## **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 to select the desired item and then press the SELECT button to display the adjustment dialog box. Use the Point ◀ ▶ buttons to adjust the setting value.

#### 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 temp.

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

## White balance (Red/Green/Blue)

Press the Point ◀ button to lighten R/G/B tone; press the Point ▶ button to deepen R/G/B tone (from 0 to 63).

## **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).

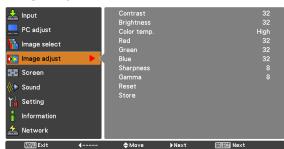
## Gamma

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

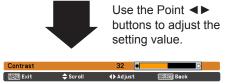
## Reset

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

## Image adjust Menu







## ✓ Note:

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

#### **Store**

To store the adjusted data, select **Store** and press the Point ▶ button or the SELECT button. Use the Point ▶ buttons to select one from **Image 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 33.



## **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.
- Use the Point ▲ ▼ buttons to select the desired item and then press the SELECT button .

#### Normal

Provide the image to fit the screen size.

## Full

Provide the full screen image.

## Wide (16:9)

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

## Zoom

Scale the image proportionally to fit the entire screen. Either side of image may go over the screen.

## **True**

Provide the image in its original size. When the original image size is larger than the screen size (1024 x 768), the projector enters to the panning mode automatically. Use the Point ▲ ▼ ◄ ▶ buttons to pan the image. When adjusted, the arrows will turn red. When reached to the correction limits, the arrows will disappear.

#### Custom

Provide the last stored aspect screen image.

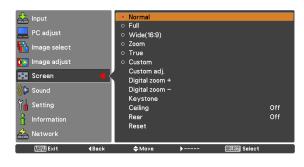
#### ✓ Note:

- This projector cannot display any resolution higher than 1920 x 1200. If your computer's screen resolution is higher than it, reset the resolution lower before connecting to the projector.
- The image data in other than 1024 x 768 is modified to fit the screen size in initial mode.
- True and Digital zoom +/— cannot be selected when 480i, 575i, 480p, 575p, 720p, 1035i or 1080i is selected in the PC System Menu (p.29).

## Screen Menu







## Custom adj.

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. The Scale V appears dimmed and becomes unavailable. Adjust 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 or position to all the inputs. Press the SELECT button at Common to display a confirmation box. To save the scale or position, press the SELECT button at Yes. When Custom is selected, the saved scale or position is

used.

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

SELECT button at Yes.

## Digital zoom +

Select **Digital zoom +**. The On-Screen Menu disappears and **D. zoom +** appears. Press the SELECT button to expand the image size. Use the Point ▲ ▼ ◆ ▶ buttons to pan the image. The Panning function can work only when the image is larger than the screen size.

A projected image can be also expanded by pressing the D.ZOOM  $\blacktriangle$  or the SELECT button on the remote control.

## Digital zoom -

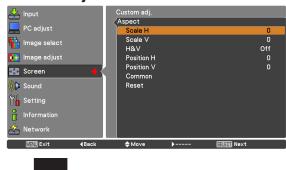
Select **Digital zoom** –. The On-Screen Menu disappears and **D. zoom** – appears. Press the SELECT button to compress image size.

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

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

To return to the previous screen size, select a screen size from the Screen Size Adjustment Menu or select an input source from the Input Source Selection Menu (pp.27-28) again, or adjust the screen size with the D.ZOOM ▲ ▼ buttons.

## Custom adj.

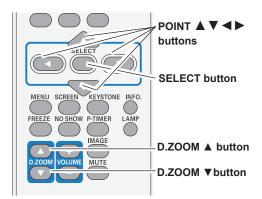




#### ✓ Note:

- 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.

## **Remote Control**



## √Note:

- The minimum compression ratio is limited depending on the input signal, when the Keystone function is working or when the custom is selected for the screen size.
- True and Digital zoom +/- are disabled and cannot be displayed when 480i, 575i, 480p 575p, 720p,1035i or 1080i is selected in the PC System Menu (p.29).
- **Digital zoom +/-** cannot be selected when **True** is selected.
- The minimum compression ratio is limited at Normal screen size.

