA and pending trademark in some countries.

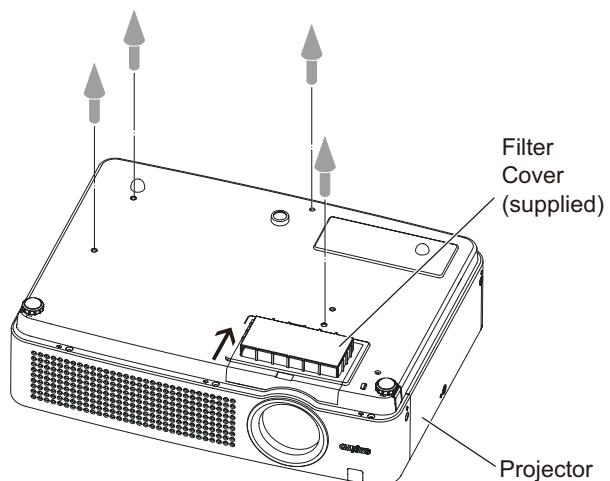


### Attaching the Filter Cover to the projector

The supplied filter cover is designed for preventing dust accumulation on the filter when mounting the projector on the ceiling.

#### To Ceiling Mount

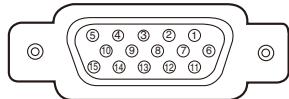
- 1 Turn over the projector.
- 2 For attaching the filter cover to the projector, push the cover as the picture shown. (For removing the filter cover, push the cover to the opposite direction.)
- 3 Attach the projector to the ceiling mount in accordance with the instruction manuals which come with the ceiling mount.



### Configurations of Terminals

#### COMPUTER IN 1 /COMPONENT IN

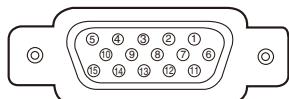
Terminal: Analog RGB (Mini D-sub 15 pin)



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

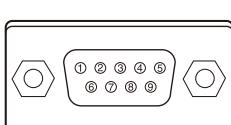
#### COMPUTER IN 2/MONITOR OUT (ANALOG)

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



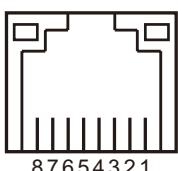
<b>1</b>	Red Input/Output	<b>9</b>	-----
<b>2</b>	Green Input/Output	<b>10</b>	Ground (Vert.sync.)
<b>3</b>	Blue Input/Output	<b>11</b>	-----
<b>4</b>	-----	<b>12</b>	-----
<b>5</b>	Ground (Horiz.sync.)	<b>13</b>	Horiz. sync. Input/Output
<b>6</b>	Ground (Red)	<b>14</b>	Vert. sync.
<b>7</b>	Ground (Green)	<b>15</b>	-----
<b>8</b>	Ground (Blue)		

#### CONTROL PORT CONNECTOR (D-sub 9 pin)



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

#### LAN TERMINAL



<b>1</b>	TX +	<b>5</b>	-----
<b>2</b>	TX -	<b>6</b>	RX -
<b>3</b>	RX +	<b>7</b>	-----
<b>4</b>	-----	<b>8</b>	-----

8 7 6 5 4 3 2 1

## Appendix

### 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 center.

**PIN Code Lock No.**

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Factory default set No: 1 2 3 4\*

**Logo PIN Code Lock No.**

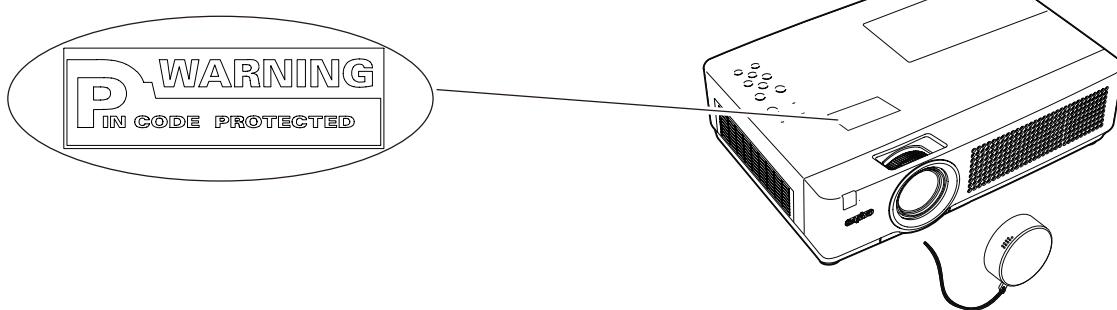
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Factory default set No: 4 3 2 1\*

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

While the projector is locked with the PIN code.

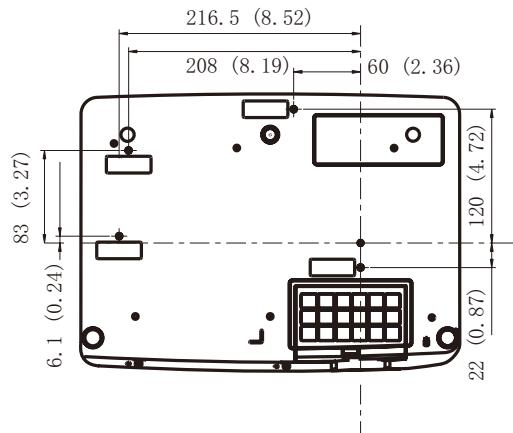
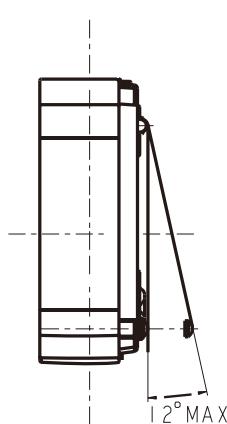
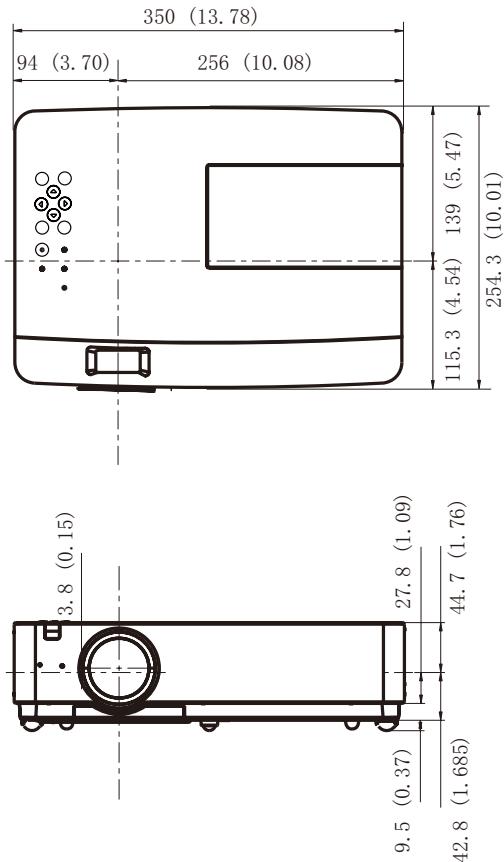
Put the label below (supplied) on in a prominent place of the projector's body while it is locked with a PIN code.



### Dimensions

Unit: mm(inch)

Screw Holes for Ceiling Mount  
Screw: M4  
Depth: 12.0(0.472)



**SANYO**

SANYO Electric Co., Ltd.

KA2AC