

Video Input

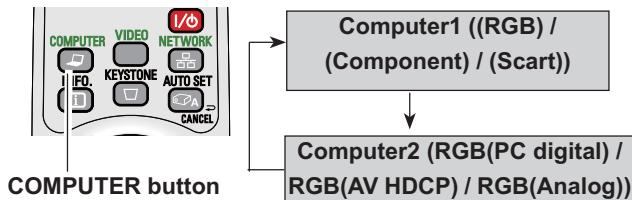
Input Source Selection (Component, RGB Scart 21-pin)

Direct Operation

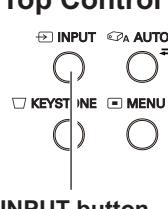
Choose **Computer 1(Component)** or **Computer 1(Scart)** by pressing the INPUT button on the top control or press the COMPUTER button on the remote control.

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

Remote Control



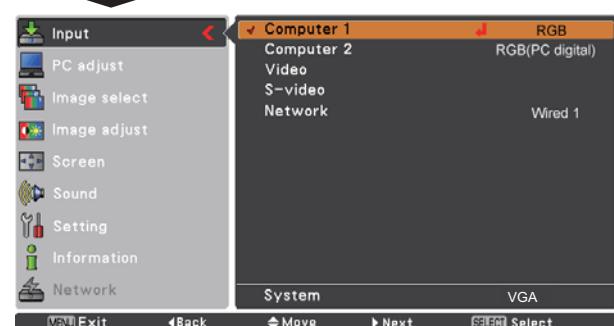
Top Control



Menu Operation

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

Input Menu



Component When the input source is coming from video equipment connected to the COMPUTER IN 1/COMPONENT IN terminal with a Component-VGA Cable, select **Component**.

RGB (Scart) When the input source is coming from video equipment connected to the COMPUTER IN 1/COMPONENT IN terminal with a Scart-VGA Cable, select **RGB (Scart)**.

✓Note:

- **Network** is for the Network function. See the owner's manual of "Network Set-up and Operation".
- When the Input Search function is set to **On1** or **On2**, the input signal will be searched automatically (p.49).

Video System Selection

- 1 Press the MENU button to display the On-Screen Menu. Use the Point **▲▼** buttons to select **Input** and then press the Point **▶** or the **SELECT** button.
- 2 Use the Point **▲▼** buttons to select **Video**, **S-video** or **Computer 1(Component)** and then press the **SELECT** button.
- 3 Use the Point **▲▼** buttons to select **System** and then press the Point **▶** or the **SELECT** button. Use the Point **▲▼** buttons to 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 can not reproduce proper video image, select a specific broadcast signal format from among **PAL**, **SECAM**, **NTSC**, **NTSC 4.43**, **PAL-M** and **PAL-N**.

AV System Menu (Video or S-video)



Component

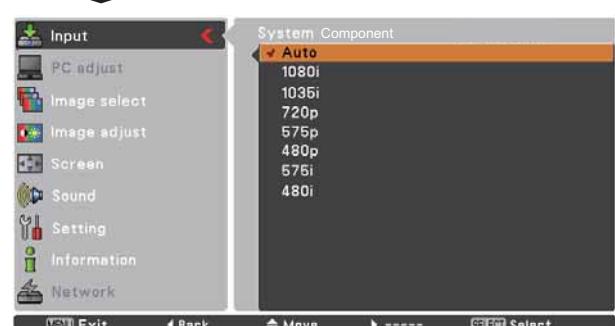
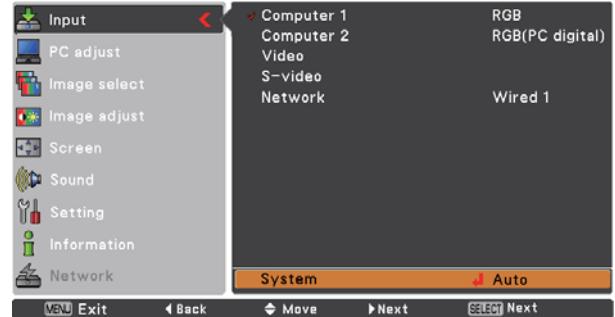
Auto

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

COMPONENT VIDEO SIGNAL FORMAT

If the projector can not reproduce proper video image, select a specific component video signal format among **480i**, **575i**, **480p**, **575p**, **720p**, **1035i**, **1080i** and **1080p**.

AV System Menu (Component)



✓Note:

The AV System Menu can not be selected when selecting **RGB (Scart)**.

Video Input

Image Mode Selection

Direct Operation

Select the desired image mode among **Dynamic**, **Standard**, **Cinema**, **Blackboard (Green)**, **Colorboard**, **Image 1**, **Image 2**, **Image 3** and **Image 4** by pressing the IMAGE button on the remote control.

Remote Control

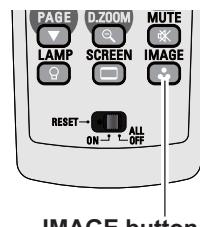
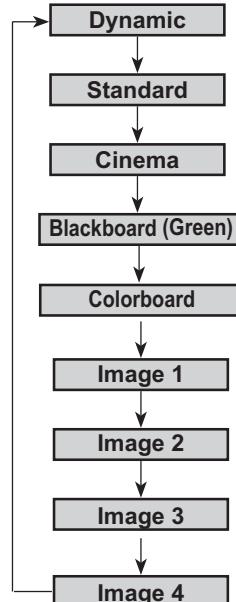


IMAGE button

IMAGE button



Menu Operation

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

Dynamic

For viewing pictures in a bright room.

Standard

Normal picture mode preset on the projector.

Cinema

Picture mode adjusted with fine tone.

Blackboard (Green)

For the image projected on a blackboard.

This mode helps 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

Use the Point **▲▼** buttons to select **Colorboard** and then press the Point **▶** or the SELECT button. Use the Point **▲▼** buttons to select the desired item and then press the SELECT button.

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.

Image 1–4

For viewing with the user preset image mode in the Image adjust Menu (see pages 45-46). This Image memory is provided in each computer, component and video input source.

Image Select Menu

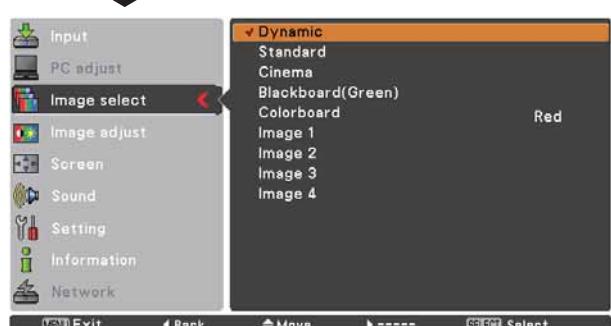
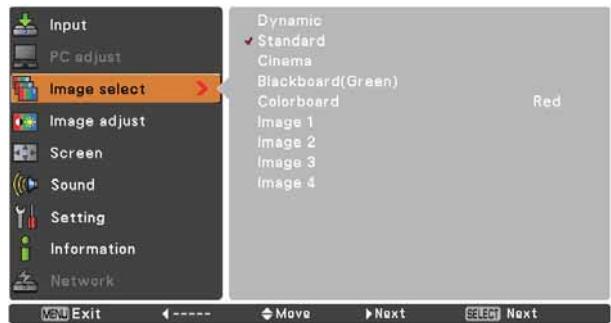


Image Adjustment

- 1 Press the MENU button to display the On-Screen Menu. Use the Point **▲▼** buttons to select **Image adjust** and then press the 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.

Contrast

Press the Point **◀** button to decrease the contrast; press the Point **▶** button to increase the contrast (from 0 to 63).

Brightness

Press the Point **◀** button to decrease the brightness; press the Point **▶** button to increase the brightness (from 0 to 63).

Color

Press the Point **◀** button decrease the intensity of the color; press the Point **▶** button increase the intensity of the color (from 0 to 63).

Tint

Press the Point **◀▶** buttons to adjust the tint value to get a proper color balance (from 0 to 63).

Color temp.

Use the Point **◀▶** buttons to select the desired Color temp. level (XLow, Low, Mid or High).

White balance (Red)

Press the Point **◀** button to lighten red tone; press the Point **▶** button to deepen red tone (from 0 to 63).

White balance (Green)

Press the Point **◀** button to lighten green tone; press the Point **▶** button to deepen green tone (from 0 to 63).

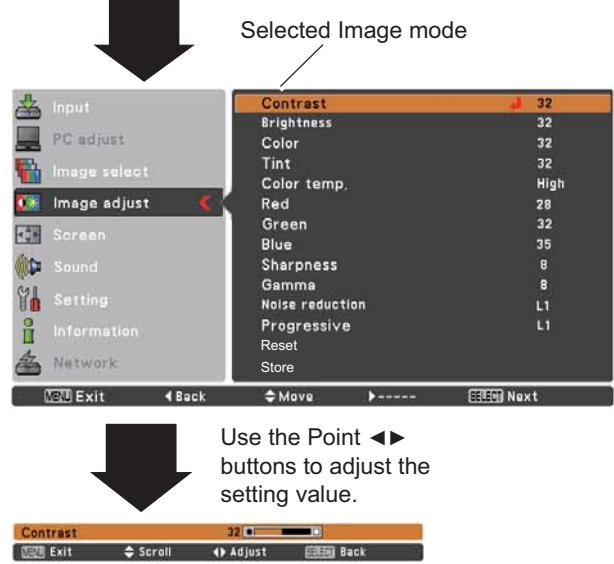
White balance (Blue)

Press the Point **◀** button to lighten blue tone; press the Point **▶** button to deepen blue tone (from 0 to 63).