## Keystone

This function is used to adjust keystone distortion of the projected image. Use the Point  $\blacktriangle \blacktriangledown$  buttons to choose the item you want to adjust.

## **Keystone**

To correct keystone distortion, press the SELECT button. Keystone appears on the screen. Use the Point ▲ ▼ buttons to correct keystone distortion (p.23).

## Store

To store or reset the keystone correction, press the SELECT button.

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

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

## 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.

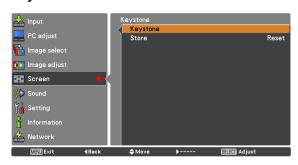
## Rear

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.

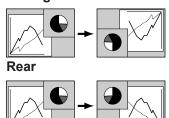
## Reset

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

## **Keystone**



## Ceiling



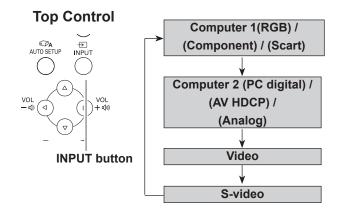
# **Video Input**

## Input Source Selection (Video, S-video)

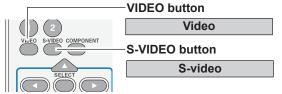
## **Direct Operation**

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

Before using INPUT button, correct input source should be selected through menu operation as described below.



## **Remote Control**



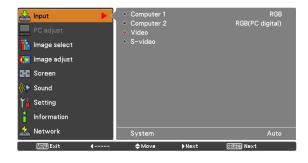
## Menu Operation

- 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 either Video or S-video and then press the SELECT button.

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

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

## **Input Menu**



## ✓ Note:

 When the Input Search function is set to On1 or On2 in the Auto setup function, the input signal will be searched automatically (p.47).

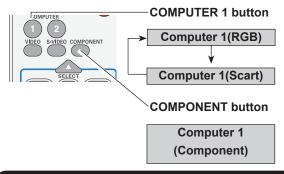
## **Input Source Selection (Component, Scart)**

## **Direct Operation**

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

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

## **Remote 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.

## Component

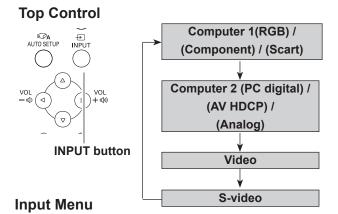
When the input source is coming from video equipment connected to the COMPUTER IN 1/COMPONENT IN terminal with a Component-VGA Cable, select **Component**.

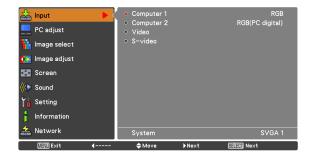
## **RGB** (Scart)

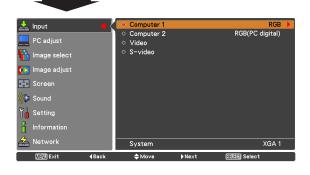
When the input source is coming from video equipment connected to the COMPUTER IN 1/COMPONENT IN terminal with a Scart-VGA Cable, select **RGB** (Scart).

## ✓ Note:

• When the Input Search function is set to **On 1** or **On 2**, the input signal will be searched automatically (p.47).









## **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.
- Use the Point ▲ ▼ buttons to select Video, S-video or Computer 1(Component) and then press the SELECT button.
- Use the Point ▲ ▼ buttons to select System and then press the Point ► or SELECT button. Use the Point ▲ ▼ buttons to select the desired system and then press the SELECT button.

## Video or S-video

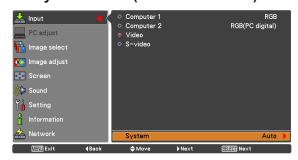
## Auto

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 cannot 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

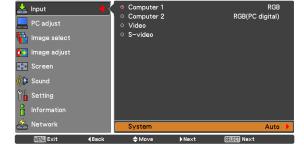
#### Auto

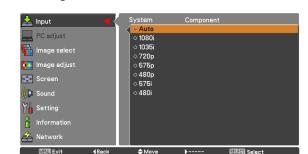
The projector automatically detects an incoming video signal, and adjusts itself to optimize its performance.

