

# **User's Guide**

# Multimedia Projector

EB-X15 EB-X14H EB-X11H EB-S11H



## **Notations Used in This Guide**

#### • Safety indications

The documentation and the projector use graphical symbols to show how to use the projector safely. Please understand and respect these caution symbols in order to avoid injury to persons or property.

| 🕂 Warning | This symbol indicates information that, if ignored, could possibly result in personal injury or even death due to incorrect handling.      |
|-----------|--|
| 🕂 Caution | This symbol indicates information that, if ignored, could possibly result in personal injury or physical damage due to incorrect handling. |

#### • General information indications

| Attention | Indicates procedures which may result in damage or injury if sufficient care is not taken.   |
|-----------|--|
|           | Indicates additional information and points which may be useful to know regarding a topic.   |
|           | Indicates a page where detailed information regarding a topic can be found.  |
| *         | Indicates that an explanation of the underlined word or words in front of this symbol appears in the glossary of terms. See the "Glossary" section of the "Appendix".<br>The "Glossary" p.98 |
| [Name]    | Indicates the name of the buttons on the remote control or the control panel.  |
|           | Example: [Esc] button  |
| Menu Name | Indicates Configuration menu items.  |
|           | Example:   |
|           | Select Brightness from Image.  |
|           | Image - Brightness   |



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| No images appear  |
|---|
| Moving images are not displayed (only the moving image portion turns black) |
|   |
| Projection stops automatically 71   |
| The message Not supported is displayed                                      |
| The message No Signal is displayed  |
| Images are fuzzy, out of focus, or distorted                                |
| Interference or distortion appear in images                                 |
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| Image colors are not right  |
| Images appear dark  |
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TOP



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## Introduction

This chapter explains the projector's features and the part names.



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## List of Functions by Model

Available functions differ depending on the model being used. See the table below for a list of the functions available for each model.

| Function                         | EB-X15 | EB-X14H | EB-X11H | EB-S11H |
|----------------------------------|--------|---------|---------|---------|
| USB Display                      |        | 1       | 1       |         |
| HDMI Connection                  | 1      | -       | -       | -       |
| External Equipment<br>Connection | -      | 1       | 1       | 1       |
| Auto V-Keystone                  | 1      | -       | -       | -       |
| H-Keystone Adjuster              | 1      | -*      | -*      | _*      |
| Quick Corner                     | 1      | 1       | 1       | /       |

\* Although the H-Keystone Slider is not installed for this model, you can perform H-Keystone from the control panel or the Configuration menu.

## Quick and Easy Set up, Projection, and Storage

- Turn the projector on and off by simply plugging in or unplugging.
- Project onto large screens from a short distance.
- Make easy height adjustments with one lever.
- No cool down delay makes it easy to put away.

#### Connecting with a USB cable and projecting (USB Display)

By simply connecting a USB cable, you can project images from a computer's screen without a computer cable.

☞ "Projecting with USB Display" p.28



## Detecting projector movements and automatically correcting image distortion (EB-X15 only)

This projector automatically corrects vertical keystone distortion which occurs when positioning or moving the projector.

Correcting automatically "p.32





#### Horizontal keystone adjuster (EB-X15 only)

This allows you to quickly correct horizontal distortion in the projected image. This is useful if you cannot install the projector parallel to the screen.



### **Useful Functions for Projecting Images**

#### Making the most of the remote control

You can use the remote control to perform operations such as enlarging part of the image. You can also use the remote control as a pointer during presentations or as a mouse for the computer.

- ☞ "Pointer Function (Pointer)" p.43
- ☞ "Enlarging Part of the Image (E-Zoom)" p.44
- ☞ "Using the Remote Control to Operate the Mouse Pointer (Wireless Mouse)" p.45

#### **Enhanced security functions**

- Password Protect to restrict and manage users
- By setting a Password you can restrict who can use the projector.
- ☞ "Managing Users (Password Protect)" p.48

- Control Panel Lock restricts button operation on the control panel You can use this to prevent people changing projector settings without permission at events, in schools, and so on.
  - ☞ "Restricting Operation (Control Panel Lock)" p.50
- Equipped with various anti-theft devices

The projector is equipped with the following types of anti-theft security devices.

- Security slot
- Security cable installation point
- ☞ "Anti-Theft Lock" p.51





#### EB-X14H/EB-X11H/EB-S11H



|   | Name                | Function  |  |
|---|---------------------|---|--|
| 0 | Air exhaust vent    | Exhaust vent for air used to cool the projector internally.   |  |
|   |                     | Caution<br>While projecting, do not put your face or hands<br>near the air exhaust vent, and do not place objects                   |  |
|   |                     | that may become warped or damaged by heat near<br>the vent. The hot air from the vent may cause<br>burns, distortions, or injuries. |  |
| 2 | A/V mute slide knob | Slide the knob to open and close the A/V mute slide.  |  |
| 8 | Foot adjust lever   | Press the foot adjust lever to extend and retract the front adjustable foot.  The "Adjusting the Image Position" p.36               |  |



|    | Name   | Function   |
|----|--|--|
| 4  | Front adjustable foot                            | When setup on a surface such as a desk, extend the foot to adjust the position of the image.  The Transformation of the Image Position p.36  |
| 5  | A/V mute slide                                   | Close when not using the projector to protect the lens. By closing during projection you can hide the image and the sound.  Thiding the Image and Sound Temporarily (A/V Mute)" p.42 |
| 6  | Remote receiver                                  | Receives signals from the remote control.  |
| 0  | Focus ring                                       | Adjusts the image focus.<br>Correcting the Focus" p.37   |
| 8  | Zoom ring<br>(EB-X15/EB-X14H/EB-<br>X11H only)   | Adjusts the image size.<br>Adjusting the Image Size" p.36  |
| 9  | Air intake vent<br>(air filter)                  | Takes in air to cool the projector internally.<br>☞ "Cleaning the Air Filter" p.79   |
| 0  | Air filter cover                                 | Opens and closes the air filter cover.<br>• "Replacing the Air Filter" p.84  |
| 0  | Speaker  | Outputs audio.   |
| 12 | Indicators                                       | Indicates the projector's status.  Therefore The Adding the Indicators p.66  |
| 3  | Control panel                                    | Operates the projector.  Control Panel" p.12   |
| 14 | Horizontal keystone<br>adjuster<br>(EB-X15 only) | Corrects horizontal distortion in the projected image.<br>Correcting manually" p.33  |
| 6  | Lamp cover                                       | Open when replacing the projector's lamp.<br>replacing the Lamp" p.81  |

#### Rear

EB-X15



#### EB-X14H/EB-X11H/EB-S11H



|   | Name            | Function   |
|---|-----------------|--|
| 0 | Remote receiver | Receives signals from the remote control.  |
| 2 | Video port      | Inputs composite video signals from video sources.   |
| 3 | Power inlet     | Connects the power cord to the projector.<br>right "From Installation to Projection" p.26        |
| 4 | Audio port      | Inputs audio from equipment connected to the Computer port, the S-Video port, or the Video port. |

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|-----|----|
|     |    |

|    | Name   | Function   |
|----|--|--|
| 5  | RS-232C port   | When controlling the projector from a computer, connect<br>it to the computer with an RS-232C cable. This port is for<br>control use and should not normally be used.<br>TESC/VP21 Commands" p.52  |
| 6  | Security slot  | The Security slot is compatible with the Microsaver<br>Security System manufactured by Kensington.   |
| 0  | Lamp Cover Fixing<br>Screw                             | Screw to fix the lamp cover in place.  |
| 8  | HDMI port (EB-X15<br>only)                             | Inputs video signals from HDMI compatible video<br>equipment and computers. This projector is compatible<br>with <u>HDCP</u> .<br>Connecting Equipment" p.20   |
| 9  | Computer2 port   | Inputs image signals from a computer and component video signals from other video sources.   |
| 0  | Computer1 port   | Inputs image signals from a computer and component video signals from other video sources.   |
| •  | USB(TypeB) port  | <ul> <li>Connects the projector to a computer via the USB cable, and the image on the computer is projected.</li> <li>Projecting with USB Display" p.28</li> <li>Also use this port to connect to a computer via the USB cable to use the Wireless Mouse function.</li> <li>"Using the Remote Control to Operate the Mouse Pointer (Wireless Mouse)" p.45</li> </ul> |
| 12 | Audio Output port                                      | Outputs the sound of the image currently being projected to external speakers.   |
| 13 | S-Video port   | For S-video signals from video sources.  |
| 14 | Monitor Out port<br>(EB-X14H/EB-X11H/<br>EB-S11H only) | Outputs analog RGB signals input from the Computer1<br>port to an external monitor. You cannot output signals<br>input from other ports or component video signals.  |

## Base



|   | Name  | Function  |
|---|---|---|
| • | Ceiling mount fixing<br>points (three points) | Attach the optional Ceiling Mount here when suspending<br>the projector from a ceiling.<br>Tinstalling the Projector" p.18<br>Toptional Accessories" p.87 |
| 2 | Rear feet                                     | When setup on a surface such as a desk, turn to extend and retract to adjust the horizontal tilt. The "Adjusting the Horizontal Tilt" p.37                |

| 88 🔪 |  |
|------|--|
| OP   |  |

|   | Name                              | Function  |
|---|-----------------------------------|---|
| 3 | Front adjustable foot             | When setup on a surface such as a desk, extend the foot to adjust the position of the image.  The Tradjusting the Image Position p.36 |
| 4 | Security cable installation point | Pass a commercially available wire lock through here and lock it in place.  |

## **Control Panel**

All of the features in this guide are explained using illustrations of EB-X14H unless otherwise mentioned.



|   | Name                      | Function  |
|---|---------------------------|---|
| 0 | [එ] button                | Turns the projector power on or off.<br>Turns the projector power on or off.  |
| 2 | [Source Search]<br>button | Changes to the next input source that is sending an image.<br>Tutomatically Detect Input Signals and Change the<br>Projected Image (Source Search)" p.27  |
| 3 | [Enter] button<br>[ ◀ ]   | <ul> <li>When the Configuration menu or the Help screen is displayed, it accepts and enters the current selection and moves to the next level.</li> <li>If pressed while projecting analog RGB signals from the Computer1 or Computer2 port, you can automatically optimize Tracking, Sync., and Position.</li> </ul> |

|   | Name  | Function   |
|---|---|--|
| 4 | [껍][꼬] buttons                                | <ul> <li>Displays the Keystone screen allowing you to correct keystone distortion in vertical and horizontal directions.</li> <li>Correcting manually" p.33</li> <li>If pressed when the Configuration menu or the Help screen is displayed, these buttons select menu items and setting values.</li> <li>"Using the Configuration Menu" p.55</li> <li>"Using the Help" p.65</li> </ul>  |
| 5 | [Help] button                                 | Displays and closes the Help screen which shows you how<br>to deal with problems if they occur.<br>Tusing the Help" p.65   |
| 6 | [Esc] button                                  | <ul> <li>Stops the current function.</li> <li>If pressed when the Configuration menu is displayed, it moves to the previous menu level.</li> <li>"Using the Configuration Menu" p.55</li> </ul>  |
|   | [석][네)] buttons<br>or [Wide][Tele]<br>buttons | <ul> <li>For EB-X15/EB-X14H/EB-X11H <ul> <li>[▷] Decreases the volume.</li> <li>[▷] Increases the volume.</li> <li>[▷] Increases the volume" p.37</li> </ul> </li> <li>For EB-S11H <ul> <li>[Wide]: Enlarges the size of the projected image.</li> <li>[Tele]: Reduces the size of the projected image.</li> <li>[○] "Adjusting the Image Size" p.36</li> </ul> </li> <li>Corrects keystone distortion in the horizontal direction when the Keystone screen is displayed.</li> <li>[○] "H/V-Keystone" p.33</li> </ul> <li>If pressed when the Configuration menu or the Help screen is displayed, these buttons select menu items and setting values.</li> <li>[○] "Using the Configuration Menu" p.55</li> <li>[○] "Using the Help" p.65</li> |
| 8 | [Menu] button                                 | Displays and closes the Configuration menu.<br>Tusing the Configuration Menu" p.55   |