✓ Note:

- When **White balance Red, Green or Blue** is adjusted, the Color temp. level will change to **User**.
- **Tint** can not be selected when the video system is **PAL, SECAM, PAL-M or PAL-N** (p.43).
- When **Blackboard(Green)** or **Colorboard** is selected in Image select, **Color temp.** will change to **Blackboard** or **Colorboard**.

Image adjust Menu



Video Input

Sharpness

Press the Point **◀** button to decrease the sharpness of the image; Press the Point **▶** button to increase the sharpness of the image (from 0 to 15).

Gamma

Use the Point **◀▶** buttons to adjust the gamma value to obtain a better balance of contrast (from 0 to 15).

Noise reduction

Noise interference on the screen can be reduced. Select one of the following options to get smoother images.

Off Disabled.

L1 Lower reduction.

L2 Higher reduction.

Progressive

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

Off Disabled.

L1 For an active picture.

L2 For a still picture.

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

Reset

To reset the adjusted data, select **Reset** and press the the **SELECT** button. A confirmation box appears and then select **Yes**. All adjustments will return to their previous figures.

Store

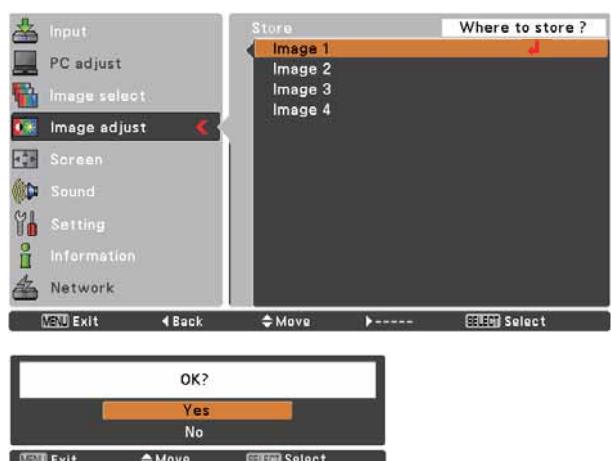
To store the adjusted data, select **Store** and press the Point **▶** or the **SELECT** button. Use the Point **▲▼** buttons to select one from Images 1 to 4 and press the **SELECT** button.

A confirmation box appears and then select **Yes**. Stored data can be called up by selecting an **Image (1-4)** in the Image Mode Selection on page 44.

✓Note:

Noise reduction and **Progressive** can not be selected when **480p**, **575p**, **720p**, **1035i** or **1080i** is selected (p.43).

Store Menu



A confirmation box appears and then select **Yes**.

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 the Point **▶** or the SELECT button
- 2 Use the Point **▲▼** buttons select the desired item and then press the SELECT button.

Normal

Provide the image to fit the screen size while maintaining the aspect ratio of input signal.

Wide

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

Custom

Adjust the screen scale and position manually with this function.

Press the Point **▶** button at **Custom** and the **Custom** is displayed on the screen, you can use the Point **▲▼** buttons to choose the item you want to adjust.

Scale H/V Adjust the Horizontal/Vertical screen scale.

H&V When set to **On**, the aspect ratio is fixed. **Scale V** appears dimmed and becomes unavailable. Adjust the **Scale H**, then the screen scale is automatically modified based on the aspect ratio.

Position H/V Adjust the Horizontal/Vertical screen position.

Common Save the adjusted scale to all the inputs. Press the SELECT button at **Common** to display a confirmation box. To save the scale, press the SELECT button at **Yes**, When **Custom** is selected, the saved scale is used.

Reset Reset the all adjusted values. Press the SELECT button at **Reset** to display a confirmation box. To reset, press the SELECT button at **Yes**.

Screen Menu



✓Note:

- When no signal is detected, **Normal** is set automatically and the Aspect dialog box disappears.
- The adjustable range for **Scale H/V** and **Position H/V** is limited depending on the input signal.
- **Wide**, **Zoom** and **Natural wide** can not be operated when **720p**, **1035i** or **1080i** is selected in the AV System Menu (p.43).
- The corner pattern mode is disable when in Custom mode.

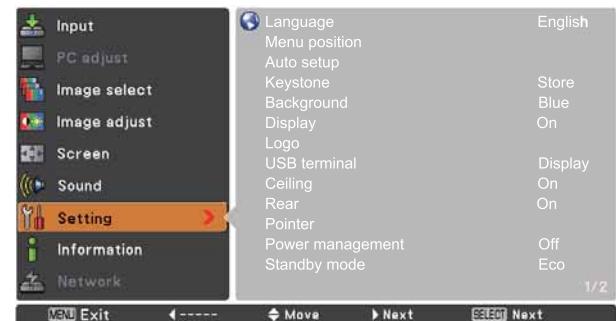
Setting

Setting

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

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

Setting Menu



Language

The language used in the On-Screen Menu is available in **English, German, French, Italian, Spanish, Portuguese, Dutch, Swedish, Finnish, Polish, Hungarian, Romanian, Russian, Chinese, Korean, Japanese and Thai.**

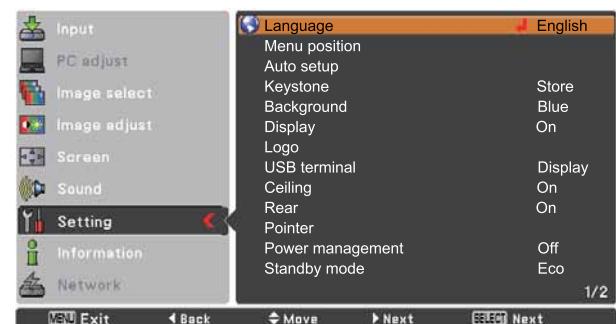
Menu position

This function is used to change the position of the On-Screen Menu. Select **Menu position** and press the Point **▶** or the SELECT button.

The Menu position changes each time you press SELECT button as follows.

the top left → the top right → the center → the bottom left → the bottom right → the top left →.....

Language



Auto setup

This function enables Input search, Auto Keystone correction and Auto PC adjustment by pressing the AUTO SETUP/CANCEL button on the top control or the AUTO SET/CANCEL 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.

Off Input search will not work.

On 1 ... Input search works under the following situation.

- When pressing the AUTO SETUP/CANCEL button on the top control.
- When pressing the AUTO SET/CANCEL button on the remote control.

On 2 ... 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/CANCEL button on the remote control.
- When pressing the AUTO SETUP/CANCEL button on the top control.
- When the current input signal is cut off.*

* If the No show 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 Enables Auto PC adjustment when pressing the AUTO SET/CANCEL button on the remote control or the AUTO SETUP/CANCEL button on the top control.

Off Disables Auto PC adjustment.

Auto Keystone

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

Manual .. Works only when pressing the AUTO SETUP/CANCEL button on the top control or the AUTO SET/CANCEL button on the remote control.

Off Disables Auto Keystone.

✓Note:

- While **Input search** is set to **On 1** or **On 2**, the status of Input and Lamp are displayed every time the signal is switched.
- Only the last selected input source can be detected.
- If the INPUT button on the top control or the COMPUTER, VIDEO or NETWORK 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** can not be set **Off** at the same time.

Auto setup Menu



✓Note:

- **Auto Keystone** corrects vertical distortion only, not correct horizontal distortion.
- The Auto Keystone function can not work when the **Ceiling** is set **On** in the Setting menu (p.54).
- Perfect correction of the image distortion can not be ensured with the Auto setup function. If the distortion is not corrected properly by pressing the AUTO SETUP/CANCEL button, adjust manually by pressing the KEYSTONE button on the remote control or selecting **Keystone** in the Setting menu (pp.27,50).
- **Fine sync**, **Total dots**, **Horizontal** and **Vertical** of some computers can not be fully adjusted with the Auto PC adjustment function. When the image is not provided properly with this operation, manual adjustments are required (pp.35-36).

Setting

Keystone

This function is used to adjust keystone distortion of the projected image. Use the Point **▲ ▼** buttons to choose the item you want to adjust.

Standard

Adjust the Horizontal/Vertical keystone distortion of the projected image.

Corner correction

Adjust the corner distortion of the projected image.

Corner pattern

Choose a Corner pattern mode among **Red, White, Blue, and Off**.

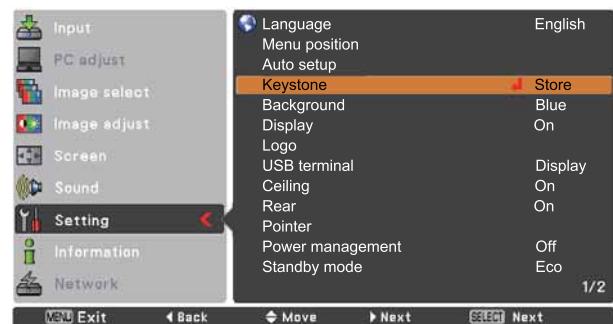
Store

StoreKeep the keystone correction even when the AC power cord is unplugged.

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

Press the KEYSTONE button on the remote control to switch the Standard (for Vertical/Horizontal) /Corner correction adjustment. The Standard or Corner correction adjustment dialog box appears. Use the Point **▲ ▼ ▲ ▼** buttons to correct the Standard or Corner distortion (p.27).