## **COMPONENT VIDEO SIGNAL FORMAT**

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

## **AV System Menu (Component)**





## ✓ Note:

 The AV System Menu cannot be selected when selecting RGB (Scart).

## **Image Mode Selection**

## **Direct Operation**

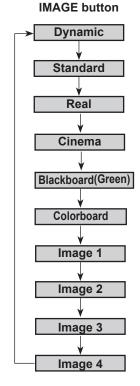
Select the desired image mode among **Dynamic**, **Standard**, **Real**, **Cinema**, **Blackboard** (**Green**), **Colorboard**, **Image** 1, **Image** 2, **Image** 3 and **Image** 4 by pressing the IMAGE button on the remote control.

## **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.
- Use the Point ▲ ▼ buttons to select the desired item and then press the SELECT button .

# MENU SCREEN KEYSTONE INFO. FREEZE NO SHOW P-TIMER LAMP D.ZOOM VOLUME MI TE IMAGE button

**Remote Control** 



## **Dynamic**

For viewing pictures in a bright room.

## Standard

Normal picture mode preset on the projector.

## Real

Picture mode with improved halftone for graphics.

## 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.

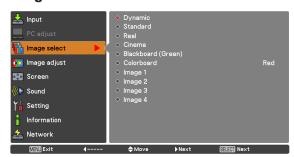
## Colorboard

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.

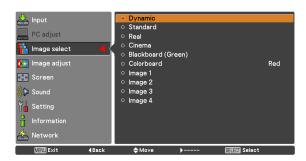
## Image 1-4

For viewing with the user preset image mode in the Image Adjust Menu (pp.42–43). This Image memory is provided in each computer, component, S-video 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 the Image adjust 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 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).

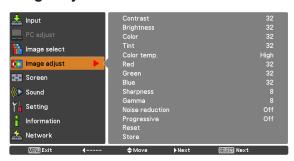
## Color temp.

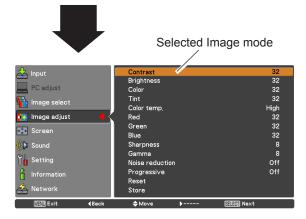
Use the Point **◄►** buttons to select the desired Color temp. level (XLow, Low, Mid or High).

## White balance (Red/Green/Blue)

Press the Point ◀ button to lighten R/G/B tone; press the Point ▶ button to deepen R/G/B tone (from 0 to 63).

## Image adjust Menu







## ✓ Note:

- When the White balance Red, Green or Blue is adjusted, the Color temp. level will change to User.
- Tint cannot be selected when the video system is PAL, SECAM, PAL-M or PAL-N (p.40).
- When Blackboard(Green) or Colorboard is selected in Image select, Color temp. will change to Blackboard or Colorboard.

## **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.
L 1 ...... Lower reduction
L 2 ...... Higher reduction

## **Progressive**

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

Off ...... Disabled.
L 1 ...... For an active picture.

**L 2** ...... 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 SELECT button. A confirmation box appears and then select **Yes**. All adjustments will return to their previous figures.

## **Store**

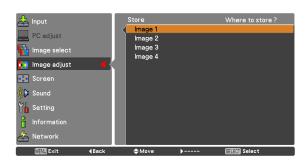
To store the adjusted data, select **Store** and press the Point ▶ button or the SELECT button. Use the Point ▶ buttons to select one from **Image 1** to **4** and press the SELECT button.

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 41.

## ✓ Note:

• Noise reduction and Progressive cannot be selected when 480p, 575p, 720p, 1035i or 1080i is selected (p.40).

## 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.

#### Full

Provide the full screen image.

## Wide (16:9)

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

#### Zoom

Scale the image proportionally to fit the entire screen. Either side of image may go over the screen.