### **Remote Control**





|   | Name              | Function  |  |  |  |
|---|-------------------|---|--|--|--|
| 0 | [也] button        | Turns the projector power on or off.<br>Turns the projector power on or off.  |  |  |  |
| 2 | [Computer] button | Each time the button is pressed, the input changes<br>between images from the Computer1 and Computer2<br>port.  |  |  |  |
| 3 | [Video] button    | <ul> <li>For EB-X15 <ul> <li>Each time the button is pressed, the image cycles through the S-Video, Video, and HDMI ports.</li> </ul> </li> <li>For EB-X14H/EB-X11H/EB-S11H <ul> <li>Each time the button is pressed, the input changes between images from the S-Video port to the Video port.</li> </ul> </li> </ul>  |  |  |  |
| 4 | Numeric buttons   | Enter the Password.  The setting Password Protect" p.48   |  |  |  |
| 5 | [Auto] button     | If pressed while projecting analog RGB signals from the<br>Computer1 or Computer2 port, you can automatically<br>optimize Tracking, Sync., and Position.  |  |  |  |
| 6 | [Aspect] button   | Each time the button is pressed, the aspect mode changes.<br>Changing the Aspect Ratio of the Projected Image "<br>p.39   |  |  |  |
| 0 | [Num] button      | Hold down this button and press the numeric buttons to<br>enter passwords and numbers.<br>The "Setting Password Protect" p.48   |  |  |  |
| 8 | [Menu] button     | Displays and closes the Configuration menu.<br>"Using the Configuration Menu" p.55  |  |  |  |
| 0 | [)][)]<br>buttons | <ul> <li>When the Configuration menu or the Help screen is displayed, pressing these buttons selects menu items and setting values.</li> <li>"Using the Configuration Menu" p.55</li> <li>During Wireless Mouse function, the mouse pointer moves in the direction of the button that was pushed.</li> <li>"Using the Remote Control to Operate the Mouse Pointer (Wireless Mouse)" p.45</li> </ul> |  |  |  |

| Name |                            | Function   |  |  |
|------|----------------------------|--|--|--|
|      | [≁] button                 | <ul> <li>When the Configuration menu or the Help screen is displayed, it accepts and enters the current selection and moves to the next level.</li> <li>"Using the Configuration Menu" p.55</li> <li>Acts as a mouse's left button when using the Wireless Mouse function.</li> <li>"Using the Remote Control to Operate the Mouse Pointer (Wireless Mouse)" p.45</li> </ul> |  |  |
| 0    | [User] button              | Select any frequently used item from the five available<br>Configuration menu items, and assign it to this button. By<br>pressing the [User] button, the assigned menu item<br>selection/adjustment screen is displayed, allowing you to<br>make one-touch settings/adjustments.<br>Term "Settings Menu" p.60<br>Power Consumption is assigned as the default setting.       |  |  |
| 0    | [Page] buttons<br>[↑][♥]   | <ul> <li>Changes pages in files such as PowerPoint files when using the following projection methods.</li> <li>When using the Wireless Mouse function <ul> <li>"Using the Remote Control to Operate the Mouse Pointer (Wireless Mouse)" p.45</li> </ul> </li> <li>When using USB Display <ul> <li>"Projecting with USB Display" p.28</li> </ul> </li> </ul>                  |  |  |
| (3)  | [E-Zoom] buttons<br>[⊕][Ҿ] | Enlarges or reduces the image without changing the projection size.  |  |  |
| (2)  | [A/V Mute] button          | <ul> <li>Turns the video and audio on or off.</li> <li></li></ul>  |  |  |

| 15<br>OP |  |
|----------|--|
|----------|--|

|    | Name                                   | Function  |
|----|--|---|
| 6  | [Help] button                          | Displays and closes the Help screen which shows you how<br>to deal with problems if they occur.<br>Tusing the Help" p.65  |
| 6  | [Freeze] button                        | Images are paused or unpaused.<br>Treezing the Image (Freeze)" p.42   |
| 0  | [Volume] buttons<br>[ଐ][ଐ)]            | <ul> <li>[Φ] Decreases the volume.</li> <li>[Φ] Increases the volume.</li> <li>(Φ) "Adjusting the Volume" p.37</li> </ul>   |
| 13 | [Pointer] button                       | Displays the on-screen pointer.<br>The "Pointer Function (Pointer)" p.43  |
|    | [Esc] button                           | <ul> <li>Stops the current function.</li> <li>If pressed when the Configuration menu is displayed, it moves to the previous level.</li> <li>"Using the Configuration Menu" p.55</li> <li>Acts as a mouse's right button when using the Wireless Mouse function.</li> <li>"Using the Remote Control to Operate the Mouse Pointer (Wireless Mouse)" p.45</li> </ul> |
| 20 | [Color Mode] button                    | <ul> <li>Each time the button is pressed, the Color Mode changes.</li> <li>"Selecting the Projection Quality (Selecting Color Mode)" p.37</li> </ul>  |
| 2) | [LAN] button                           | Not available for this projector.   |
| 22 | [USB] button                           | Changes to USB Display.   |
| 23 | [Source Search]<br>button              | Changes to the next input source that is sending an image.<br>• "Automatically Detect Input Signals and Change the<br>Projected Image (Source Search)" p.27   |
| 24 | Remote control light-<br>emitting area | Outputs remote control signals.   |

#### Replacing the remote control batteries

If delays in the responsiveness of the remote control occur or if it does not operate after it has been used for some time, it probably means that the batteries are becoming flat. When this happens, replace them with new batteries. Have two AA size manganese or alkaline batteries ready. You cannot use other batteries except for the AA size manganese or alkaline.

#### Attention

Make sure you read the following manual before handling the batteries.

Safety Instructions

#### Remove the battery cover.

While pushing the battery compartment cover catch, lift the cover up.





Replace the old batteries with new batteries.



## **A** Caution

Check the positions of the (+) and (-) marks inside the battery holder to ensure the batteries are inserted the correct way. If the batteries are not handled correctly, they could explode or leak causing a fire, injury, or damage to the product.

#### Replace the battery cover.

3

Press the battery compartment cover until it clicks into place.



#### Remote control operating range







## **Preparing the Projector**

This chapter explains how to install the projector and connect projection sources.

## **Installing the Projector**



### **Installation Methods**

The projector supports the following four different projection methods. Install the projector according to the conditions of the installation location.

• Project images from in front of the screen. (Front projection)



• Suspend the projector from the ceiling and project images from in front of a screen. (Front/Ceiling projection)



• Project images from behind a translucent screen. (Rear projection)



• Suspend the projector from the ceiling and project images from behind a translucent screen. (Rear/Ceiling projection)



## 🔥 Warning

- A special method of installation is required when suspending the projector from a ceiling (ceiling mount). If it is not installed correctly, it could fall causing an accident and injury.
- If you use adhesives on the Ceiling mount fixing points to prevent the screws from loosening, or if you use things such as lubricants or oils on the projector, the projector case may crack causing it to fall from its ceiling mount. This could cause serious injury to anyone under the ceiling mount and could damage the projector.

When installing or adjusting the ceiling mount, do not use adhesives to prevent the screws from loosening and do not use oils or lubricants and so on.

• Do not cover the projector's air intake vent or air exhaust vent. If either of the vents are covered, the internal temperature could rise and cause a fire.

#### Attention

Do not use the projector on its side. This may cause malfunctions to occur.



• An optional Ceiling mount is required when suspending the projector from a ceiling.

- ☞ "Optional Accessories" p.87
- The default Projection setting is **Front**. You can change from **Front** to **Rear** from the Configuration menu.
  - Extended Projection p.61
- You can change the Projection mode as follows by pressing down the [A/V Mute] button on the remote control for about five seconds.
   Front↔Front/Ceiling Rear↔Rear/Ceiling

#### Installation methods

Install the projector as follows.

- Install the projector so that it is parallel to the screen. If the projector is installed at an angle to the screen, keystone distortion occurs in the projected image.
- Place the projector on a level surface. If the projector is tilted the projected image is also tilted.



- See the following if you cannot install the projector parallel to the screen.
  - Correcting Keystone Distortion" p.32
  - See the following if you cannot install the projector on a level surface.
    - "Adjusting the Horizontal Tilt" p.37
    - ☞ "Correcting Keystone Distortion" p.32

## Screen Size and Approximate Projection Distance

Projection size is determined by the distance from the projector to the screen. See the illustrations on the right to select the best position according to the screen size. The illustrations show the approximate shortest distance at maximum zoom. See the following for more information on the projection distance.

☞ "Screen Size and Projection Distance" p.88



When you correct keystone distortion, the projected image may be

4:3 Screen Size

#### EB-X15/EB-X14H/EB-X11H







TOP



Illustrations in this section are of EB-X15. The port name, location, and connector orientation differ depending on the source being connected.

## **Connecting a Computer**

To project images from a computer, connect the computer using one of the following methods.

**()** When using the supplied computer cable

Connect the computer's display output to the projector's Computer1 or Computer2 port.

You can output audio from the projector's speaker by connecting the audio output port on the computer to the projector's Audio port using a commercially available audio cable.

When using the supplied or commercially available USB cable Connect the computer's USB port to the projector's USB(TypeB) port. You can send the computer's audio with the projected image.

When using a commercially available HDMI cable (EB-X15 only)

Connect the computer's HDMI port to the projector's HDMI port. You can send the computer's audio with the projected image.



## **Connecting Equipment**



• You can use a USB cable to connect the projector to a computer to project images from the computer. This function is called USB Display.

- ☞ "Projecting with USB Display" p.28
- Depending on the model used and the area of purchase, the USB cable may not be supplied with the projector.



### **Connecting Image Sources**

To project images from DVD players or VHS video and so on, connect to the projector using one of the following methods.

**(1)** When using a commercially available video or S-video cable

Connect the video output port on the image source to the projector's Video port.

Or, connect the S-video output port on the image source to the projector's S-Video port.

You can output audio from the projector's speaker by connecting the audio output port on the image source to the projector's Audio port using a commercially available audio cable.

#### **When using the optional component video cable**

#### Optional Accessories" p.87

Connect the component output port on the image source to the projector's Computer1 or Computer2 port.

You can output audio from the projector's speaker by connecting the audio output port on the image source to the projector's Audio port using a commercially available audio cable.

#### **When using a commercially available HDMI cable (EB-X15 only)**

Connect the HDMI port on the image source to the projector's HDMI port.

You can send the image source's audio with the projected image.





#### Attention

- If the input source is on when you connect it to the projector, it could cause a malfunction.
- If the orientation or shape of the plug differs, do not try to force it in. The device could be damaged or could malfunction.

If the source you want to connect to has an unusually shaped port, use the cable supplied with the device or an optional cable to connect to the projector.
When using a commercially available 2RCA(L/R)/stereo mini-pin audio cable, make sure it is labeled "No resistance".

### **Connecting Equipment**



## **Connecting External Equipment**

You can output images and audio by connecting an external monitor or speaker. The illustration in this section is of EB-X14H/EB-X11H/EB-S11H.

- When outputting images to an external monitor (EB-X14H/EB-X11H/EB-S11H only) Connect the external monitor to the projector's Monitor Out port using the cable supplied with the external monitor.
- **When outputting audio to an external speaker**

Connect the external speaker to the projector's Audio Out port using a commercially available audio cable.



If you set Standby Mode to Communication On, you can output images to an external monitor even if the projector is in standby mode.
 Extended - Standby Mode p.61

- Only analog RGB signals from the Computer1 port can be output to an external monitor. You cannot output signals input from other ports or component video signals.
- Setting gauges for functions such as Keystone, Configuration Menu, or Help screens are not output to the external monitor.
- When the audio cable jack is inserted into the Audio Out port, audio stops being output from the projector's built-in speakers and switches to external output.



## **Basic Usage**

This chapter explains how to project and adjust images.

## **Projecting Images**



TOP

## From Installation to Projection

This section explains the procedure for connecting the projector to a computer with the computer cable and projecting images.



- 1 Connect the projector to an electrical outlet with the power cord.
- Connect the projector to the computer with the computer cable.
- Turn on the projector.
- Slide open the A/V mute slide.
  - Turn on your computer.