Keystone



Background

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

Blue . . . Blue colored background.

User . . . The image you captured.

Black . . . Black colored background.

Display

This function decides whether to display On-Screen Displays.

Off Hide the On-Screen Displays except;

Countdown Off Show the input image instead of the countdown when turning on the projector. Use this function when you want to project the image as early as possible even when the lamp is not bright enough.

On Show all the On-Screen displays. Use this function when you want to project images after the lamp becomes bright enough. The factory default setting is in this option.

- On-Screen Menu
- **Power off?** (p.23)
- **No signal** for Power management (p.55)
- **Please wait ...**
- Arrows for the True function in the Screen Menu (p.39)
- P-Timer

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**, **capture** and **Logo PIN code change** can not be selected.

Logo select

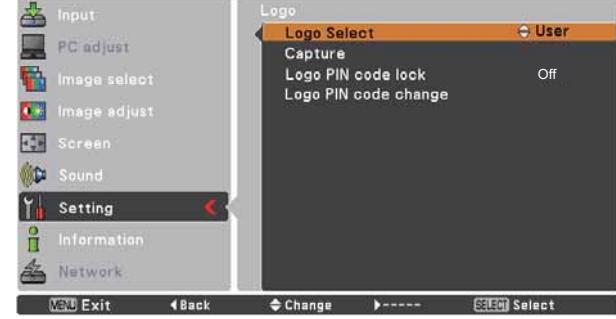
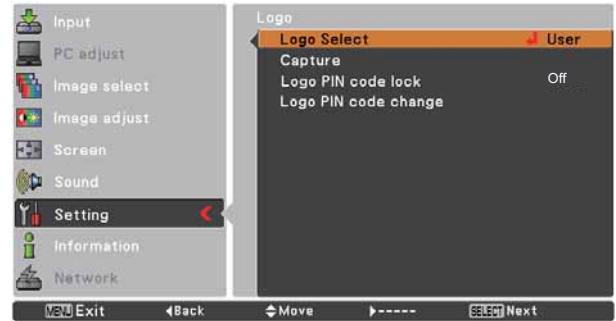
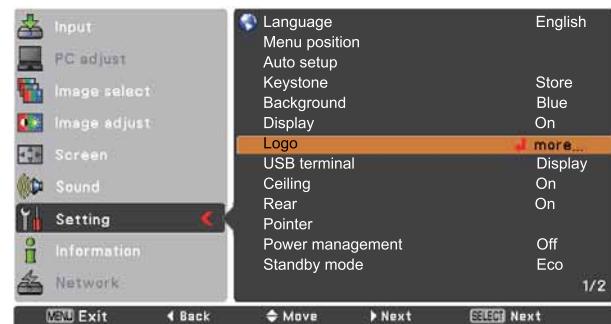
This function decides on the starting-up display from among following options.

Off Show the countdown display only.

Default Show the factory-set logo.

User Show the image you captured.

Logo select Menu



Setting

Capture

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

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 the next time you turn on the projector or when you press the **NO SHOW** button (see page 30).

To cancel the capture function, select **Yes** in the "Quit?" confirmation box.

✓ Note:

- Before capturing an image, select **Standard** in the Image Select Menu to capture a proper image (pp.37, 44).
- A signal from a computer can be captured up to **XGA (1024 x 768)**. A signal from video equipment can be captured except for **720p, 1035i** and **1080i**.
- When capturing the image that has been adjusted by the Keystone function, the adjusted data is automatically reset and the projector captures an image without keystone correction.
- When **Logo PIN code lock** is set to **On**, **capture** can not be selected.
- When starting to capture a new image, the previously stored image is cleared even if you cancel the capturing.
- When there is no captured image or it is interrupted while capturing an image, **User** can not be selected, you can only switch between **Default** and **Off**.

Logo PIN code lock

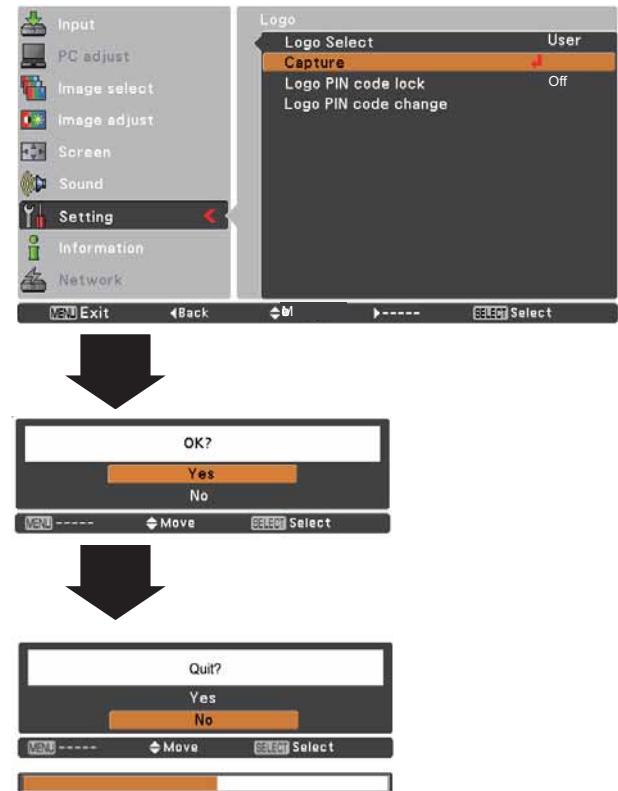
This function prevents an unauthorized person from changing the screen logo.

Off The screen logo can be changed freely from the Logo Menu (p.51).

On The screen logo can not 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. The initial **Logo PIN code** is set to "4321" at the factory.

Capture



Logo PIN code lock



Enter a Logo PIN code

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

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

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

If you entered an incorrect 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 close the dialog box.

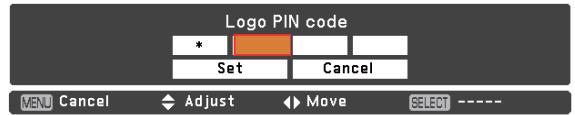
Logo PIN code change

Logo PIN code can be changed to your desired four-digit number. Press the Point **▼** button to select **Logo PIN code change** and then press the **SELECT** button. The New Logo PIN code input dialog box appears. Set a new Logo PIN code.

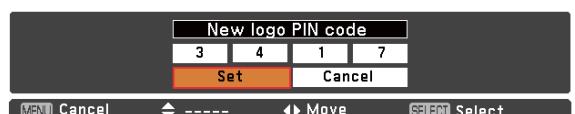
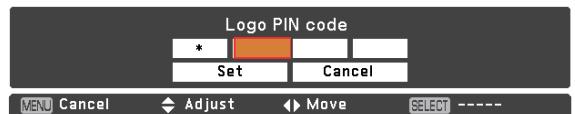
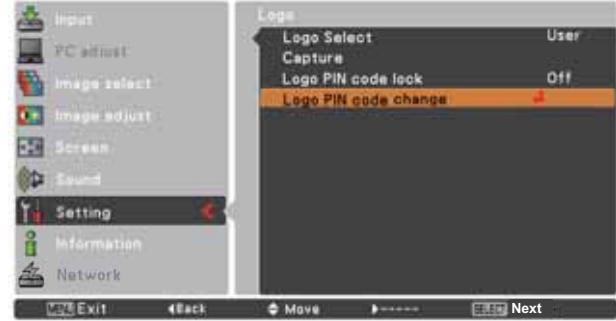
Be sure to note the new Logo PIN code and keep it on hand. If you lost the number, you could no longer change the Logo PIN code setting. For details on PIN code setting, refer to "PIN code lock" on pages 58-59.

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 81, AND KEEP IT SECURELY. SHOULD THE LOGO PIN CODE BE LOST OR FORGOTTEN, THE LOGO PIN CODE SETTING CAN NO LONGER BE CHANGED.

Enter a Logo PIN code

After a correct Logo PIN code is entered, the following dialog box appears.

Change the Logo PIN code lock setting**Change the Logo PIN code**

Setting

USB Terminal

This function provides the following options for the USB terminal.

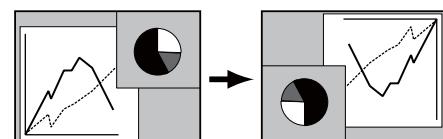
Mouse control ... When using the remote control as a mouse control, set this option. (p.15)

Display ... When using "USB display" function, set this option. The image and sound are sent to the projector by connecting the computer to the projector with a USB cable. Refer to the owner's manual of "Network Set-up and Operation For Windows".

Ceiling

When this function is set to **On**, the picture will be top/bottom and left/right reversed. This function is used to project the image from a ceiling-mounted projector.

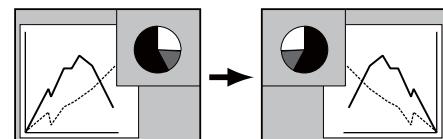
Ceiling



Rear

When this function is set to **On**, the picture will be left/right reversed. This function is used to project the image from rear of the screen.