#### Custom

Provide the last stored aspect screen image.

## Custom adj.

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. The Scale V appears dimmed and becomes unavailable. Adjust Scale H, then the screen scale is automatically modified based on the aspect ratio.

position.

Common ....... Save the adjusted scale or position to all the inputs. Press the SELECT button at Common to display a confirmation box.

To save the scale or position, press the SELECT button at **Yes**. When **Custom** is selected, the saved scale or position is used.

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.

## Keystone

This function is used to adjust keystone distortion of the projected image. Use the Point  $\blacktriangle \blacktriangledown$  buttons to choose the item you want to adjust.

## Keystone

To correct keystone distortion, press the SELECT button. Keystone appears on the screen. Use the Point ▲ ▼ buttons to correct keystone distortion (p.23).

## Store

To store or reset the keystone correction, press the SELECT button.

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

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

## 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.

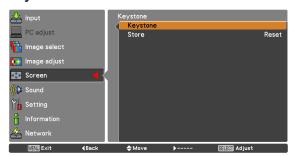
## Rear

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.

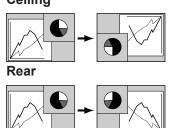
## Reset

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

## Keystone



## Ceiling



# **Setting**

## Setting

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

- Press the MENU button to display the On-Screen Menu. Press the Point ▲ ▼ buttons to select the **Setting** and press the Point ▶ or the SELECT button to access the submenu items.
- Use the Point ▲▼ buttons to select the desired item and then press the Point ► or the SELECT buttons to access the selected item.
- 3 Use the Point ▲ ▼ buttons 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, Czech, Russian, Turkish, Kazakh, Vietnamese, Chinese, Korean, Japanese and Thai.

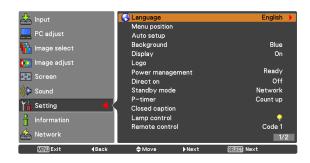
## Menu position

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

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

the center  $\rightarrow$  the bottom left  $\rightarrow$  the bottom right  $\rightarrow$  the top left  $\rightarrow$  the top right  $\rightarrow$  the center  $\rightarrow$ .....

## Language







## **Auto setup**

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

## Input search

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

Off ..... Input search will not work.

On 1...... Input search works when.

 Pressing the AUTO SETUP button on the top control or the AUTO SET 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 SETUP button on the top control or the AUTO SET button on the remote 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 button on the remote control or the AUTO SETUP 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.

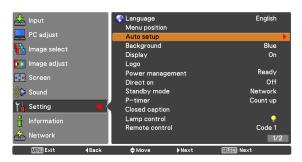
Manual....Works only when pressing the AUTO SETUP button on the top control or the AUTO SET button on the remote control.

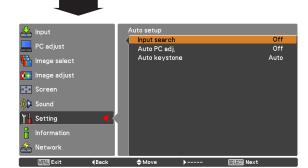
Off . . . . . . Disables Auto Keystone.

#### ✓ 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 1/2 buttons, VIDEO or S-VIDEO or COMPONENT button on the remote control is pressed during Input search is in progress, Input search will stop and go back to the previous input signal.
- Input search, Auto PC adj. and Auto Keystone cannot be set Off at the same time.

## Auto setup







#### ✓ Note:

- Auto Keystone corrects vertical distortion only, not correct horizontal distortion.
- The **Auto Keystone** function cannot work when the **Ceiling** feature is set **On** in the Setting menu (pp.37, 45).
- Perfect correction of the image distortion cannot be ensured with the Auto setup function. If the distortion is not corrected properly by pressing the AUTO SETUP or AUTO SET button, adjust manually by pressing the KEYSTONE button on the remote control or selecting **Keystone** in the Setting menu (pp.23, 37, 45).
- Fine sync, Total dots, Horizontal and Vertical position of some computers cannot be fully adjusted with the Auto PC Adjustment function. When the image is not provided properly with this operation, manual adjustments are required (pp.31-32).