6

Change the computer's screen output.

When using a laptop computer, you need to change the screen output from the computer.

Hold down the Fn key (function key), and press the  $\equiv/\Box$  key.

• The method for changing differs depending on the computer being used. See the documentation supplied with the computer.

 $\bullet$  Press the  $[\ensuremath{\textcircled{}}]$  button twice to turn off the projector.

If the image is not projected, you can change the projected image using one of the following methods.

• Press the [Source Search] button on the control panel or the remote control.

☞ "Automatically Detect Input Signals and Change the Projected Image (Source Search)" p.27

- Press the button for the target port on the remote control.
- ☞ "Switching to the Target Image by Remote Control" p.28

After projecting the image, adjust the image if necessary.

- "Correcting Keystone Distortion" p.32
- Correcting the Focus" p.37

## **Projecting Images**



# Automatically Detect Input Signals and Change the Projected Image (Source Search)

Press the [Source Search] button to project images from the port currently receiving an image.



#### \* (EB-X15 only)

When two or more image sources are connected, press the [Source Search] button until the target image is projected.

When your video equipment is connected, start playback before beginning this operation.

| The following screen is displayed<br>Example: EB-X15  | l while no ima                                       | ge signals are | input. |
|---|--|----------------|--------|
| [Source Search]<br>Computer1<br>Computer2<br>S-Video<br>Computer2<br>Computer2<br>Computer2<br>Computer2<br>Computer2<br>Computer2<br>Computer1 | Signal Sta<br>Off<br>Off<br>Off<br>Off<br>Off<br>Off | tus            |        |
| ■ USB Display Input an image signal. Press ◆ to select the s [◆]:Select [♥]:Enter   | Off<br>ource.  | [Esc] :Exit    |        |



## Switching to the Target Image by Remote Control

You can change directly to the target image by pressing the following buttons on the remote control.

#### **Remote control**



- Each time the button is pressed, it cycles through the images being input from the following sources.
  - Computer1 port
  - Computer2 port
- 2 Each time the button is pressed, it cycles through the images being input from the following sources.
  - S-Video port
  - Video port
  - HDMI port (EB-X15 only)
- Changes to USB Display.

## **Projecting with USB Display**

You can use a USB cable to connect the projector to a computer to project images from the computer.

You can send the computer's audio with the projected image.

#### System requirements

For Windows

| OS               | Windows 2000*1                           |                          |  |  |
|------------------|--|--------------------------|--|--|
|                  | Windows XP*2                             | Professional 32 bit      |  |  |
|                  |  | Home Edition 32 bit      |  |  |
|                  |  | Tablet PC Edition 32 bit |  |  |
|                  | Windows Vista                            | Ultimate 32 bit          |  |  |
|                  |  | Enterprise 32 bit        |  |  |
|                  |  | Business 32 bit          |  |  |
|                  |  | Home Premium 32 bit      |  |  |
|                  |  | Home Basic 32 bit        |  |  |
|                  | Windows 7                                | Ultimate 32/64 bit       |  |  |
|                  |  | Enterprise 32/64 bit     |  |  |
|                  |  | Professional 32/64 bit   |  |  |
|                  |  | Home Premium 32/64 bit   |  |  |
|                  |  | Home Basic 32 bit        |  |  |
|                  |  | Starter 32 bit           |  |  |
| CPU              | Mobile Pentium III 1.2 GHz or faster     |                          |  |  |
|                  | Recommended: Pentium M 1.6 GHz or faster |                          |  |  |
| Amount of Memory | 256 MB or more                           |                          |  |  |
|                  | Recommended: 512 MB or more              |                          |  |  |
| Hard Disk Space  | ace 20 MB or more                        |                          |  |  |

### **Projecting Images**



| Resolution of no less than 640x480 and no higher than 1600x1200. |
|--|
| Display color in 16-bit color or greater                         |

\*1 Service Pack 4 only

\*2 Except for Service Pack 1

#### For Mac OS X

| OS               | Mac OS X 10.5.x 32 bit   |
|------------------|--|
|                  | Mac OS X 10.6.x 32/64 bit  |
|                  | Mac OS X 10.7.x 32/64 bit  |
| CPU              | Power PC G4 1GHz or faster   |
|                  | Recommended: Core Duo 1.83GHz or faster  |
| Amount of Memory | 512 MB or more   |
| Hard Disk Space  | 20 MB or more  |
| Display          | Resolution of no less than 640x480 and no higher than 1600x1200.<br>Display color in 16-bit color or greater |

#### Connecting for the first time

The first time you connect the projector and the computer using the USB cable, the driver needs to be installed. The installation procedure is different for Windows and Mac OS X.



- You do not need to install the driver the next time you connect.
- When inputting images from multiple sources, change the input source to USB Display.
- If you use a USB hub, the connection may not operate correctly. Connect the USB cable directly to the projector.
- Depending on the model used and the area of purchase, the USB cable may not be supplied with the projector.
- You cannot change option settings while using USB Display.

#### For Windows



Connect the computer's USB port to the projector's USB(TypeB) port using a USB cable.

For Windows 2000 or Windows XP, a message asking you if you want to restart your computer may be displayed. Select No.

#### For Windows 2000

Double-click Computer, EPSON PJ\_UD, and then EMP\_UDSE.EXE.

#### For Windows XP

Driver installation starts automatically.

#### For Windows Vista/Windows 7

When the dialog box is displayed, click Run EMP\_UDSE.exe.



When the License Agreement screen is displayed, click Agree.

3

4



Computer images are projected.

It may take a while before computer images are projected. Until computer images are projected, leave the equipment as it is and do not disconnect the USB cable or turn off the power to the projector.

Disconnect the USB cable when you finish projection.

When disconnecting the USB cable, there is no need to use Safely Remove Hardware.



- If nothing is projected for some reason, click All Programs -EPSON Projector - Epson USB Display - Epson USB Display Vx.xx on your computer.
- When using a computer running Windows 2000 under user authority, a Windows error message is displayed and you may not be able to use the software. In this case, try updating Windows to the latest version, restart, and then try to connect again.

For more details, contact your local dealer or the nearest address provided in the following document.

Epson Projector Contact List

#### For Mac OS X

- 1
- Connect the computer's USB port to the projector's USB(TypeB) port using a USB cable.

The Setup folder of USB Display is displayed in the Finder.

2 Double-click the USB Display Installer icon.



When the License Agreement screen is displayed, click Agree.

Enter the administrator authority password and start the installation. When the installation is complete, the USB Display icon is displayed in the Dock and menu bar.

#### **5** Computer images are projected.

It may take a while before computer images are projected. Until computer images are projected, leave the equipment as it is and do not disconnect the USB cable or turn off the power to the projector.

- When you finish projection, select **Disconnect** from the **USB Display** icon menu on the menu bar or Dock, and then remove the USB cable.
  - If the USB Display setup folder is not displayed automatically in the Finder, double-click EPSON PJ\_UD - USB Display Installer on your computer.
    - If nothing is projected for some reason, click the USB Display icon in the Dock.
    - If there is no **USB Display** icon in the Dock, double-click **USB Display** from the Applications folder.
    - If you select **Exit** from the **USB Display** icon menu on the Dock, USB Display does not start automatically when you connect the USB cable.

#### Uninstalling

6

#### For Windows 2000

Click Start, select Settings, and then click Control Panel.

Double-click Add/Remove Programs.

- Click Change or Remove Programs.
- Select Epson USB Display and click Change/Remove.



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#### For Windows XP

- **1** Click **Start**, and then click **Control Panel**.
- Double-click Add or Remove Programs.



Select Epson USB Display and click Remove.

#### For Windows Vista/Windows 7

Click Start, and then click Control Panel.



Click Uninstall a program under Programs.



Select Epson USB Display and click Uninstall.

#### For Mac OS X



Open the **Applications** folder, double-click **USB Display**, and then double-click **Tool**.



Run USB Display UnInstaller.

## **Adjusting Projected Images**

## **Correcting Keystone Distortion**

You can correct keystone distortion using one of the following methods.

- Correcting automatically (Auto V-Keystone) (EB-X15 only) Automatically corrects vertical keystone distortion.
- Correcting manually (H-Keystone Adjuster) (EB-X15 only) Manually corrects horizontal keystone distortion using the horizontal keystone adjuster.



• Correcting manually (H/V-Keystone)

Manually correct distortion in the horizontal and vertical directions independently.



• Correcting manually (Quick Corner) Manually correct the four corners independently.





#### **Correcting automatically**

#### Auto V-Keystone (EB-X15 only)

When the projector detects any movement, for example when it is installed, moved, or tilted, it automatically corrects vertical keystone distortion. This function is called Auto V-Keystone.

When the projector remains still for about two seconds after it detects movement, it displays a screen for adjustment and then automatically corrects the projected image.

You can use Auto V-Keystone to correct the projected image under the following conditions.

Correction angle: approx. 30° up and down

TOP

### **Adjusting Projected Images**





• Auto V-Keystone works only when **Projection** is set to **Front** from the Configuration menu.

- Extended Projection p.61
- If you do not want to use Auto V-Keystone, set Auto V-Keystone to Off.

Settings - Keystone - H/V-Keystone - Auto V-Keystone p.60

#### Correcting manually

You can manually correct keystone distortion.

You can use H/V-Keystone to correct the projected image under the following conditions.

Correction angle: approx 30° right and left/approx. 30° up and down

#### H-Keystone Adjuster (EB-X15 only)

Move the horizontal keystone adjuster to the right or left to perform horizontal keystone correction.



• When using horizontal keystone adjuster, set H-Keystone Adjuster to On.

• Settings - Keystone - H/V-Keystone - H-Keystone Adjuster p.60

• You can also correct keystone distortion in the horizontal direction using H/V-Keystone.

H/V-Keystone

Manually correct distortion in the horizontal and vertical directions independently.



Press the  $[\square]$  or  $[\square]$  buttons on the control panel during projection to display the Keystone screen.

| [Keystone]  |  |
|-------------|--|
| (V-Keystone |  |
| (H-Keystone |  |
| ·           |  |

[♦]:V-Keystone [♦]:H-Keystone

Press the following buttons to correct keystone distortion. Press the  $[\Box]$  or  $[\Box]$  buttons to correct vertical distortion.





Press the  $[\Phi]/[\Phi]$  buttons or the [Wide]/[Tele] buttons to correct horizontal distortion.



✓ Settings - Keystone - H/V-Keystone p.60

Quick Corner

This allows you to manually correct each of the four corners of the projected image separately.

- - Press the [Menu] button while projecting.

#### Using the remote control







3

Select Keystone from Settings.

| Image              |      |  |                  | Re                            | turn          |  |
|--------------------|------|--|------------------|-------------------------------|---------------|--|
| Signal             | Ī    | Certain Control Panel Lock<br>Control Panel Lock<br>Pointer Shape<br>Power Consumption |                  |                               | OH/V-Keystone |  |
| Settings           | 0    |  |                  | Full Lock<br>Pointer 1<br>ECO |               |  |
| Extended           |      | Volume   | ·                | 0                             | aar           |  |
| Info               |      | Remote Receiver<br>User Button<br>Test Pattern   |                  | Power Consum                  |               |  |
| Reset              |      | Reset  |                  |                               |               |  |
|                    |      |  |                  |                               | ,             |  |
| [Esc] :Retu        | rn [ | 🗢]:Select  | [ <b>O</b> ]:Ent | er [M                         | enu]:Exit     |  |
| elect <b>Quick</b> | Co   | orner, and   | then pr          | ess the [◀                    | ן button      |  |
|                    |      |  | -                |                               |               |  |

| [Keysto         | ne]                          | Return |             |
|-----------------|------------------------------|--------|-------------|
|                 | JH/V-Keysto<br>()Quick Corne |        |             |
| [Esc]:Return [♦ | ]:Select [O]                 | :Enter | [Menu]:Exit |



Using the [], [], [], [], and [] buttons on the remote control, or the [], [], [], [], and [] buttons (or the [Wide]/[Tele] buttons) on the control panel, select the corner to correct, and then press the [] button.