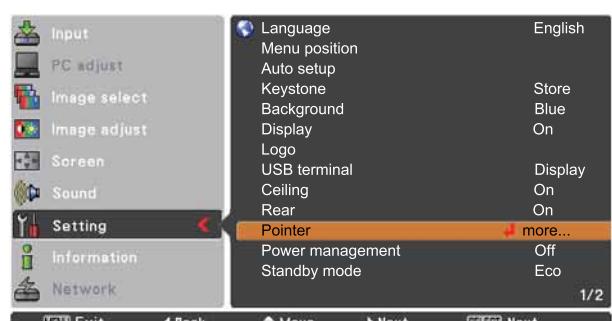
Rear



Pointer

You can emphasize a part of the projected image with this function. Use the Point **▲ ▼** buttons to choose **Spotlight** (**Large**, **Middle** or **Small**), **Arrow**, **Finger** or **Dot** and press the **SELECT** button. See "Pointer Function" on page 14.

Pointer



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.**

Standby mode

This function is available when operating the projector via network.

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

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

✓Note:

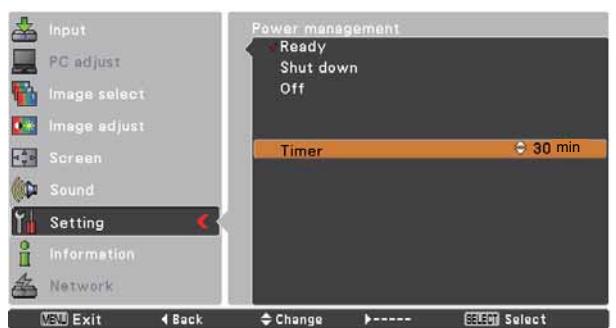
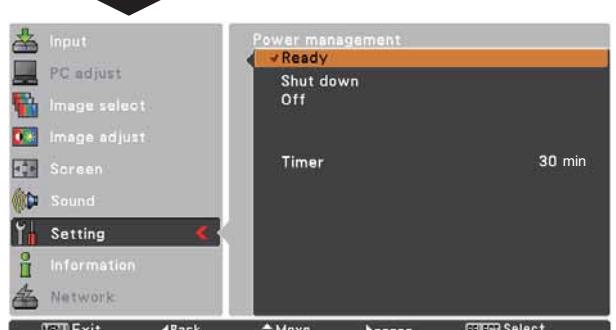
- Factory default is **Network**.
- When selecting **Network**, the cooling fans may be running depending on the temperature inside the projector even if the projector is turned off.
- When **Eco** is selected and the projector is in Standby, the communication of RS-232C serial port is not available.

Power management

No signal

04 : 50

Timer left before Lamp is off.



Setting

On start

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:

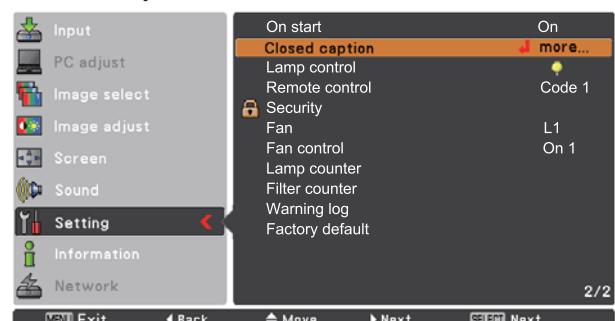
Be sure to turn off the projector properly (see "Turning Off the Projector" on page 23). If the projector is turned off in the incorrect sequence, the On start function does not work properly.

Closed caption

Closed caption is a printed 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**.

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 the **SELECT** button.

Lamp control

This function allows you to change brightness of the screen.

- 💡 High Brighter than the Normal mode.
- 💡 Normal Normal brightness.
- 💡 Eco Lower brightness reduces the lamp power consumption and extends the lamp life.

✓ **Note:**

Lamp mode can not 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.

Remote control

The eight different remote control codes (**Code 1-Code 8**) are assigned to the projector; the factory-set, initial code (**Code 1**) and the other seven codes (**Code 2 to Code 8**). The same code should set on both the projector and the remote control. For example, operating the projector in **Code 7**, the remote control code also must be switched to **Code 7**.

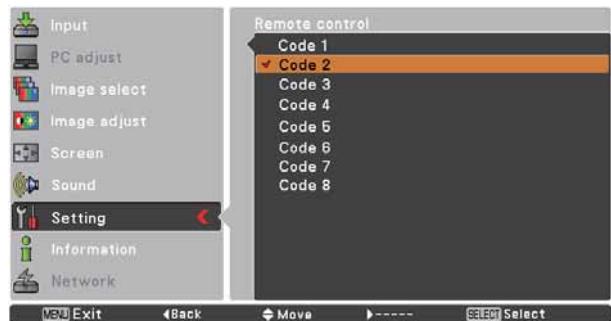
To change the code for the projector

Select a remote control code in this Setting Menu.

To change the code for the remote control:

While holding down the MENU button, press the IMAGE button the number of times corresponding to the remote control code for the projector. See “Remote Control Code” on page 13.

Remote control



✓ **Note:**

- When different codes are set on the projector and on the remote control, any operation can not 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.

Setting



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.



..... 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.

PIN code lock



Enter a PIN code

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

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

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

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

Change the PIN code lock setting

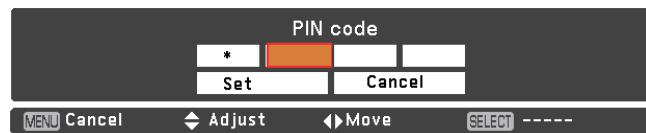
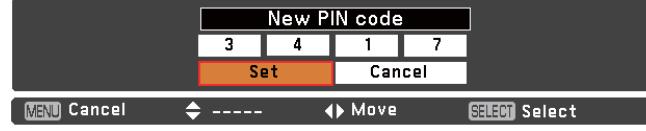
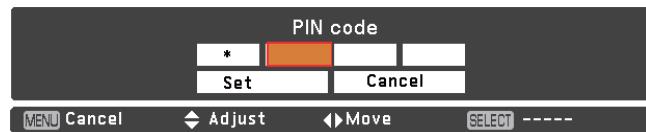
Use the Point **▲▼** buttons to select **Off**, **On1** or **On2**. Press the **SELECT** button to close the dialog box.

PIN code change

The PIN code can be changed to your desired four-digit number. Press the Point **▼** button to select **PIN code change** and press the **SELECT** button. 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 81, AND KEEP IT SECURELY. IF YOU FORGET YOUR PIN CODE, THE PROJECTOR CAN NO LONGER BE STARTED.

Enter a PIN code**Change the PIN code**

Setting

Fan

This function provides the following options in the cooling fans' operation when the projector is turned off (p.23).

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

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.
- On 3**....Be sure to set the Lamp control in High and the Fan control in **On 3** when using the projector inclined at between +40 degrees to +140 degrees to the horizontal plane at altitudes between 0 and approximately 1,600 meters above sea level.

✓ **Note:**

- The fan noise becomes louder in **On1**, **On2** and **On3**.
- Setting Fan control to **On1**, **On2** or **On3** affects **L2** operation in Fan.

Lamp counter

This function is used to display the cumulative lamp operating time and reset the lamp counter.

When the total lighting time of a lamp exceeds the recommended total hours of use, the Lamp replacement icon (Fig.1) will appear on the screen, indicating that the end of lamp life is reached.

When replacing the projection lamp, reset lamp counter. See "Resetting the Lamp Counter" on page 67.

✓ **Note:**

The Lamp replacement icon (Fig.1) will not appear when the Display function is set to **Off** (p.51), during "Freeze" (p.29) or "No show" (p.30).

Fan Control Setting

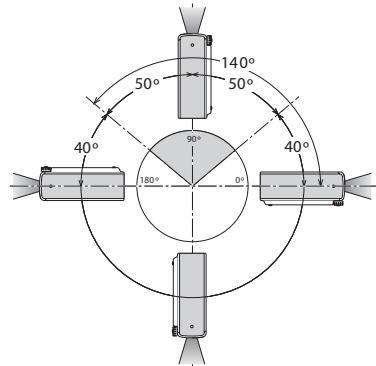


Fig.1 Lamp replacement icon



This icon appears on the screen when the end of lamp life is reached.

✓ **Note:**

At turning on, the icon (Fig.1) will appear.

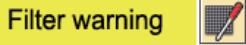
Filter counter

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.

For details about resetting the timer, refer to "Resetting the Filter Counter" on page 64.

Fig.1 Filter warning icon



Filter warning icon appears on the screen at a set time.

✓ **Note:**

This icon also appears at turning on.

✓ **Note:**

The Filter warning icon (Fig.1) will not appear when the Display function is set to **Off** (p.51), during "Freeze"(p.29), or "No show" (p.30).

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

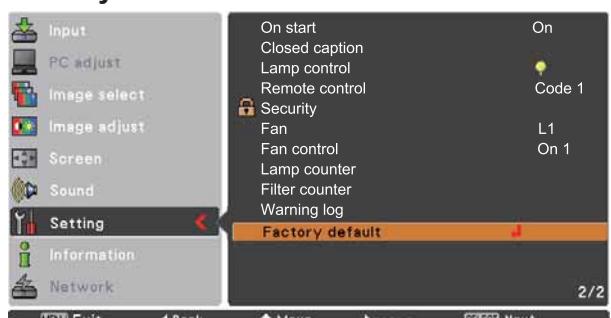
This function returns all setting values except for the **User logo**, **PIN code lock**, **Logo PIN code lock**, **Lamp counter** and **Filter counter** to the factory default settings.

Filter counter



Press the **SELECT** button to select **Timer** and then use the Point **▲ ▼** buttons to set the timer. Select from **(Off/100H/ 200H/ 300H)** depending on the use environment.

Factory default



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.