## **Background**

Select the background screen when no input signal is detected. Press the Point  $\blacktriangle \blacktriangledown$  buttons to switch between each option.

Blue . . . Project a blue background

**User** . . . Project an image captured in the Logo setting.

Black . . Project a black background

## **Display**

This function decides whether to display On-Screen Displays.

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.

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.

Off ...... Hide the On-Screen Displays except;

- On-Screen Menu
- Power off? (p.20)
- No signal for Power management (p.51)
- Please wait ...
- Arrows for the True function in the Screen Menu (p.35)
- 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 and Capture functions cannot be selected.

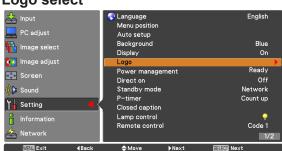
## Logo select

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

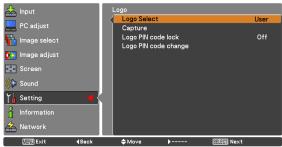
Off ...... Show the countdown display only.

**Default** .... Show the factory-set logo. **User** ...... Show the image you captured.

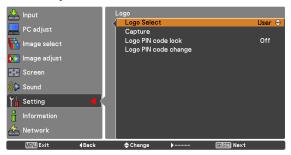
Logo select











## **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.

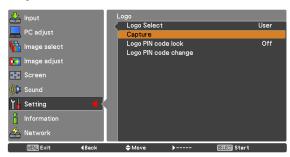
After capturing the projected image, go to the Logo select function and set it to **User**. Then the captured image will be displayed the next time you turn on the projector.

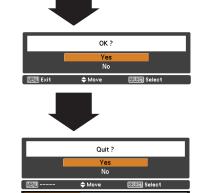
To cancel the capture function, select **Yes** in the "Quit?" confirmation box.

#### ✓ Note:

- Before capturing an image, select **Standard** in the Image select Menu to capture a proper image (pp.33, 41).
- The output image resolution from a computer can be supported up to the panel resolution (1024 x 768).
- 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** cannot 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**.

## Capture





## Logo PIN code lock

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

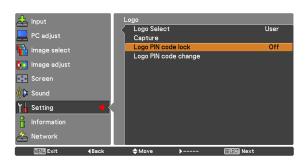
On ........... The screen logo cannot be changed without a Logo PIN code.

Off .......... The screen logo can be changed freely from

the Logo Menu (p.48).

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.

## 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 make a choice.

## Logo PIN code change

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

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

## **CAUTION:**

WHEN YOU HAVE CHANGED THE LOGO PIN CODE, WRITE DOWN THE NEW PIN CODE IN COLUMN OF THE LOGO PIN CODE NO. MEMO ON PAGE 77, AND KEEP IT SECURELY. SHOULD THE LOGO PIN CODE BE LOST OR FORGOTTEN, THE LOGO PIN CODE SETTING CAN NO LONGER BE CHANGED.

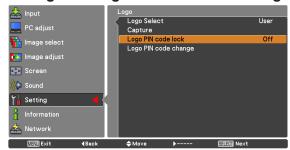
## Enter a Logo PIN code



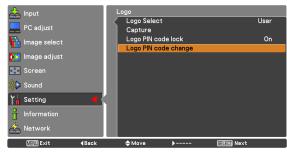


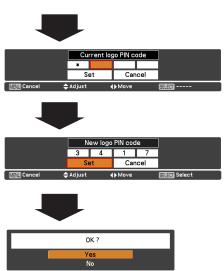
After a correct Logo PIN code is entered, the following dialog box appears.

## Change the Logo PIN code lock setting



## Logo PIN code change





## **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.

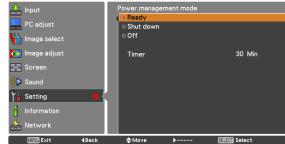
## Power management

No signal **04:50** 

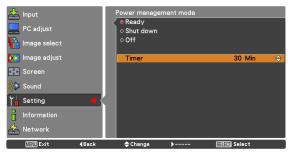
Time left before Lamp is off.