Using the [], [], [], [], and [] buttons on the remote control, or the [], [], [], [], and [] buttons (or the [Wide]/[Tele] buttons) on the control panel, correct the position of the corner.

When you press the  $[\checkmark]$  button, the screen shown in step 4 is displayed.

If the message "Cannot adjust any further." is displayed while adjusting, you cannot adjust the shape any further in the direction indicated by the gray triangle.



6

Repeat procedures 4 and 5 as needed to adjust any remaining corners.

When you are done, press the [Esc] button to exit the correction menu.

Because **Keystone** was changed to **Quick Corner**, the corner selection screen shown in step 4 is displayed the next time you press the  $[\square]$  or  $[\square]$  buttons on the control panel. Change **Keystone** to **H/V-Keystone** if you want to perform horizontal and vertical correction using the  $[\square]$  or  $[\square]$  buttons on the control panel.

☞ Settings - Keystone - H/V-Keystone p.60



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## Adjusting the Image Size

#### EB-X15/EB-X14H/EB-X11H

Turn the zoom ring to adjust the size of the projected image.

#### EB-S11H

Adjust by using the [Wide]/[Tele] buttons on the control panel.

Wide: Enlarges the size of the projected image.

Tele: Reduces the size of the projected image.



## Adjusting the Image Position

Press the foot adjust lever to extend and retract the front adjustable foot. You can adjust the position of the image by tilting the projector up to 12 degrees.





The larger the angle of tilt, the harder it becomes to focus. Install the projector so that it only needs to be tilted at a small angle.


# Adjusting the Horizontal Tilt

Extend and retract the rear feet to adjust the projector's horizontal tilt.



- Extend the rear foot.
- Retract the rear foot.

# **Correcting the Focus**

You can correct the focus using the focus ring.



# **Adjusting the Volume**

You can adjust the volume using one of the following methods.

- Press the [Volume] button on the control panel or the remote control to adjust the volume.
  - $[ \diamondsuit ]$  Decreases the volume.
  - [⊲»] Increases the volume.

### Using the remote control



Using the control panel (EB-X15/EB-X14H/EB-X11H only)



- Adjust the volume from the Configuration menu.
- ☞ Settings Volume p.60

# 🕂 Caution

Do not start at high volume.

A sudden excessive volume may cause loss of hearing. Always lower the volume before powering off, so that you can power on and then gradually increase the volume.

# Selecting the Projection Quality (Selecting Color Mode)

You can easily obtain the optimum image quality simply by selecting the setting that best corresponds to your surroundings when projecting. The brightness of the image varies depending on the mode selected.

37

| 5 A |  |
|-----|--|
|     |  |
| UP  |  |

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| Mode                 | Application  |  |
|----------------------|--|--|
| Dynamic              | Ideal for use in a bright room. This is the brightest mode, and reproduces shadow tones well.  |  |
| Presentation         | Ideal for making presentations using color materials in a bright room.   |  |
| Theatre              | Ideal for watching films in a dark room. Gives images a natural tone.  |  |
| Photo <sup>*1</sup>  | Ideal for projecting still pictures, such as photos, in<br>a bright room. The images are vivid and brought<br>into contrast.                             |  |
| Sports <sup>*2</sup> | Ideal for watching TV programmes in a bright room. The images are vivid and brought to life.   |  |
| sRGB                 | Ideal for images that conform to the $\underline{sRGB}^{\triangleright}$ color standard.   |  |
| Blackboard           | Even if you are projecting onto a blackboard<br>(greenboard), this setting gives your images a<br>natural tint, just like when projecting onto a screen. |  |
| Whiteboard           | Ideal for making presentations using a whiteboard.   |  |

\*1 This selection is only available when the input signal is RGB or when the source is USB Display.

\*2 This selection is only available when the input signal is component video, or when the input source is Video or S-Video.

Each time you press the [Color Mode] button, the Color Mode name is displayed on the screen and the Color Mode changes.

### **Remote control**



You can set Color Mode from the Configuration menu. • Image - Color Mode p.57

# Setting Auto Iris

By automatically setting the luminance according to the brightness of the displayed image, it lets you enjoy deep and rich images.

- Press the [Menu] button.
- ☞ "Using the Configuration Menu" p.55

Using the remote control

Using the control panel







Select Auto Iris from Image.

| Image       | <mark>0</mark>                       | Return         |       |
|-------------|--------------------------------------|----------------|-------|
| Signal      | Color Mode<br>Brightness             | Dynamic<br>0   |       |
| Settings    | Contrast<br>Sharpness<br>Color Temp. | 0<br>0<br>High | Ę     |
| Extended    | Color Adjustment                     | eOff           |       |
| Info        | Reset                                |                |       |
| Reset       |                                      |                |       |
|             |                                      |                |       |
| [Esc] :Retu | n [�]:Select [❹]:En                  | ter [Menu]     | :Exit |

### **3** S

# Select **On**.

The setting is stored for each Color Mode.



Press the [Menu] button to finish making settings.

Auto Iris can only be set when the **Color Mode** is **Dynamic** or **Theatre**.

# Changing the Aspect Ratio of the Projected Image

You can change the <u>Aspect Ratio</u> of the projected image to suit the type, the ratio of height and width, and the resolution of the input signals.

Available aspect modes vary depending on the image signal currently being projected.

### Changing methods

Each time you press the [Aspect] button on the remote control, the aspect mode name is displayed on the screen and the aspect ratio changes.

#### **Remote control**





You can set the aspect ratio from the Configuration menu. Signal - Aspect p.58

### Changing the aspect mode

Projecting images from video equipment

Each time the [Aspect] button is pressed, the aspect mode changes in the order 4:3 and 16:9.

Example: 720p signal input (resolution: 1280x720, aspect ratio: 16:9)



TOP



### 2 16:9

Projecting images from the HDMI port (for EB-X15)

Each time the Aspect button is pressed, the aspect mode changes in the order Auto, 4:3, and 16:9.

Example: 1080p signal input (resolution: 1920x1080, aspect ratio: 16:9)



Auto

2 4:3

**3** 16:9

### Projecting images from a computer

The following shows projection examples for each aspect mode.



or **Normal** from the Configuration menu, according to the size of the computer panel.

**Signal** - Resolution p.58



# **Useful Functions**

This chapter explains useful tips for giving presentations, and the Security functions.

# **Projection Functions**



# Hiding the Image and Sound Temporarily (A/V Mute)

You can use this when you want to focus the audience's attention on what you are saying, or if you do not want to show details such as when you are changing between files during presentations from a computer.



Each time you press the [A/V Mute] button or open/close the lens cover, A/V Mute turns on or off.





• When projecting moving images, the images and sound continue to be played back while A/V Mute is on. It is not possible to resume projection from the point where A/V Mute was activated.

- You can select the screen displayed when the [A/V Mute] button is pressed from the Configuration menu.
- Extended Display A/V Mute p.61
- When the A/V mute slide is closed for approximately 30 minutes, Lens Cover Timer activates and the power is automatically turned off. If you do not want Lens Cover Timer to activate, set **Lens Cover Timer** to **Off**.
- Extended Operation Lens Cover Timer p.61
- The lamp is still lit during A/V Mute, so the lamp hours continue to accumulate.

# Freezing the Image (Freeze)

When Freeze is activated on moving images, the frozen image continues to project on the screen, so you can project a moving image one frame at a time like a still photo. Also, you can perform operations such as changing between files during presentations from a computer without projecting any images if the Freeze function is activated beforehand.

Each time you press the [Freeze] button, Freeze turns on or off.

#### **Remote control**



### **Projection Functions**



• Audio does not stop.

- When projecting moving images, the images continue to be played back while the screen is frozen. It is not possible to resume projection from the point where the screen was frozen.
- If the [Freeze] button is pressed while the Configuration menu or the Help screen is displayed, the menu or the Help screen that is displayed is closed.
- Freeze still works while E-Zoom is being used.

## **Pointer Function (Pointer)**

This allows you to move a Pointer icon on the projected image, and helps you draw attention to the area you are talking about.





Display the Pointer.

Each time you press the [Pointer] button, the pointer appears or disappears.

### Remote control





Move the Pointer icon ( $\checkmark$ ).





When any pair of adjacent [ ], [ ], [ ], or [ ] buttons are pressed at the same time, the pointer can be moved diagonally.

You can select the shape of the pointer icon from the Configuration menu.

**Settings** - Pointer Shape p.60

### **Projection Functions**



# Enlarging Part of the Image (E-Zoom)

This is useful when you want to expand images to see them in greater detail, such as graphs and tables.



### 1

Start E-Zoom.

Press the  $[\oplus]$  button to display the Cross  $(\underbrace{\Box}$ ).

### Remote control





Move the Cross ( 1) to the area of the image that you want to enlarge.

#### **Remote control**





When any pair of adjacent  $[\bigcirc]$ ,  $[\bigcirc]$ ,  $[\bigcirc]$ , or  $[\bigcirc]$  buttons are pressed at the same time, the pointer can be moved diagonally.



### **Remote control**



 $[\oplus]$  button: Expands the area each time it is pressed. You can expand quickly by holding the button down.

 $[\heartsuit]$  button: Reduces images that have been enlarged.

[Esc] button: Cancels E-Zoom.



• The enlargement ratio appears on the screen. The selected area can be enlarged to between 1 to 4 times in 25 incremental steps.

- During enlarged projection, press the [], [], [], [], and
  - $[(\cdot)]$  buttons to scroll the image.

# Using the Remote Control to Operate the Mouse Pointer (Wireless Mouse)

You can control the computer's mouse pointer from the projector's remote control. This function is called Wireless Mouse.

The following operating systems are compatible with Wireless Mouse.

|    | Windows       | Mac OS X        |
|----|---------------|-----------------|
| OS | Windows 98    | Mac OS X 10.3.x |
|    | Windows 98SE  | Mac OS X 10.4.x |
|    | Windows Me    | Mac OS X 10.5.x |
|    | Windows 2000  | Mac OS X 10.6.x |
|    | Windows XP    | Mac OS X 10.7.x |
|    | Windows Vista |                 |
|    | Windows 7     |                 |

\* It may not be possible to use the Wireless Mouse function under some versions of the operating systems.

Use the following procedure to enable the Wireless Mouse function.

- Change the source to one of the following.

1

- USB Display
- Computer1
- Computer2
- HDMI (EB-X15 only)
- ☞ "Switching to the Target Image by Remote Control" p.28

Once set, the mouse pointer can be controlled as follows.

#### Moving the mouse pointer



[ ] ] [ ] [ ] ] [ ] ] buttons:Moves the mouse pointer.



[Esc] button: Right click.[↓] button: Left click. Press quickly twice to double-click.

| ag ana arop        |  |
|--------------------|--|
| Menu Esc           |  |
|                    |  |
|                    |  |
| User               |  |
|                    |  |
| Page E-Zoom Volume |  |

### Page Up/Down

Drag and drop



While holding down the  $[\checkmark]$  button, press the  $[\frown]$ ,  $[\frown]$ ,  $[\frown]$ , and  $[\frown]$ buttons.

Release the [ ◀ ] button to drop at the desired location.

[•] button: Moves to the previous page.[•] button: Moves to the next page.





- If the mouse button settings are set to reverse on the computer, the operation of the remote control buttons will also be reversed.
- The Wireless Mouse function does not work under the following conditions.
- When the Configuration menu or a Help screen is displayed
- When operating functions other than the Wireless Mouse function (such as adjusting the volume)

However, when using the E-Zoom or Pointer function, the page up or down function is available.

### Saving a User's Logo

You can save the image that is currently being projected as a User's Logo.



Once a User's Logo has been saved, the logo cannot be returned to the factory default.

Project the image you want to save as the User's Logo, and then press the [Menu] button.

#### Using the remote control

#### Using the control panel







#### Select User's Logo from Extended.





- When User's Logo Protect from Password Protect is set to On, a message is displayed and the User's Logo cannot be changed. You can make changes after setting User's Logo Protect to Off.
  - ☞ "Managing Users (Password Protect)" p.48
- If User's Logo is selected when Keystone, E-Zoom, Aspect, or Adjust Zoom are being performed, the function currently being performed is temporarily cancelled.