Remote Control



Menu Operation

Press the Point **▲▼** buttons to select **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** , **Shut down** or **Timer** is displayed.

Key lock

The selected Key lock icon is displayed.

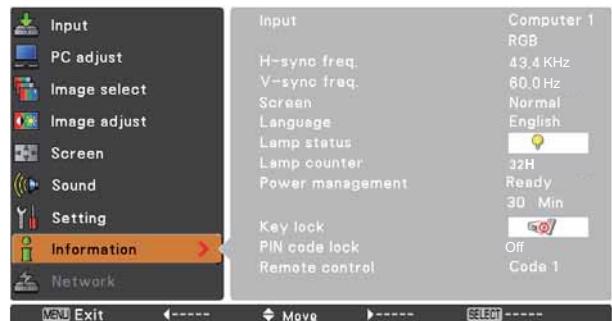
PIN code lock

Off , **On 1** or **On 2** is displayed.

Remote control

The selected remote code is displayed.

Information Menu



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 POWER ON/STAND-BY button.

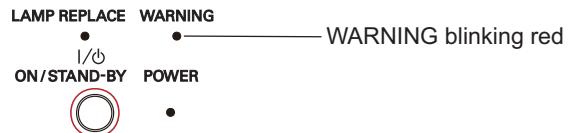
✓ Note:

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 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.
- Are the filters clean? Clean the filters periodically.

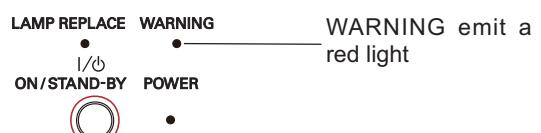
Top Control



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 can not be turned on and the WARNING indicator still lights red, unplug the AC power cord and contact the service station.

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.

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.

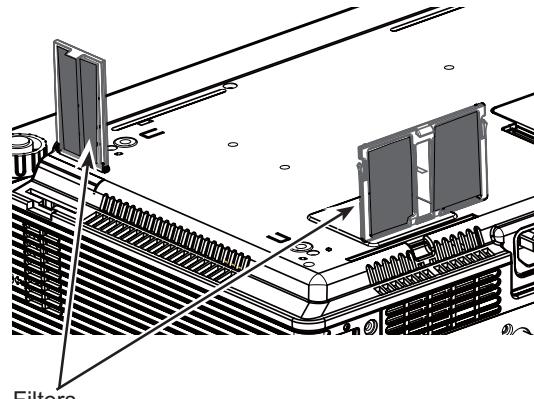
- 1 Turn off the projector, and unplug the AC power cord from the AC outlet.
- 2 Turn the projector over and remove the filters by pulling the latches upward.
- 3 Gently clean the filters by using a brush or rinse them softly.
- 4 When rinsing the filters, dry them well. Replace the filters properly. 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.



Filters

Pull up and remove.

✓ Note:

When reinserting these filters, be sure that the slit part is facing the outer side.

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 Filter Counter

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

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



Filter counter Reset? appears.

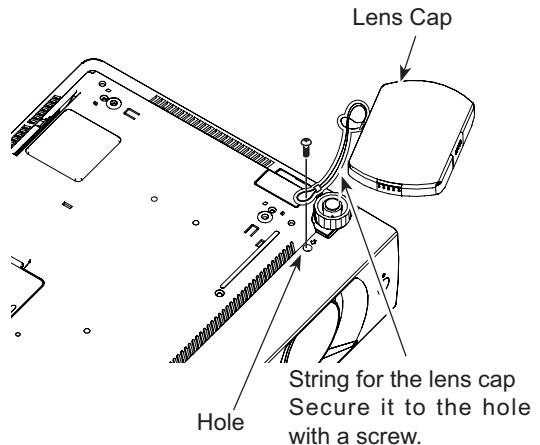
Select **Yes**, then another confirmation box appears.

Select **Yes** again to reset the Filter counter.

Attaching the Lens Cap

When moving the projector or while it is not in use, replace the lens cap.

- 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.

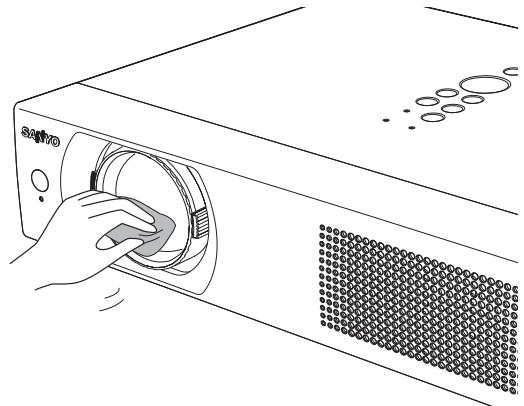


Cleaning the Projection Lens

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.

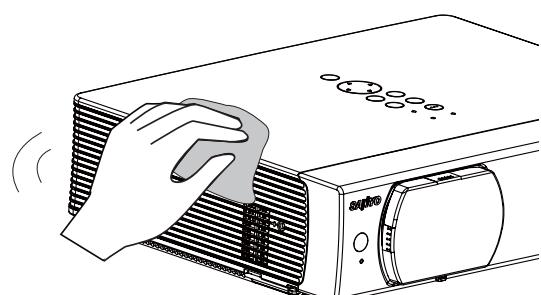


Cleaning the Projector Cabinet

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.

Maintenance and Cleaning

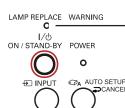
Lamp Replacement

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.



WARNING:
TURN OFF THE UV LAMP BEFORE
OPENING THE LAMP COVER

Top Control



LAMP REPLACE
indicator

Lamp replacement icon



✓ **Note:**

The Lamp replacement icon will not appear when the Display function is set to **Off** (p.51), during "Freeze" (p.29), or "No show" (p.30).



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.

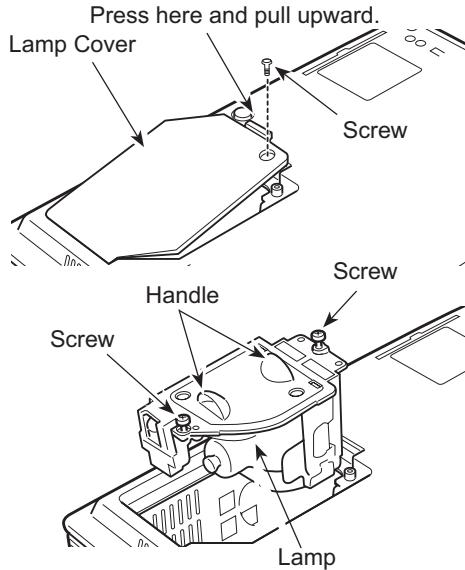


CAUTION

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.

Follow these steps to replace the lamp.

- 1 Turn off the projector and unplug the AC power cord. Let the projector cool for at least 45 minutes.
- 2 Remove 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.
- 6 **Reset the lamp counter.**
See "Resetting the Lamp Counter" on the next page.



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-XU116
- **Replacement Lamp Type No.** : POA-LMP111
(Service Parts No. 610 333 9740)

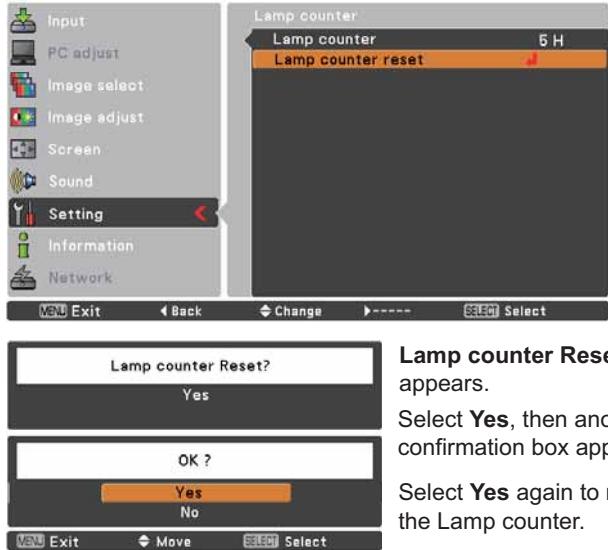
Resetting the Lamp Counter

Be sure to reset the Lamp counter after the lamp is replaced. When the Lamp counter is reset, the LAMP REPLACE indicator stops lighting and the Lamp replacement icon disappears.

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

✓ **Note:**

Do not reset the Lamp counter without implementing lamp replacement. Be sure to reset the Lamp counter only after replacing the lamp.



Lamp counter Reset? appears.

Select **Yes**, then another confirmation box appears.

Select **Yes** again to reset the Lamp counter.



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 as described on pages 17-19.
- 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. See page 21.– Check the WARNING indicator. If the WARNING indicator lights red, projector can not be turned on. See page 63.– Check the projection lamp. See page 66.– Unlock the Key lock function for the projector. See page 58.
The initial display is not shown.	<ul style="list-style-type: none">– Make sure Off or Countdown off is not chosen at display function. See page 51.
The initial display is not same as the default set.	<ul style="list-style-type: none">– Make sure User or Off is not chosen at Logo (select) function. See page 51.
Input signal switches automatically. (or does not switch automatically)	<ul style="list-style-type: none">– Make sure Input search function is adjusted properly. See page 49.
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. See page 61.
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. See pages 60, 61.
Image is out of focus.	<ul style="list-style-type: none">– Adjust focus of the projector. See page 26.– Provide proper distance between the projector and the projection screen. See page 16.– Check the projection lens to see if it needs cleaning. See page 65.– 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. See page 54.– Check the Ceiling function. See page 54.
Picture is not bright enough.	<ul style="list-style-type: none">– Check if the Contrast or Brightness are adjusted properly. See pages 38, 45.– Check if Image mode is selected properly. See pages 37, 44.– Check the lamp control function. See pages 29, 57.– Check the LAMP REPLACE indicator. If it lights, the end of lamp life is approaching. Replace the lamp with a new one promptly. See page 66.