## 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	0
Network	×	0
Monitor Out	×	0
Audio Out	×	x *2
Direct on	0	0

- \*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.

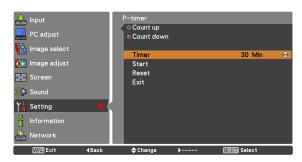
## P-timer



## 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, CC 1, CC 2, CC 3 or CC 4.

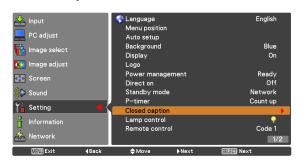
If the closed caption is not clear, you can change the text from **Color** to **White**.

#### ✓ Note:

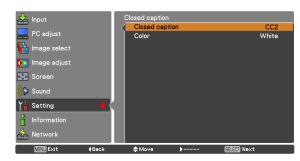
The Closed caption is available only under the situation below.

- When the input signal is NTSC of composite and S-video, and the system is set according to the signal or set on Auto.
- The system must be set on **NTSC** or **Auto** in Video System Selection (p.40).
- The icon of Closed caption is displayed in gray while it is not available.
- The Closed caption is unavailable when On-Screen menu and P-Timer are displayed.

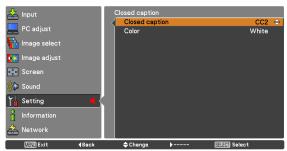
## **Closed Caption**











Press the Point ▲ ▼ buttons to select **Off**, **CC 1**, **CC 2**, **CC 3** or **CC 4**, and then Press SELECT button.

## Lamp control

## **Lamp control**

This function allows you to change brightness of the screen.

Auto ........ Brightness according to the input signal.
 Normal ..... The lamp power output is maximum.
 Eco 1...... The lamp power output is 70% of the

Normal mode.

**Eco 2**...... The lamp power output is 53% of the Normal mode.

## 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 poweron. 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.

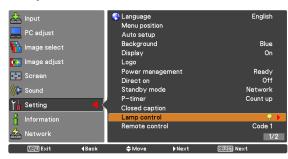
## To change the code for the remote control:

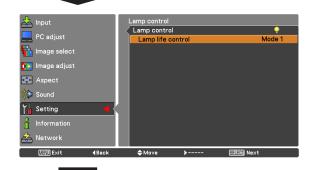
Press and hold both the MENU and IMAGE buttons together for 5 seconds or more. After changing the code, make sure the remote control operates properly.

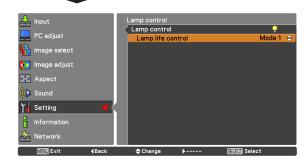
## ✓ Note:

- 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



## 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 On 2.
- 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

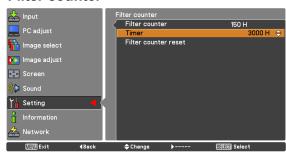


Filter warning icon appears on the screen at a set time (Off/1000H/2000H/3000H/4000H/5000H/6000H).

## ✓ 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.

## **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 the figures of the total power savings and the

exhausted CO2.

## **Total power savings**







## 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.

## **Factory default**









## **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.
- 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**

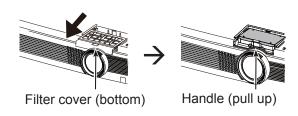
We recommend avoiding dusty/smoky environments when you operate the projector. Usage in these environments may cause poor image quality.

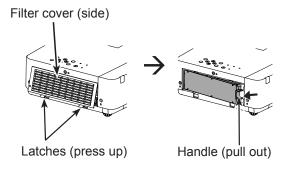
When using the projector under dusty or smoky conditions, dust may accumulate on a lens, LCD panels, or optical elements inside the projector degrading the quality of a projected image. When the symptoms above are noticed, contact your authorized dealer or service center for proper cleaning.

# **Resetting the Filter Counter**

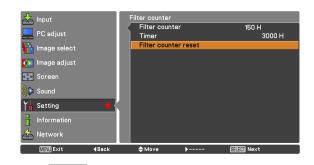
Be sure to reset the Filter counter after replacing the filters.