When the message "Choose this image as the User's Logo?" is displayed, select **Yes**.

When you press the [ ] button on the remote control or the control panel, the screen size may change depending on the signal to match the actual resolution of the image signal.



Move the box to select the part of the image to use as the User's Logo.

You can perform the same operations from the projector's control panel.

#### Remote control





You can save at 400x300 dots in size.



- When you press the [ ] button and the message "Select this image?" is displayed, select **Yes**.
- Select the zoom factor from the zoom setting screen.



7

When the message "Save this image as the User's Logo?" is displayed, select **Yes**.

The image is saved. After the image has been saved, the message "Completed." is displayed.



• When a User's Logo is saved, the previous User's Logo is erased.

• It takes a while to save. Do not operate the projector or any connected equipment while it is saving, otherwise malfunctions may occur.

# **Security Functions**

ТОР

The projector has the following enhanced security functions.

• Password Protect

You can limit who can use the projector.

• Control Panel Lock

You can prevent people changing the settings on the projector without permission.

- ☞ "Restricting Operation (Control Panel Lock)" p.50
- Anti-Theft Lock

The projector is equipped with the following anti-theft security device.

☞ "Anti-Theft Lock" p.51

# **Managing Users (Password Protect)**

When Password Protect is activated, people who do not know the password cannot use the projector to project images even if the projector power is on. Furthermore, the user's logo that is displayed when you turn on the projector cannot be changed. This acts as an anti-theft function as the projector cannot be used even if it is stolen. At the time of purchase, Password Protect is not activated.

### **Kinds of Password Protect**

The following two kinds of Password Protect settings can be made according to how the projector is being used.

### • Power On Protect

When **Power On Protect** is **On**, you need to enter a preset password after the projector is plugged in and turned on (this also applies to Direct Power On). If the correct password is not entered, projection does not start.

### • User's Logo Protect

Even if someone tries to change the User's Logo set by the owner of the projector, it cannot be changed. When User's Logo Protect is set to On, the following setting changes for the User's Logo are prohibited.

- Capturing a User's Logo
- Setting Display Background, Startup Screen, or A/V Mute from Display
  - Extended Display p.61

### **Setting Password Protect**

Use the following procedure to set Password Protect.

- 1
  - During projection, hold down the [Freeze] button for about five seconds.

The Password Protect setting menu is displayed.

### Remote control



• If Password Protect is already activated, you must enter the password.

If the password is entered correctly, the Password Protect setting menu is displayed.

- ☞ "Entering the Password" p.49
- When the password is set, stick the password protect sticker in a visible position on the projector as a further theft deterrent.
  - Password Protect Sticker



4

Select the type of Password Protect you want to set, and then press the [+] button.

| [Password Protect]   |     |             |
|----------------------|-----|-------------|
| Power On Protect     | Off |             |
| User's Logo Protect  | Off |             |
|                      |     |             |
| Password             |     |             |
|                      |     |             |
|                      |     |             |
|                      |     |             |
|                      |     |             |
| [�]:Select [@]:Enter |     | [Menu]:Exit |



Press the [Esc] button, the screen displayed in step 2 is displayed again.

- Set the password.
  - (1) Select **Password**, and then press the  $[\checkmark]$  button.
  - (2) When the message "Change the password?" is displayed, select Yes and then press the [ ← ] button. The default password is set to "0000". Change this to your own desired Password. If you select No, the screen displayed in step 2 is displayed again.
- (3) While holding down the [Num] button, enter a four digit number using the numeric buttons. The number entered is displayed as "\* \* \* \*". When you enter the fourth digit, the confirmation screen is displayed.



(4) Re-enter the password. The message "Password accepted." is displayed.
If you enter the password incorrectly, a message is displayed prompting you to re-enter the password.

### **Entering the Password**

When the password entry screen is displayed, enter the password using the remote control.

While holding down the [Num] button, enter the password by pressing the numeric buttons.



When you enter the correct password, Password Protect is temporarily released.

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# TOP

#### Attention

- If an incorrect password is entered three times in succession, the message "The projector's operation will be locked." is displayed for approximately five minutes, and then the projector switches to standby mode. If this happens, disconnect the power plug from the electrical outlet and then reinsert it and turn the projector's power back on. The projector displays the password entry screen again so that you can enter the correct password.
- If you have forgotten the password, make a note of the "**Request Code**: xxxxx" number that appears on the screen and contact the nearest address provided in the Epson Projector Contact List.
- Epson Projector Contact List
- If you continue to repeat the above operation and enter the wrong password thirty times in succession, the following message is displayed and the projector does not accept any more password entries. "The projector's operation will be locked. Contact Epson as described in your documentation."
- Epson Projector Contact List

# **Restricting Operation (Control Panel Lock)**

Perform one of the following to lock the operation buttons on the control panel.

• Full Lock

All of the buttons on the control panel are locked. You cannot perform any operations from the control panel, including turning the power on or off.

• Partial Lock

All of the buttons on the control panel, except for the  $[\boldsymbol{\boldsymbol{\varTheta}}]$  button, are locked.

This is useful at events or shows when you want to deactivate all buttons during projection or at schools when you want to limit button operation. The projector can still be operated using the remote control.

- 1
- Press the [Menu] button while projecting.
- "Using the Configuration Menu" p.55
   Using the remote control
   Using the remote control

### Using the control panel







Select Control Panel Lock from Settings.

| Image         |  | Return                            |
|---------------|--|-----------------------------------|
| Signal        | Keystone<br>Control Panel Lock               | H/V-Keystone<br><b>OFull Lock</b> |
| Settings 🛛 🚭  | Pointer Shape<br>Power Consumption<br>Volume | Pointer 1<br>ECO<br>0             |
| Extended      | Remote Receiver<br>User Button               | Front/Rear<br>Power Consum        |
| Info          | Test Pattern<br>Reset                        | Power Consum                      |
| Reset         | heset  |                                   |
|               |  |                                   |
| [Esc] :Return | [♦]:Select [❹]:Ente                          | r [Menu]:Exit                     |



Select either Full Lock or Partial Lock according to your purpose.

| [Control Panel Lock] Return           |             |
|---------------------------------------|-------------|
| 0Full Lock ⊕<br>IPartial Lock<br>IOff | B           |
| [Esc]:Return [♦]:Select [❹]:Set       | [Menu]:Exit |

4



Select **Yes** when the confirmation message is displayed. The control panel buttons are locked according to the setting you chose.

You can release the control panel lock by one of the following two methods.

- Select Off from Control Panel Lock.
- ☞ Settings Control Panel Lock p.60
- Press and hold down the [+] button on the control panel for about seven seconds, a message is displayed and the lock is released.

# **Anti-Theft Lock**

The projector is equipped with the following types of anti-theft security devices.

• Security slot

The security slot is compatible with the Microsaver Security System manufactured by Kensington.

See the following for more details on the Microsaver Security System.

- http://www.kensington.com/
- Security cable installation point

A commercially available theft-prevention wire lock can be passed through the installation point to secure the projector to a desk or pillar.

### Installing the wire lock

Pass an anti-theft wire lock through the installation point.

See the documentation supplied with the wire lock for locking instructions.



# **ESC/VP21** Commands

You can control the projector from an external device using ESC/VP21.

### **Before starting**

Connect the computer's serial port (D-Sub 9pin) to the projector's RS-232C port with a PC serial cable.

- Connector shape: D-Sub 9-pin (male)
- Projector input port name: RS-232C <At the projector>



| TD | ~ |  |
|----|---|--|
| ТD | 3 |  |

| Signal Name | Function           |  |
|-------------|--------------------|--|
| GND         | Signal wire ground |  |
| TD          | Transmit data      |  |
| RD          | Receive data       |  |

# **Command list**

0

RD 2

When the power ON command is transmitted to the projector, the power turns on and it enters warm-up mode. When the projector's power has turned on, a colon ":" (3Ah) is returned.

When a command is input, the projector executes the command and returns a ":", and then accepts the next command.

If the command being processed terminates abnormally, an error message is output and a ":" is returned.

The main contents are listed below.

| ltem             |                    | Command   |           |
|------------------|--------------------|-----------|-----------|
| Power ON/OFF     | On                 | On        |           |
|                  | Off                |           | PWR OFF   |
| Signal selection | Computer1          | Auto      | SOURCE 1F |
|                  |                    | RGB       | SOURCE 11 |
|                  |                    | Component | SOURCE 14 |
|                  | Computer2          | Auto      | SOURCE 2F |
|                  |                    | RGB       | SOURCE 21 |
|                  |                    | Component | SOURCE 24 |
|                  | HDMI (EB-X15 only) | )         | SOURCE 30 |
|                  | Video              |           | SOURCE 41 |
|                  | S-Video            |           | SOURCE 42 |
|                  | USB Display        |           | SOURCE 51 |
| A/V Mute On/Off  | On                 |           | MUTE ON   |
|                  | Off                |           | MUTE OFF  |

Add a Carriage Return (CR) code (0Dh) to the end of each command and transmit.

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# **Monitoring and Controlling**

For more details, contact your local dealer or the nearest address provided in the Epson Projector Contact List.

Epson Projector Contact List

### **Communications protocol**

- Default baud rate setting: 9600 bps
- Data length: 8 bit
- Parity: None
- Stop-bit: 1 bit
- Flow control: None





# **Configuration Menu**

This chapter explains how to use the Configuration menu and its functions.

# **Using the Configuration Menu**

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This section explains how to use the Configuration menu.

Although steps are explained using the remote control as an example, you can perform the same operations from the control panel. Check the guide under the menu for the available buttons and their operations.



Display the Configuration menu screen.





### Select a top menu item.



Á

| Image         |   | Return 🕘                               |
|---------------|---|--|
| Signal        | Keystone<br>Control Panel Lock<br>Pointer Shape | H/V-Keystone<br>Full Lock<br>Pointer 1 |
| Settings 🛛    | Power Consumption                               | ECO                                    |
| Extended      | Volume<br>Remote Receiver<br>User Button        | 0<br>Front/Rear<br>Power Consum        |
| Info          | Test Pattern<br>Reset                           | r ower oonsummer                       |
| Reset         | ) neset   |  |
|               |   |  |
| [Esc] /[@] :R | eturn [�]:Select                                | [Menu]:Exit                            |



### Select a submenu item. Image Á









Δ

Press the [Menu] button to finish making settings.