No image	<ul style="list-style-type: none"> – Check the connection between your computer or video equipment and the projector. See pages 17-19. – 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 21. – 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–95°F [5°C–35°C]). – When No Show function is operating, the image can not be displayed. Press the NO SHOW 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. See page 28. – Press the Mute button. See page 28. – 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 Blackboard is not selected on Image select menu. See pages 37, 44.
Some displays are not seen during the operation.	<ul style="list-style-type: none"> – Check the Display function. See page 51.
Auto PC adjustment function does not work.	<ul style="list-style-type: none"> – Check the Input signal. Auto PC adj.function can not work when 480p, 575p, 720p, 480i, 575i, 1035i or 1080i is selected or when the signal is coming from the DVI terminal. (See page34).
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. See page 39, 46.
Power management does not work.	<ul style="list-style-type: none"> – Power management function can not work while Freeze or No Show function is running. See page 55.
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". See page 49. – Make sure On is not selected at the Ceiling function. See page 54.
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/CANCEL button on the top control. See pages 26,49.

Appendix

The image is distorted or runs off.	<ul style="list-style-type: none">– Check PC adjustment or Screen and adjust them. See pages 35-36, 39-40.
PIN code dialog box appears at start-up.	<ul style="list-style-type: none">– PIN code lock is being set. Enter a PIN code ("1234" or numbers you have set). See pages 22, 58-59.
Page Up/Down function does not work.	<ul style="list-style-type: none">– Make sure your computer is connected to the projector with USB cable. See page 17.
The Remote Control does not work.	<ul style="list-style-type: none">– 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 57.– Unlock the Key lock function for the remote control function. See page 58.– Check RESET/ON/ALL-OFF switch on the remote control is set to ON. See page 12.
Indicator blinks or lights.	<ul style="list-style-type: none">– Check the status of the projector with referring to "Indicators and projector Condition". See page 74.
Wireless Mouse function does not work.	<ul style="list-style-type: none">– Check the connection between the projector and your computer.– Check the mouse setting on your computer.– Make sure the mouse driver is installed on your computer, otherwise, the remote control can not be used as a wireless mouse.– Make sure the signal is from the computer, otherwise, the remote control can not be used as a wireless mouse.– Turn on the projector before turning on the computer.
The exclamation mark appears on the screen.	<ul style="list-style-type: none">– Your operation is invalid. Operate correctly.
Top control does not work.	<ul style="list-style-type: none">– The top control is not available if the top control is locked at Key lock under Security of Setting section. See page 58.
Unable to unlock the Logo PIN code lock, Security key lock or Security PIN code lock.	<ul style="list-style-type: none">– Contact the dealer where you purchased the projector or the service center.

Appendix

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.



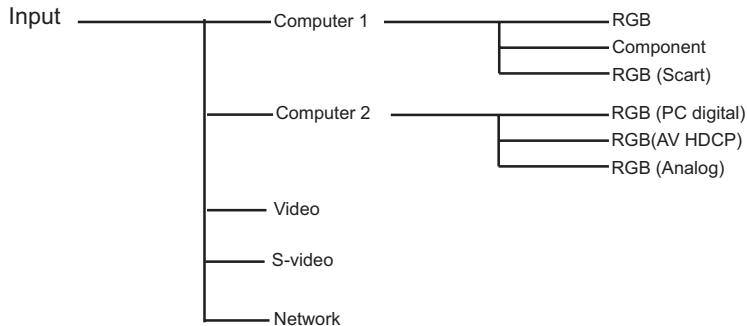
This symbol on the nameplate means the product is Listed by Underwriters Laboratories Inc. It is designed and manufactured to meet rigid U.L. safety standards against risk of fire, casualty and electrical hazards.

Appendix

Menu Tree

Computer Input/Video Input

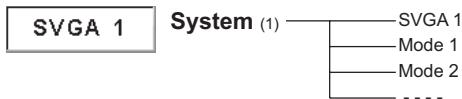
Input



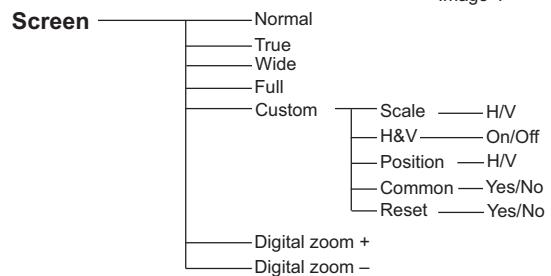
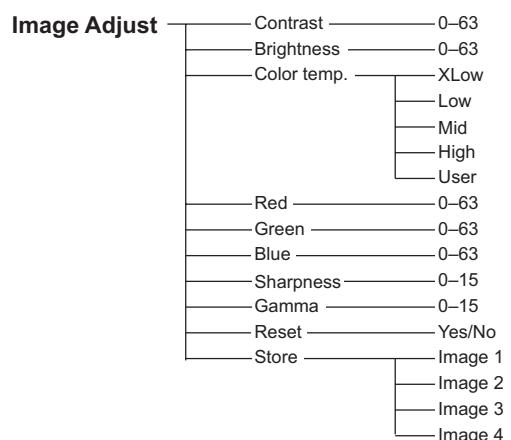
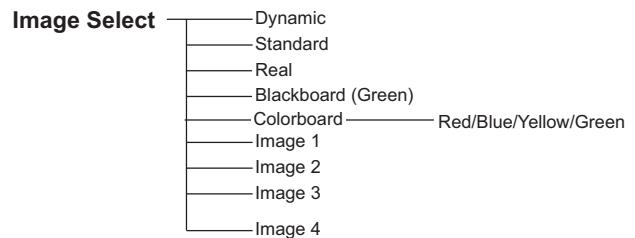
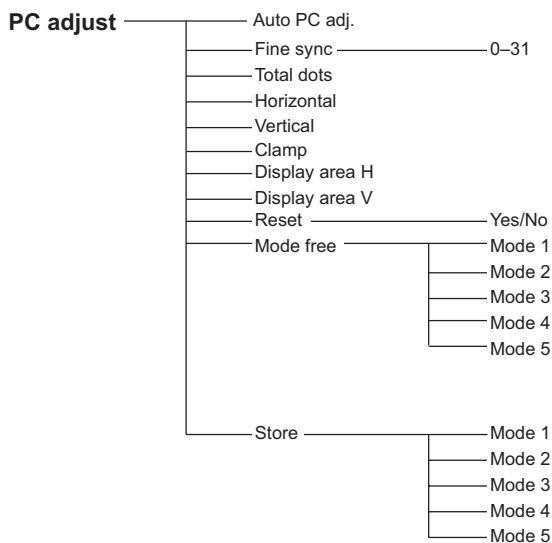
Sound