- 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 to 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.
- Another confirmation dialog box appears, select **Yes** to reset the Filter counter.





## Filter counter







The Filter counter Reset? appears.

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

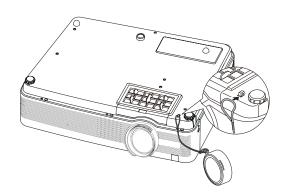
Select **Yes** again to reset the Filter counter.

## **Attaching the Lens Cap**

When moving 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.

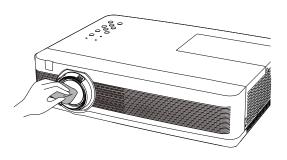


## Cleaning the Projection Lens

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.



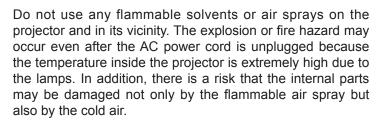
## **Cleaning the Projector Cabinet**

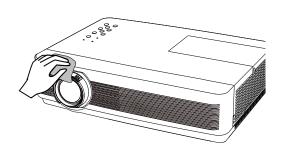
Unplug the AC power cord before cleaning.

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.



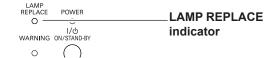




## **Lamp Replacement**

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.

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.



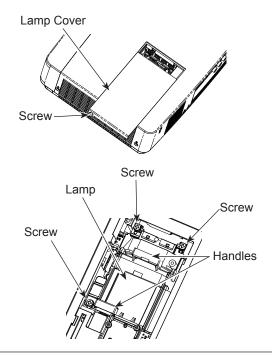
## CAUTION

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.
- 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.
- Connect the AC power cord to the projector and turn on the projector.



## 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 : LC-XB250A
 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.

# **Indicators and Projector Condition**

Check the indicators for projector condition.

Indicators		'S		
POWER red/green	WARNING red	LAMP REPLACE yellow	Projector Condition	
•	•	•	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.	
W/	•	*	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.	
Ŏ.	•	*	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.	
•	Ø	*	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.		• • • • off
· • • blinks green.	··· blinks red.	

<sup>\*</sup> 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.

## **Technical Specifications**

**Mechanical Information** 

Projector Type Multi-media Projector

Dimensions (W x H x D) 13.78" x 3.44" x 10.02" (350.0 mm X 87.5 mm X 254.4 mm ) (Not including protrusions)

Net Weight 7.50 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 Analog: 480i, 480p, 575i, 575p, 720p, 1035i and 1080i Digital: 480i, 480p, 575i, 575p, 720p, 1080i and 1080p

Input Scanning Frequency H-sync. 15 kHz–100 kHz, V-sync. 50–100 Hz

**Optical Information** 

Projection Image Size (Diagonal) Adjustable from 30" to 300" Throw Distance  $2.3' \sim 23.7' (0.69 \text{ m} \sim 7.23 \text{ m})$ 

Projection Lens F  $1.65 \sim 2.33$  lens with f 15.5 mm  $\sim 24.5$  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 2 Audio Input: Common use for MIC Input)

Computer In 1/Component Input Terminal Mini D-sub 15 pin x 1

Computer In 2/DVI-I Input DVI-I Terminal x 1

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 W RMS

Built-in Speaker 1 speaker, ø1.5"(37 mm)

**Power** 

Voltage and Power Consumption AC 100–240 V (3.8-1.8 A Max.), 50/60 Hz

**Operating Environment** 

Operating Temperature 41  $^{\circ}F-95 ^{\circ}F$  (5  $^{\circ}C-35 ^{\circ}C$ ) Storage Temperature 14  $^{\circ}F-140 ^{\circ}F$  (-10  $^{\circ}C-60 ^{\circ}C$ )

**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)

## **Dimensions**

Unit: mm(inch)

Screw Holes for Ceiling Mount Screw: M4

Depth: 12.0(0.472)