O

# **List of Functions**



# **Configuration Menu Table**

Settable items vary depending on the model being used and the image signal and source being projected.

| Top Menu Name      | Submenu Name     | Items or Setting Values   |
|--------------------|------------------|---|
| Image menu<br>p.57 | Color Mode       | Dynamic, Presentation, Theatre,<br>Photo, Sports, sRGB, Blackboard,<br>and Whiteboard |
|                    | Brightness       | -24 to 24   |
|                    | Contrast         | -24 to 24   |
|                    | Color Saturation | -32 to 32   |
|                    | Tint             | -32 to 32   |
|                    | Sharpness        | -5 to 5   |
|                    | Color Temp.      | High, Medium, and Low   |
|                    | Color Adjustment | Red: -16 to 16  |
|                    |                  | Green: -16 to 16  |
|                    |                  | Blue: -16 to 16   |
|                    | Auto Iris        | On and Off  |
| Signal menu        | Auto Setup       | On and Off  |
| 🖝 p.58             | Resolution       | Auto, Wide, and Normal  |
|                    | Tracking         | -   |
|                    | Sync.            | 0 to 31   |
|                    | Position         | Up, Down, Left, and Right   |
|                    | Progressive      | Off, Video, and Film/Auto (EB-<br>X15 only)   |
|                    |                  | On and Off (EB-X14H/EB-<br>X11H/EB-S11H only)   |
|                    | Noise Reduction  | Off, NR1, and NR2   |
|                    | HDMI Video Range | Auto, Normal, and Expanded  |
|                    | Input Signal     | Auto, RGB, and Component  |

| Top Menu Name | Submenu Name       | Items or Setting Values   |
|---------------|--------------------|---|
|               | Video Signal       | Auto, NTSC, NTSC4.43, PAL,<br>M-PAL, N-PAL, PAL60, and<br>SECAM                               |
|               | Aspect             | Normal, Auto, 4:3, and 16:9   |
|               | Overscan           | Auto, Off, 4%, and 8%   |
|               | Image Processing   | Fast and Fine   |
| Settings menu | Keystone           | H/V-Keystone and Quick Corner   |
| • p.60        | Zoom               | -   |
|               | Control Panel Lock | Full Lock, Partial Lock, and Off  |
|               | Pointer Shape      | Pointer 1, 2, and 3   |
|               | Power Consumption  | Normal and ECO  |
|               | Volume             | 0 to 10   |
|               | Remote Receiver    | Front/Rear, Front, Rear and Off   |
|               | User Button        | Power Consumption, Info,<br>Progressive, Test Pattern,<br>Resolution                          |
|               | Test Pattern       | -   |
| Extended menu | Display            | Messages, Display Background,<br>Startup Screen, and A/V Mute                                 |
|               | User's Logo        | -   |
|               | Projection         | Front, Front/Ceiling, Rear, and Rear/Ceiling  |
|               | Operation          | Direct Power On, Sleep Mode,<br>Sleep Mode Timer, Lens Cover<br>Timer, and High Altitude Mode |
|               | Standby Mode       | Communication On and<br>Communication Off   |
|               |                    |   |
|               | Language           | 15 or 36 languages*1  |

| Top Menu Name | Submenu Name     | Items or Setting Values |
|---------------|------------------|-------------------------|
| 🖝 p.62        | Source           | -                       |
|               | Input Signal     | -                       |
|               | Resolution       | -                       |
|               | Video Signal     | -                       |
|               | Refresh Rate     | -                       |
|               | Sync Info        | -                       |
|               | Status           | -                       |
|               | Serial Number    | -                       |
| Reset menu    | Reset All        | -                       |
| <b>p.63</b>   | Reset Lamp Hours | -                       |

\*1 The number of supported languages differs depending on the region where the projector is used.

# Image Menu

Settable items vary depending on the image signal and source currently being projected. Setting details are saved for each image signal.

☞ "Automatically Detect Input Signals and Change the Projected Image (Source Search)" p.27

| Image    | •                                    | 🦳 🔁 🤁 🦉 🦉 🦉 🦉  |
|----------|--------------------------------------|----------------|
| Signal   | Color Mode<br>Brightness             | Photo<br>0     |
| Settings | Contrast<br>Sharpness<br>Color Temp. | 0<br>0<br>High |
| Extended | Color Adjustment<br>Auto Iris        | Off            |
| Info     | Reset                                |                |
| Reset    |                                      |                |
|          |                                      |                |

[Esc] /[@] :Return [�] :Select

[Menu]:Exit

| Submenu          | Function   |
|------------------|--|
| Color Mode       | You can select the quality of the image to suit your surroundings.<br>Telecting the Projection Quality (Selecting Color Mode)"<br>p.37   |
| Brightness       | You can adjust the image brightness.   |
| Contrast         | You can adjust the difference between light and dark in the images.  |
| Color Saturation | You can adjust the color saturation for the images.  |
| Tint             | (Adjustment is possible when a component video signal is being<br>input. If a composite video or S-video signal is input, adjustment<br>is only possible when NTSC signals are being input.)<br>You can adjust the image tint.   |
| Sharpness        | You can adjust the image sharpness.  |
| Color Temp.      | (This item cannot be selected if <b>Color Mode</b> is set to <u>sRGB</u> ).)<br>You can adjust the overall tint of the image. You can adjust tints<br>in three stages from <b>High</b> , <b>Medium</b> , and <b>Low</b> . The image is tinted<br>blue when <b>High</b> is selected and tinted red when <b>Low</b> is selected. |

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# **List of Functions**

| Submenu               | Function   |
|-----------------------|--|
| Color Adjust-<br>ment | <ul> <li>(This item cannot be selected if Color Mode is set to <u>sRGE</u><sup>▶</sup>.)</li> <li>You can adjust the color strength for Red, Green, and Blue individually.</li> </ul>                  |
| Auto Iris             | (This item can be set only if <b>Color Mode</b> is set to <b>Dynamic</b> or <b>Theatre</b> .)  |
|                       | Set to <b>On</b> to adjust the iris to obtain the optimum light for images being projected.  |
|                       | The setting is stored for each Color Mode.   |
|                       | Setting Auto Iris" p.38  |
| Reset                 | <ul> <li>You can reset all adjustment values for the Image menu to their default settings. See the following to return all menu items to their default settings.</li> <li>TReset Menu" p.63</li> </ul> |

### ☞ "Automatically Detect Input Signals and Change the Projected Image (Source Search)" p.27

| Image    |    | L                                   | Return 🕲    |
|----------|----|-------------------------------------|-------------|
| Signal   | 0  | Auto Setup<br>Resolution            | Off<br>Auto |
| Settings |    | Tracking<br>Sync.<br>Position       | 0<br>0      |
| Extended |    | Input Signal                        | Auto        |
| Info     |    | Aspect<br>Image Processing<br>Reset | 4:3<br>Fine |
| Reset    |    | Reset                               |             |
|          |    |                                     |             |
|          | L. |                                     |             |

### [Esc]/[@]:Return [�]:Select

[Menu]:Exit

# Signal Menu

Settable items vary depending on the image signal and source currently being projected. Setting details are saved for each image signal.

You cannot make settings on the Signal menu when the source is USB Display.

| Submenu    | Function  |
|------------|---|
| Auto Setup | Set to <b>On</b> to automatically adjust Tracking, Sync., and Position to the optimum state when the input signal changes.  |
| Resolution | Set to <b>Auto</b> to automatically identify the resolution of the input signal. If images are not projected correctly when set to <b>Auto</b> , for example if some of the image is missing, adjust to <b>Wide</b> for wide screens, or set to <b>Normal</b> for 4:3 or 5:4 screens depending on the connected computer. |
| Tracking   | You can adjust computer images when vertical stripes appear in the images.  |
| Sync.      | You can adjust computer images when flickering, fuzziness, or interference appear in the images.  |
| Position   | You can adjust the display position up, down, left, and right when<br>a part of the image is missing so that the whole image is projected.  |

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# List of Functions



| Submenu                              | Function   |
|--------------------------------------|--|
| Progressive                          | <ul> <li>(This setting can only be adjusted when a component video or RGB video with an interlaced signal (480i/576i/1080i) is input. This cannot be set when a digital RGB signal is input.)</li> <li>Interlace<sup>(*)</sup> (i) signal is converted to Progressive<sup>(*)</sup> (p). (IP conversion)</li> <li>For EB-X15 <ul> <li>Off: Ideal for images with a large amount of movement.</li> <li>Video: Ideal for general video images.</li> <li>Film/Auto: This is ideal for movie films, computer graphics, and animation.</li> </ul> </li> <li>For EB-X14H/EB-X11H/EB-S11H <ul> <li>On: Ideal for still images.</li> <li>Off: Ideal for images with a large amount of movement.</li> </ul> </li> </ul> |
| Noise Reduction<br>(EB-X15 only)     | (This cannot be set when a digital RGB signal is input, when<br>projecting an interlaced signal while <b>Progressive</b> is set to <b>Off</b> , or<br>when a 480p, 576p, or 1080p signal is input while <b>Image</b><br><b>Processing</b> is set to <b>Fast</b> .)<br>Smoothes out rough images. There are two modes. Select your<br>favorite setting. It is recommended that this is set to <b>Off</b> when<br>viewing image sources in which noise is very low, such as for<br>DVDs.   |
| HDMI Video<br>Range<br>(EB-X15 only) | When the projector's HDMI port is connected to a DVD player,<br>the projector's video range is set according to the DVD player's<br>video range setting.   |
| Input Signal                         | You can select input signal from Computer port.<br>If set to <b>Auto</b> , the input signal is set automatically according to<br>the connected equipment.<br>If colors do not appear correctly when set to <b>Auto</b> , select the<br>appropriate signal according to the connected equipment.  |
| Video Signal                         | You can select the input signal from the Video port. If this is set to <b>Auto</b> , video signals are recognized automatically. If interference appears in the image or a problem occurs such as no image is being projected when set to <b>Auto</b> , select the appropriate signal depending on the connected equipment.  |

| Submenu                                | Function   |
|--|--|
| Aspect                                 | You can set the <u>aspect ratio</u> <sup>▶</sup> for projected images.<br>☞ "Changing the Aspect Ratio of the Projected Image " p.39   |
| Overscan                               | Changes the output image ratio (the range of the projected image). You can set the cropping range to <b>Off</b> , <b>4%</b> , or <b>8%</b> . When the source is HDMI, <b>Auto</b> is available (EB-X15 only). When <b>Auto</b> is selected, it automatically changes to <b>Off</b> or <b>8%</b> according to the input signal. |
| Image Process-<br>ing<br>(EB-X15 only) | Changes settings for image processing.<br>Fast: Images are displayed quicker. The pen's reaction time is<br>improved when using the optional interactive unit.<br>Fine: Images are displayed in higher quality.  |
| Reset                                  | You can reset all adjustment values on the <b>Signal</b> menu to their default settings, except for <b>Input Signal</b> .<br>See the following to return all menu items to their default settings.   |



# Settings Menu



| Submenu                | Function  |
|------------------------|---|
| Keystone               | You can correct keystone distortion.  |
|                        | <ul> <li>When H/V-Keystone is selected:<br/>Adjust V-Keystone and H-Keystone to correct horizontal<br/>and vertical keystone distortion.<br/>You can also set Auto V-Keystone and H-Keystone<br/>Adjuster to On or Off. (EB-X15 only)</li> <li>When Quick Corner is selected:<br/>Select and correct the four corners of the projected image.</li> <li>              "Quick Corner" p.34      </li> </ul> |
| Zoom<br>(EB-S11H only) | Adjusts the size of the projected image.  |
| Control Panel<br>Lock  | You can use this to restrict operation of the projector's control panel.  |
|                        | <ul> <li>"Restricting Operation (Control Panel Lock)" p.50</li> </ul>   |

| Submenu                | Function   |
|------------------------|--|
| Pointer Shape          | You can select the shape of the pointer.   |
|                        | Pointer 1: 🛷   |
|                        | Pointer 2: 👿   |
|                        | Pointer 3: 📥   |
|                        | "Pointer Function (Pointer)" p.43  |
| Power Consump-<br>tion | You can set the lamp brightness to one of two settings.<br>Select <b>ECO</b> if the images being projected are too bright, such as<br>when projecting images in a dark room or onto a small screen.<br>When <b>ECO</b> is selected, the power consumption and the lamp's<br>operating life are changed as follows, and fan rotation noise<br>during projection is reduced.<br>Electrical consumption: about 17.5% decrease, lamp life: about |
|                        | 1.25 times longer<br>When the projector is used at a high altitude or in a location<br>subject to high temperatures, the <b>ECO</b> setting may be used<br>automatically. If this happens, <b>Power Consumption</b> is grayed<br>out and cannot be adjusted.   |
| Volume                 | You can adjust the volume. Setting values are saved for each source.   |
| Remote Receiver        | You can limit the reception of the operation signal from the remote control.   |
|                        | When set to <b>Off</b> , you cannot perform any operations from the remote control. If you want to make operations from the remote control, hold down the [Menu] button on the remote control for at least 15 seconds to reset the setting to its default value.   |
| User Button            | You can select and assign an item from the Configuration menu<br>with the remote control's [User] button. Pressing the [User]<br>button directly displays the assigned menu item selection/<br>adjustment screen, allowing you to make one-touch changes to<br>settings/adjustments. You can assign one of the following items<br>to the [User] button.<br><b>Power Consumption, Info, Progressive, Test Pattern</b> ,                       |
|                        | Power Consumption, Info, Progressive, Test Pattern, Resolution   |