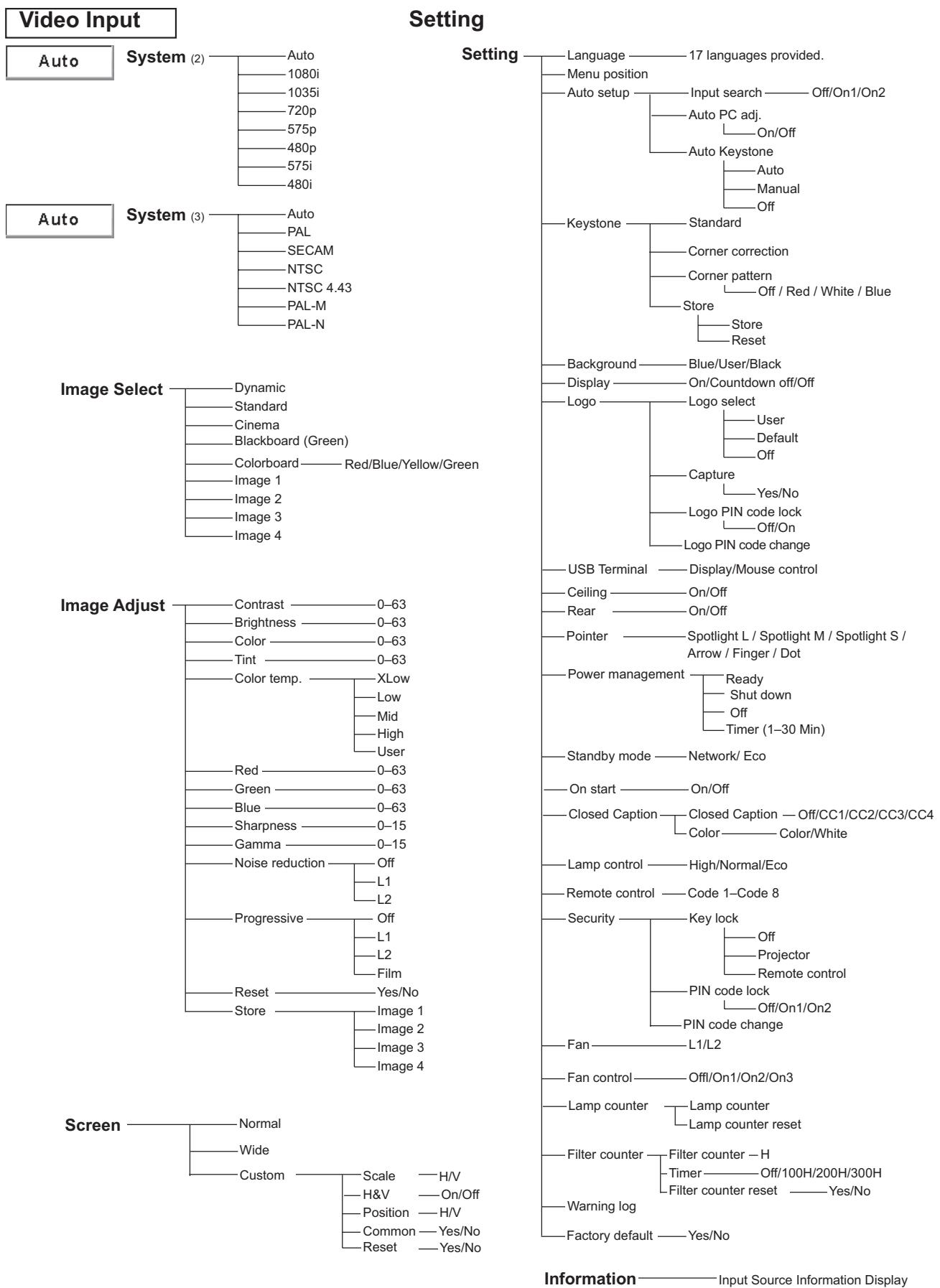


Computer Input



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





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 can not 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 can not 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. Check and clean the filters.
●	○	*	The projector detects an abnormal condition and can not 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 for analog signal and 110 MHz of Dot Clock for digital signal.

When selecting these modes, PC adjustment can be limited.

When the input signal is Analog , refer to the chart below.

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 1	1152 x 864	64.20	70.40
VGA 2	720 x 400	31.47	70.09	SXGA 2	1280 x 1024	62.50	58.60
VGA 3	640 x 400	31.47	70.09	SXGA 3	1280 x 1024	63.90	60.00
VGA 4	640 x 480	37.86	74.38	SXGA 4	1280 x 1024	63.34	59.98
VGA 5	640 x 480	37.86	72.81	SXGA 5	1280 x 1024	63.74	60.01
VGA 6	640 x 480	37.50	75.00	SXGA 6	1280 x 1024	71.69	67.19
VGA 7	640 x 480	43.269	85.00	SXGA 7	1280 x 1024	81.13	76.107
MAC LC13	640 x 480	34.97	66.60	SXGA 8	1280 x 1024	63.98	60.02
MAC 13	640 x 480	35.00	66.67	SXGA 9	1280 x 1024	79.976	75.025
480p	640 x 480	31.47	59.88	SXGA 10	1280 x 960	60.00	60.00
575p	768 x 575	31.25	50.00	SXGA 11	1152 x 900	61.20	65.20
480i	640 x 480	15.734	^{60.00} (Interface)	SXGA 12	1152 x 900	71.40	75.60
575i	768 x 576	15.625	^{50.00} (Interface)	SXGA 13	1280 x 1024	50.00	^{86.00} (Interface)
SVGA 1	800 x 600	35.156	56.25	SXGA 14	1280 x 1024	50.00	^{94.00} (Interface)
SVGA 2	800 x 600	37.88	60.32	SXGA 15	1280 x 1024	63.37	60.01
SVGA 3	800 x 600	46.875	75.00	SXGA 16	1280 x 1024	76.97	72.00
SVGA 4	800 x 600	53.674	85.06	SXGA 17	1152 x 900	61.85	66.00
SVGA 5	800 x 600	48.08	72.19	SXGA 18	1280 x 1024	46.43	^{86.70} (Interface)
SVGA 6	800 x 600	37.90	61.03	SXGA 19	1280 x 1024	63.79	60.18
SVGA 7	800 x 600	34.50	55.38	SXGA 20	1280 x 1024	91.146	85.024
SVGA 8	800 x 600	38.00	60.51	SXGA+ 1	1400 x 1050	63.97	60.19
SVGA 9	800 x 600	38.60	60.31	SXGA+ 2	1400 x 1050	65.35	60.12
SVGA 10	800 x 600	32.70	51.09	SXGA+ 3	1400 x 1050	65.12	59.90
SVGA 11	800 x 600	38.00	60.51	MAC21	1152 x 870	68.68	75.06
MAC 16	832 x 624	49.72	74.55	MAC	1280 x 960	75.00	75.08
MAC 19	1024 x 768	60.24	75.08	MAC	1280 x 1024	80.00	75.08
XGA 1	1024 x 768	48.36	60.00	WXGA 1	1366 x 768	48.36	60.00
XGA 2	1024 x 768	68.677	84.997	WXGA 2	1360 x 768	47.70	60.00
XGA 3	1024 x 768	60.023	75.03	WXGA 3	1376 x 768	48.36	60.00
XGA 4	1024 x 768	56.476	70.07	WXGA 4	1360 x 768	56.16	72.00
XGA 5	1024 x 768	60.31	74.92	WXGA 6	1280 x 768	47.776	59.87
XGA 6	1024 x 768	48.50	60.02	WXGA 7	1280 x 768	60.289	74.893
XGA 7	1024 x 768	44.00	54.58	WXGA 8	1280 x 768	68.633	84.837
XGA 8	1024 x 768	63.48	79.35	WXGA 9	1280 x 800	49.600	60.050
XGA 9	1024 x 768	36.00	^{87.17} (Interface)	WXGA 10	1280 x 800	41.200	50.00
XGA 10	1024 x 768	62.04	77.07	WXGA 11	1280 x 800	49.702	59.810
XGA 11	1024 x 768	61.00	75.70	WXGA 12	1280 x 800	63.98	60.02
XGA 12	1024 x 768	35.522	^{86.96} (Interface)	WUXGA 1	1920 x 1200	74.556	59.885
XGA 13	1024 x 768	46.90	58.20	WUXGA 2	1920 x 1200	74.038	59.950
XGA 14	1024 x 768	47.00	58.30	WSXGA+1	1680 x 1050	65.290	59.954
XGA 15	1024 x 768	58.03	72.00	WXGA+1	1440 x 900	55.935	59.887
720p	1280 x 720	45.00	60.00	WXGA+2	1440 x 900	74.918	60.00
720p	1280 x 720	37.50	50.00	UXGA 1	1600 x 1200	75.00	60.00
1035i	1920 x 1035	33.75	^{60.00} (Interface)	UXGA 2	1600 x 1200	81.25	65.00
1080i	1920 x 1080	33.75	^{60.00} (Interface)	UXGA 3	1600 x 1200	87.5	70.00
1080i	1920 x 1080	28.125	^{50.00} (Interface)	UXGA 4	1600 x 1200	93.75	75.00

Appendix

When the input signal is digital from DVI terminal, refer to the chart below.

ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (KHz)	V-Freq. (Hz)	ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (KHz)	V-Freq. (Hz)
D-VGA	640 x 480	31.47	59.94	D-SXGA1	1280 x 1024	63.98	60.02
D-480p	640 x 480	31.47	59.88	D-SXGA2	1280 x 1024	60.276	58.069
D-575p	768 x 575	31.25	50.00	D-SXGA3	1280 x 1024	31.65	29.80
D-SVGA	800 x 600	37.879	60.32	D-720p	1280 x 720	37.50	50.00
D-XGA	1024 x 768	43.363	60.00	D-720p	1280 x 720	45.00	60.00
D-WXGA 1	1366 x 768	48.36	60.00	D-1035i	1920 x 1035	33.75	<small>60.00 (Interface)</small>
D-WXGA 2	1360 x 768	47.7	60.00	D-1080i	1920 x 1080	33.75	<small>60.00 (Interface)</small>
D-WXGA 3	1376 x 768	48.36	60.00	D-1080i	1920 x 1080	28.125	<small>50.00 (Interface)</small>
D-WXGA 4	1360 x 768	56.160	72.000	D-WXGA+1	1440 x 900	55.935	59.887
D-WXGA 5	1366 x 768	46.500	50.000	D-SXGA+1	1400 x 1050	63.97	60.19
D-WXGA 6	1280 x 768	47.776	59.870	D-SXGA+2	1400 x 1050	65.350	60.120
D-WXGA 7	1280 x 768	60.289	74.893	D-SXGA+3	1400 x 1050	65.120	59.00
D-WXGA 8	1280 x 768	68.633	84.837	D-UXGA	1600 x 1200	75.00	60.00
D-WXGA 9	1280 x 800	49.572	59.870	D-WSXGA+1	1680 x 1050	65.290	59.954
D-WXGA 10	1280 x 800	41.200	50.00	D-WUXGA 2	1920 x 1200	74.038	59.950
D-WXGA 11	1280 x 800	49.702	59.810				
D-WXGA 12	1280 x 800	63.98	60.02				

✓ **Note:**

- The specifications are subject to change without notice.