# **List of Functions**



| Submenu      | Function  |  |
|--------------|---|--|
| Test Pattern | When the projector is set up, a test pattern is displayed so that you can adjust the projection status without connecting equipment. While the test pattern is displayed, zoom, focus adjustments, and keystone correction can be performed. To cancel the test pattern, press the [Esc] button on the remote control or the control panel. |  |
|              | Attention<br>If a pattern is displayed for a long time, a residual<br>image may be visible in projected images.   |  |
| Reset        | You can reset all adjustment values on the <b>Settings</b> menu to their default settings, except for <b>Zoom</b> (EB-S11H only) and <b>User Button</b> .   |  |
|              | See the following to return all menu items to their default<br>settings.<br>reset Menu" p.63  |  |

# **Extended Menu**



| Submenu                   | Function   |
|---------------------------|--|
| Display                   | You can make settings related to the projector's display.<br>Messages: When set to Off, the following items will not be  |
|                           | displayed.<br>Item names when the Source, Color Mode, or Aspect Ratio<br>is changed, messages when no signal is being input, and<br>warnings such as High Temp Warning.  |
|                           | <b>Display Background</b> <sup>*1</sup> : You can set the screen background to <b>Black</b> , <b>Blue</b> , or <b>Logo</b> when no image signal is available.            |
|                           | Startup Screen <sup>*1</sup> : Set to On to display the User's Logo when projection starts.  |
|                           | <b>A/V Mute</b> <sup>*1</sup> : You can set the screen displayed when the remote control's [A/V Mute] button is pressed to <b>Black</b> , <b>Blue</b> , or <b>Logo</b> . |
| User's Logo <sup>*1</sup> | You can change the user's logo that is displayed as a background during Display Background, A/V Mute, and so on.   |
|                           | "Saving a User's Logo" p.46  |
| Projection                | Select from one of the following projection methods depending on how the projector is installed.   |
|                           | Front, Front/Ceiling, Rear, and Rear/Ceiling   |
|                           | You can change the setting as follows by pressing down<br>the [A/V Mute] button on the remote control for about five<br>seconds.   |
|                           | Front↔Front/Ceiling  |
|                           | Rear ↔ Rear/Ceiling  |
|                           | "Installation Methods" p.18  |

### **List of Functions**



| Submenu   | Function   |  |
|---|--|--|
| Operation   | <ul> <li>Direct Power On: Set to On to turn on the projector simply by plugging it in.</li> <li>When the power cable is plugged in, note that the projector turns on automatically in cases such as a power outage being restored.</li> <li>Sleep Mode: When set to On, this automatically stops projection when no image signal is being input and no operations are carried out.</li> <li>Sleep Mode Timer: When Sleep Mode is set to On, you can set the time before the projector automatically turns off within a range of 1 to 30 minutes.</li> <li>Lens Cover Timer: When set to On, this turns off the power automatically 30 minutes after the A/V mute slide is closed.</li> <li>This is set to On by default.</li> <li>High Altitude Mode: Set to On when using the projector above an altitude of 1500 m.</li> </ul> |  |
| Standby Mode<br>(EB-X14H/EB-<br>X11H/EB-S11H<br>only) | When set to <b>Communication On</b> , you can output analog RGB signals from the Computer1 port to an external monitor even if the projector is in standby mode.   |  |
| Language  | You can set the language for messages and menus.   |  |
| Reset   | You can reset the adjustment values for <b>Display</b> <sup>*1</sup> and <b>Operation</b> <sup>*2</sup> from the <b>Extended</b> menu to their default settings.<br>See the following to return all menu items to their default settings.  |  |

\*1 When User's Logo Protect is set to On in Password Protect, settings related to user's logo cannot be changed. You can make changes after setting User's Logo Protect to Off.

- "Managing Users (Password Protect)" p.48
- \*2 Except for High Altitude Mode.

# Info Menu (Display Only)

Lets you check the status of the image signals being projected and the status of the projector. Items that can be displayed vary depending on the source currently being projected. Depending on the model used, some input sources are not supported.

☞ "Automatically Detect Input Signals and Change the Projected Image (Source Search)" p.27

| Image      |   |                  |
|------------|---|------------------|
| Signal     | Lamp Hours<br>Normal  | он               |
| Settings   | ECO<br>Source<br>Input Signal<br>Resolution<br>Refresh Rate<br>Sync Info<br>Status<br>Serial Number | Computer1        |
| Extended   |   | 0 x 0<br>0.00 Hz |
| Info       |   | SGNN 00000       |
| Reset      |   |                  |
|            |   |                  |
| [♦]:Select |   | [Menu]:Exit      |

| Submenu      | Function  |  |
|--------------|---|--|
| Lamp Hours   | You can display the cumulative lamp operating time*.<br>When it reaches the lamp warning time, the characters are<br>displayed in yellow. |  |
| Source       | You can display the source name for the connected equipment currently being projected.  |  |
| Input Signal | You can display the content of <b>Input Signal</b> set in the <b>Signal</b> menu according to the source.                                 |  |
| Resolution   | You can display the resolution.   |  |
| Refresh Rate | You can display the <u>refresh rate</u> .   |  |

| TOP |  |
|-----|--|

| Submenu       | Function  |
|---------------|---|
| Sync Info     | You can display the image signal information.<br>This information may be needed if service is required.                         |
| Video Signal  | You can display the settings for Video Signal in the Signal menu.   |
| Status        | This is information about errors that have occurred on the projector.<br>This information may be needed if service is required. |
| Serial Number | Displays the projector's serial number.   |

\* The cumulative use time is displayed as "0H" for the first 10 hours. 10 hours and above is displayed as "10H", "11H", and so on.

## **Reset Menu**



[Esc]/[@]:Return [�]:Select

[Menu]:Exit

| Submenu             | Function   |
|---------------------|--|
| Reset All           | You can reset all items in the Configuration menu to their default<br>settings.<br>The following items are not reset to their defaults: <b>Input Signal</b> ,<br><b>User's Logo, Lamp Hours, Language, Password, Zoom</b> (EB-<br>S11H only), and <b>User Button</b> . |
| Reset Lamp<br>Hours | Clears the cumulative lamp hours use time. Reset when you replace the lamp.  |



# Troubleshooting

This chapter explains how to identify problems and what to do if a problem is found.

# Using the Help



If a problem occurs with the projector, the Help screen is displayed to assist you by pressing the Help button. You can solve problems by answering the questions.



### Press the [Help] button.

The Help screen is displayed.

### Using the remote control



### Using the control panel



### 2

### Select a menu item.



Volume



### Confirm the selection.

### Using the remote control



### Using the control panel



Questions and solutions are displayed as shown on the screen below. Press the [Help] button to exit the Help.



# **Problem Solving**



If you are having a problem with the projector, first check the projector's indicators and refer to "Reading the Indicators" below.

See the following if the indicators do not show clearly what the problem might be.

☞ "When the Indicators Provide No Help" p.69

### **Reading the Indicators**

The projector is provided with the following three indicators that indicate the operating status of the projector.





Refer to the following table to see what the indicators mean and how to remedy problems that they indicate.

If all indicators are off, check that the power cord is connected correctly and that the power is being supplied normally.

Sometimes, when the power cord is unplugged, the [0] indicator remains lit for a short period, but this is not a fault.

=: Lit +: Flashing  $\square$ : Off  $\square$ : Varies according to the projector status

| Status                                   | Cause                            | Remedy or Status  |
|--|----------------------------------|---|
| <u>ب</u><br>بې                           | Internal Error                   | Stop using the projector, remove the power plug from the electrical outlet, and contact your local dealer or the nearest address provided in the Epson Projector Contact List.  |
|  |                                  |   |
| <b>— (</b> )                             | Fan Error<br>Sensor Error        | Stop using the projector, remove the power plug from the electrical outlet, and contact your local dealer or the nearest address provided in the Epson Projector Contact List.  |
|  |                                  | Epson Projector Contact List  |
|  | High Temp Error<br>(overheating) | The lamp turns off automatically and projection stops. Wait for about five minutes. After about five minutes the projector switches to standby mode, so check the following two points.   |
| <u>□ ☆</u>                               | (overneating)                    | • Check that the air filter and air exhaust vent are clear, and that the projector is not positioned against a wall.  |
|  |                                  | <ul> <li>If the air filter is clogged, clean or replace it.</li> <li>Cleaning the Air Filter" p.79, "Replacing the Air Filter" p.84</li> <li>If the error continues after checking the points above, stop using the projector, remove the power plug from the electrical outlet, and contact your local dealer or the nearest address provided in the Epson Projector Contact List.</li> <li><i>Epson Projector Contact List</i></li> </ul> |
|  |                                  | When using at an altitude of 1500 m or more, set <b>High Altitude Mode</b> to <b>On</b> .  The "Extended Menu" p.61   |
| ال ا | Lamp Error<br>Lamp Failure       | <ul> <li>Check the following two points.</li> <li>Take out the lamp and check if it is cracked.</li> <li>"Replacing the Lamp" p.81</li> <li>Clean the air filter.</li> <li>"Cleaning the Air Filter" p.79</li> </ul>  |

# **Problem Solving**



68

| Status      | Cause                         | Remedy or Status  |
|-------------|-------------------------------|---|
|             |                               | If the lamp is not cracked: Reinstall the lamp and turn on the power.   |
|             |                               | If the error continues: Replace the lamp with a new one and then turn on the power.   |
|             |                               | If the error continues: Stop using the projector, remove the power plug from the electrical outlet, and contact your local dealer or the nearest address provided in the Epson Projector Contact List.          |
|             |                               | 🖝 Epson Projector Contact List  |
|             |                               | If the lamp is cracked: Contact your local dealer or the nearest address provided in the Epson Projector Contact List. (Images cannot be projected until the lamp is replaced.)  © Epson Projector Contact List |
|             |                               | When using at an altitude of 1500 m or more, set <b>High Altitude Mode</b> to <b>On</b> .   |
|             |                               | ☞ "Extended Menu" p.61  |
| <u>ს</u> დ  | Auto Iris Error<br>Power Err. | Stop using the projector, remove the power plug from the electrical outlet, and contact your local dealer or the nearest address provided in the Epson Projector Contact List.                                  |
| <u>, ż.</u> |                               | Epson Projector Contact List  |
|             |                               |   |
| <u>ل</u> ا  | High Temp Warning             | (This is not an abnormality. However, if the temperature rises too high again, projection stops automatically.)   |
|             |                               | • Check that the air filter and air exhaust vent are clear, and that the projector is not positioned against a wall.  |
|             |                               | • If the air filter is clogged, clean or replace it.  |
|             |                               | Cleaning the Air Filter" p.79, "Replacing the Air Filter" p.84  |
| 回 心         | Replace Lamp                  | Replace it with a new lamp.   |
| in v        |                               | "Replacing the Lamp" p.81   |
|             |                               | If you continue to use the lamp after the replacement period has passed, the possibility that the lamp may explode increases. Replace it with a new lamp as soon as possible.                                   |

• See the following if the projector is not operating properly, even though the indicators are all showing normal.

☞ "When the Indicators Provide No Help" p.69

• If the indicators are in a state not shown in this table, stop using the projector, remove the power plug from the electrical outlet, and contact your local dealer or the nearest address provided in the Epson Projector Contact List.

Epson Projector Contact List

# **Problem Solving**



# When the Indicators Provide No Help

If any of the following problems occur and the indicators do not offer a solution, refer to the pages given for each problem.