Technical Specifications

Mechanical Information

Projector Type	Multi-media Projector
Dimensions (W x H x D)	13.16" x 3.09" x 10.14" (334.2 x 78.4 x 257.5mm) (Not including protrusions)
Net Weight	7.7 lbs (3.5 kg)
Feet Adjustment	0° to 8.9°

Panel Resolution

LCD Panel System	0.8" TFT Active Matrix type, 3 panels
Panel Resolution	1,024 x 768 dots
Number of Pixels	2,359,296 (1024 x 768x 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
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	3.1' (0.93m) - 37.6' (11.5m)
Projection Lens	F1.7–2.5 lens with f=19.2 mm–30.2 mm with manual zoom and focus
Projection Lamp	275 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 Component/	
Computer2 Audio Input Jacks	Mini Jack x 2
Computer In 1/ Component Input Terminal	Mini D-sub 15 pin x 1
MONITOR OUT Terminal	Mini D-sub 15 pin x 1
Computer In 2/DVI-I	Input DVI-I Terminal x 1
Control port	D-sub 9 pin x 1
USB Connectors	USB connector (Series A x1, Series B 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	1.0 W RMS
Built-in Speaker	1 speaker, ø1.10" (28 mm)

Power

Voltage and Power Consumption	AC 100–120 V (4.1A Max. Ampere), 50/60 Hz (The U.S.A and Canada)
	AC 200–240 V (2.1A Max. Ampere), 50/60 Hz (Continental Europe and The U.K.)

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 Type x 2
Operating Range	5 m/±30°
Dimensions	45 mm (W) x 23 mm (H) x 145 mm (D)
Net Weight	3.5 oz 99 g (including batteries)
Laser Pointer	Class II Laser (Max. Output: 1 mW/Wave length: 640–660 nm)

Appendix

Accessories

Owner's Manual (CD-ROM)
Quick Reference Guide
Safety Manual
AC Power Cord
Remote Control and Batteries
VGA Cable
Lens Cap with String
PIN Code Label
Network Application (CD-ROM)
Soft Carrying Case
USB thumb drive for Auto Capture
Case (for USB thumb drive)
Hook and Loop Fastener

- 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
VGA-Cable (10 m)	: KA-MC-DB10

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 page 53 on the owner's manual of "Network Set-up and Operation."

Projector Input		PJLink Input	Parameter
Computer 2 (Analog)		RGB 1	11
Computer 2 (Digital)	RGB (PC digital)	DIGITAL 1	31
	RGB (AV HDCP)	DIGITAL 2	32
Computer 1	RGB	RGB 2	12
	Component	RGB 3	13
	RGB (Scart)	RGB 4	14
Video	Video	VIDEO 2	22
	S-video	VIDEO 3	23
Network		NETWORK 1	51

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

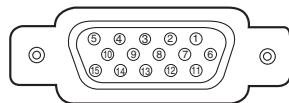


Appendix

Configurations of Terminals

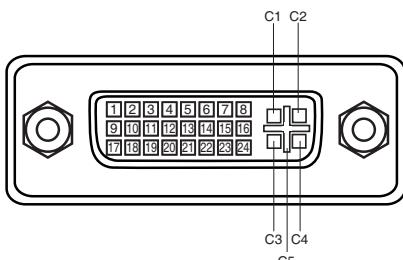
COMPUTER IN 1/COMPONENT IN /MONITOR OUT (ANALOG)

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 (Composite H/V sync.)
6	Ground (Red)	14	Vert. sync.
7	Ground (Green)	15	DDC Clock/----
8	Ground (Blue)		

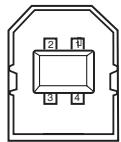
COMPUTER 2 / DVI-I TERMINAL (DIGITAL/ANALOG)



C1	Analog Red Input
C2	Analog Green Input
C3	Analog Blue Input
C4	Analog Horiz. sync
C5	Analog Ground (R/G/B)

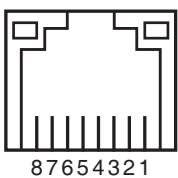
1	T.M.D.S. Data2-	9	T.M.D.S. Data1-	17	T.M.D.S. Data0-
2	T.M.D.S. Data2+	10	T.M.D.S. Data1+	18	T.M.D.S. Data0+
3	T.M.D.S. Data2 Shield	11	T.M.D.S. Data1 Shield	19	T.M.D.S. Data0 Shield
4	No Connect	12	No Connect	20	No Connect
5	No Connect	13	No Connect	21	No Connect
6	DDC Clock	14	+5V Power	22	T.M.D.S. Clock Shield
7	DDC Data	15	Ground (for +5V)	23	T.M.D.S. Clock+
8	Analog Vert. sync	16	Hot Plug Detect	24	T.M.D.S. Clock-

USB CONNECTOR (Series B)



1	Vcc
2	- Data
3	+ Data
4	Ground

LAN TERMINAL



1	TX +	5	-----
2	TX -	6	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: 1 2 3 4*

Logo PIN Code Lock No.

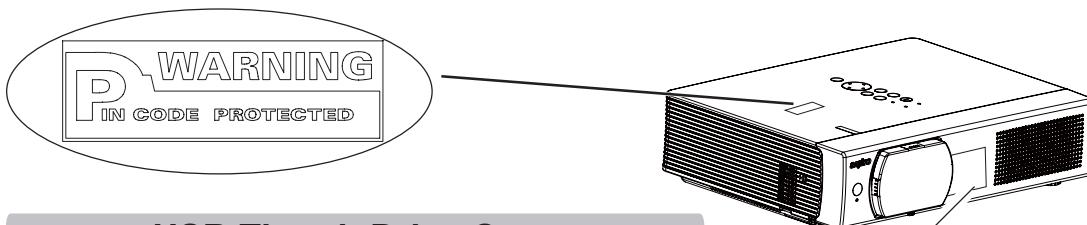
--	--	--	--

Factory default set No: 4 3 2 1*

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

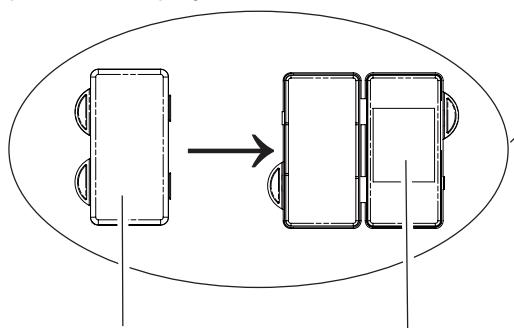
While the projector is locked with the PIN code.

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



USB Thumb Drive Case

While the USB thumb drive is not in use, put it in the USB Thumb Drive Case to prevent lose USB theumb drive.
Use hook and loop fastener, the USB Thumb Drive Case will be a fixed place on the projector.



USB thumb drive case
(supplied)

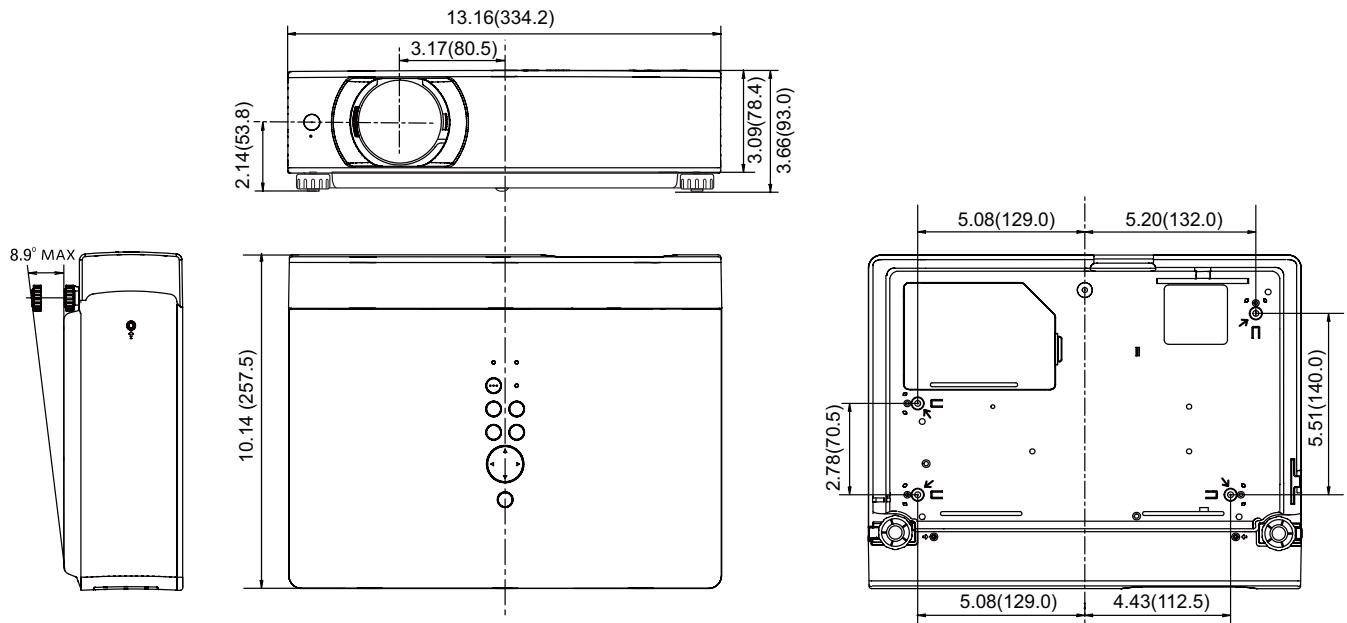
Hook and loop fastener
(supplied)

Appendix

Dimensions

Unit: inch(mm)

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



SANYO

SANYO Electric Co., Ltd.

KC8AC