### Problems Relating to Images

| • No images appear<br>Projection does not start, the projection area is completely black,<br>or the projection area is completely blue.   | <b>☞</b> p.70 |
|---|---------------|
| • Moving images are not displayed<br>Moving images being projected from a computer appear black<br>and nothing is projected.  |               |
| Projection stops automatically  | <b>☞</b> p.71 |
| • The message "Not supported" is displayed  |               |
| The message "No Signal" is displayed  |               |
| • Images are fuzzy, out of focus, or distorted  |               |
| • Interference or distortion appear in images   | <b>•</b> p.73 |
| • The image is truncated (large) or small, or the aspect ratio is not suitable<br>Only part of the image is displayed, or the height and width ratios of the image are not correct. | <b>☞</b> p.73 |
| • Image colors are not right<br>The whole image appears purplish or greenish, images are black<br>& white, or colors appear dull.   | <b>☞</b> p.74 |
| • Images appear dark  | <b>☞</b> p.75 |

### Problems when projection starts

| • The projector does not turn on | <b>•</b> p.75 |
|----------------------------------|---------------|
|----------------------------------|---------------|

#### **Other Problems**

| <ul> <li>No sound can be heard or the sound is faint</li> </ul> | <b>@</b> p.76 |
|---|---------------|
|   |               |

| • The remote control does not work                     | <b>•</b> p.76 |
|--|---------------|
| • I want to change the language for messages and menus | <b>•</b> p.77 |



# Problems Relating to Images

### No images appear

| Check   | Remedy  |
|---|---|
| Did you press the [也] button?                                   | Press the [Φ] button to turn the power on.  |
| Are the indicators switched off?                                | The power cord is not connected correctly or power is not being supplied.                                       |
|   | Connect the projector's power cord correctly.   |
|   | "From Installation to Projection" p.26  |
|   | Check that your electrical outlet or power source is functioning correctly.                                     |
| Is A/V Mute active?   | Press the [A/V Mute] button on the remote control to cancel A/V Mute.   |
|   | "Hiding the Image and Sound Temporarily (A/V Mute)" p.42  |
| Is the A/V mute slide closed?                                   | Open the A/V mute slide.  |
|   | ☞ "Front/Top" p.9   |
| Are the Configuration menu settings correct?                    | Reset all of the settings.  |
|   | Reset - Reset All p.63  |
| Is the image to be projected completely black?                  | Some input images, such as screen savers, may be completely black.  |
| (Only when projecting computer images)                          |   |
| Is the image signal format setting correct?                     | Change the setting according to the signal for the connected equipment.   |
| (Only when projecting images from a video source)               | Signal - Video Signal p.58  |
| Is the USB cable connected correctly?                           | Check that the USB cable is connected correctly. Reconnect it if it is not connected or not connected properly. |
| (Only when projecting USB Display)                              |   |
| Is Windows Media Center displayed in full screen?               | When Windows Media Center is displayed at full screen, you cannot project using USB Display. Reduce the screen  |
| (Only when projecting USB Display)                              | size.   |
| Is an application using the Windows DirectX function displayed? | Applications using the Windows DirectX function may not display images correctly.                               |
| (Only when projecting USB Display)                              |   |



### Moving images are not displayed (only the moving image portion turns black)

| Check   | Remedy  |
|---|---|
| Is the computer's image signal being output to the LCD and the monitor?                       | Change the image signal from the computer to external output only. Check your computer's documentation, or contact the computer's manufacturer. |
| (Only when projecting images from a laptop computer or a computer with a built-in LCD screen) |   |

### Projection stops automatically

| Check                    | Remedy  |
|--------------------------|---|
| Is Sleep Mode set to On? | Press the $[0]$ button to turn the power on. If you do not want to use Sleep Mode, change the setting to <b>Off</b> . |
|                          | Extended - Operation - Sleep Mode p.61  |

### The message "Not supported" is displayed.

| Check   | Remedy   |
|---|--|
| Is the image signal format setting correct?                           | Change the setting according to the signal for the connected equipment.  |
| (Only when projecting images from a video source)                     | 🖝 Signal - Video Signal p.58   |
| Do the image signal resolution and the refresh rate correspond to the | Refer to the computer's documentation for how to change the image signal resolution and the refresh rate output from |
| mode?   | the computer.  |
| (Only when projecting computer images)                                | "Supported Monitor Displays" p.90  |

### The message "No Signal" is displayed.

| Check  | Remedy  |
|--|---|
| Are the cables connected correctly?                      | Check that all the cables required for projection are securely connected.                           |
|  | "From Installation to Projection" p.26  |
| Is the correct port selected?                            | Change the image by pressing the [Source Search] button on the remote control or the control panel. |
|  | "Automatically Detect Input Signals and Change the Projected Image (Source Search)" p.27            |
| Is the power for the computer or video source turned on? | Turn the power on for the equipment.  |



| Check  | Remedy  |
|--|---|
| Are the image signals being output to the projector?<br>(Only when projecting images from a laptop computer or a<br>computer with a built-in LCD screen) | If the image signals are only being output to the computer's LCD monitor or to the accessory monitor, you need to change the output to an external destination as well as the computer's own monitor. For some computer models, when the image signals are output externally, they no longer appear on the LCD monitor or accessory monitor. If the connection is made while the power of the projector or computer is already turned on, the Fn key (Function key) that changes the computer's image signal to external output may not work. Turn the power for the computer and the projector off and then back on again. |

### Images are fuzzy, out of focus, or distorted

| Check                                       | Remedy  |
|---|---|
| Is Auto V-Keystone set to Off?              | Setting it to <b>On</b> enables Auto V-Keystone.  |
| (EB-X15 only)                               | Settings - Keystone - H/V-Keystone - Auto V-Keystone p.60   |
|   | If you are using the projector with this setting off, manually adjust the projected image.  |
|   | "Correcting manually" p.33  |
| Is the focus adjusted correctly?            | Turn the focus ring to adjust the focus.  |
|   | "Correcting the Focus" p.37   |
| Is the projector at the correct distance?   | Is it projecting outside of the recommended projection distance range?  |
|   | Setup within the recommended range.   |
|   | "Screen Size and Projection Distance" p.88  |
| Is the keystone adjustment value too large? | Lower the projection angle to reduce the amount of keystone correction.   |
|   | "Adjusting the Image Position" p.36   |
| Has condensation formed on the lens?        | If the projector is suddenly taken from a cold environment to a warm environment, or if sudden ambient temperature changes occur, condensation may form on the surface of the lens, and this may cause the images to appear fuzzy. Set the projector up in the room about one hour before it is used. If condensation forms on the lens, turn the projector off and wait for the condensation to disappear. |


#### Interference or distortion appear in images

| Check   | Remedy   |
|---|--|
| Is the image signal format setting correct?                           | Change the setting according to the signal for the connected equipment.  |
| (Only when projecting images from a video source)                     | Signal - Video Signal p.58   |
| Are the cables connected correctly?                                   | Check that all the cables required for projection are securely connected.  |
|   | "Connecting Equipment" p.20  |
| Is an extension cable being used?                                     | If an extension cable is used, electrical interference may affect the signals. Use the cables supplied with the projector to check if the cables you are using may be causing the problem. |
| Is the correct resolution selected?                                   | Set the computer so that the signals being output are compatible with the projector.   |
| (Only when projecting computer images)                                | "Supported Monitor Displays" p.90  |
|   | Computer's documentation   |
| Are the <u>Sync.</u> and <u>Tracking</u> settings adjusted correctly? | Press the [Auto] button on the remote control or the [ ] button on the control panel to perform automatic adjustment.  |
| (Only when projecting computer images)                                | If the images are not adjusted correctly even after performing automatic adjustment, you can also make adjustments   |
|   | from the Configuration menu.   |
|   | Signal - Tracking, Sync. p.58  |
| Is Transfer layered window selected?                                  | Click All Programs - EPSON Projector - Epson USB Display - Epson USB Display Vx.xx Settings, and then clear the  |
| (Only when projecting USB Display)                                    | Transfer layered window checkbox.  |

## The image is truncated (large) or small, or the aspect is not suitable

| Check   | Remedy  |
|---|---|
| Is a wide panel computer image being projected? | Change the setting according to the signal for the connected equipment.                                       |
| (Only when projecting computer images)          | Signal - Resolution p.58  |
| Is the image still being enlarged by E-Zoom?    | Press the [Esc] button on the remote control to cancel E-Zoom.  |
|   | ☞ "Enlarging Part of the Image (E-Zoom)" p.44   |
| Is the image position adjusted correctly?       | (Only when projecting analog RGB signals input from the Computer1 or Computer2 port)                          |
|   | Press the [Auto] button on the remote control or the [ 🚽] button on the control panel to adjust the position. |
|   | You can also adjust the position from the Configuration menu.   |
|   | Signal - Position p.58  |



| Check   | Remedy  |
|---|---|
| Is the computer set for dual display?<br>(Only when projecting computer images) | If dual display is activated in the <b>Display Properties</b> of the computer's Control Panel, only about half of the image on the computer screen is projected. To display the entire image on the computer screen, turn off the dual display setting. |
| Is the correct resolution selected?<br>(Only when projecting computer images)   | Set the computer so that the signals being output are compatible with the projector.  The "Supported Monitor Displays" p.90  Computer's documentation   |

## Image colors are not right

| Check   | Remedy   |
|---|--|
| Do the input signal settings match the signals from the connected | Change the following settings according to the signal for the connected equipment.       |
| device?   | • When the image is from a device connected to the Computer1 or Computer2 port.          |
|   | Signal - Input Signal p.58   |
|   | • When the image is from a device connected to the Video or S-Video port.                |
|   | ☞ Signal - Video Signal p.58   |
| Is the image brightness adjusted correctly?                       | Adjust the Brightness setting from the Configuration menu.                               |
|   | Image - Brightness p.57  |
| Are the cables connected correctly?                               | Check that all the cables required for projection are securely connected.                |
|   | "Connecting Equipment" p.20  |
| Is the <u>contrast</u> adjusted correctly?                        | Adjust the <b>Contrast</b> setting from the Configuration menu.                          |
|   | ☞ Image - Contrast p.57  |
| Is the color adjustment set correctly?                            | Adjust the Color Adjustment setting from the Configuration menu.                         |
|   | Image - Color Adjustment p.57  |
| Are the color saturation and tint adjusted correctly?             | Adjust the <b>Color Saturation</b> and <b>Tint</b> settings from the Configuration menu. |
| (Only when projecting images from a video source)                 | ☞ Image - Color Saturation, Tint p.57  |



#### Images appear dark

| Check   | Remedy   |
|---|--|
| Is the image brightness set correctly?  | Adjust the Brightness and Power Consumption settings from the Configuration menu.  |
|   | Image - Brightness p.57  |
|   | Settings - Power Consumption p.60  |
| Is the <u>contrast</u> adjusted correctly?  | Adjust the <b>Contrast</b> setting from the Configuration menu.  |
|   | Image - Contrast p.57  |
| Is it time to replace the lamp?   | When the lamp is nearly ready for replacement, the images become darker and the color quality becomes poorer. When this happens, replace the lamp with a new lamp.  The "Replacing the Lamp" p.81  |
| Is the projector being used at a high altitude or in a location subject to high temperatures? | When the projector is used at a high altitude or in a location subject to high temperatures, the Power Consumption setting may be automatically set to <b>ECO</b> . This may make the screen dark. If this happens, the Power Consumption setting cannot be changed. |

## **Problems when Projection Starts**

#### The projector does not turn on

| Check   | Remedy  |
|---|---|
| Did you press the [也] button?                                     | Press the $[0]$ button to turn the power on.  |
| Are the indicators switched off?                                  | The power cord is not connected correctly or power is not being supplied.   |
|   | Disconnect and then reconnect the power cord.   |
|   | "From Installation to Projection" p.26  |
|   | Check that your electrical outlet or power source is functioning correctly.   |
| Do the indicators turn on and off when the power cord is touched? | There is probably a poor contact in the power cable, or the power cable may be defective. Reinsert the power cable. If this does not solve the problem, stop using the projector, disconnect the power cable from the electrical outlet, and contact your local dealer or the nearest address provided in the Epson Projector Contact List. |
|   |   |
| Is the Control Panel Lock set to Full Lock?                       | Press the $[U]$ button on the remote control. If you do not want to use <b>Control Panel Lock</b> , change the setting to <b>Off</b> .  |
|   | Settings - Control Panel Lock p.60  |



| Check  | Remedy  |
|--|---|
| Is the correct setting for the remote receiver selected? | Check the <b>Remote Receiver</b> from the Configuration menu. |
|  | Settings - Remote Receiver p.60                               |

## **Other Problems**

#### No sound can be heard or the sound is faint

| Check   | Remedy   |
|---|--|
| Check that the audio/video cable is securely attached to both the projector and audio source. | Disconnect the cable from the Audio port, and then reconnect the cable.                                      |
| Is the volume adjusted to the minimum setting?  | Adjust the volume so that sound can be heard.  |
|   | ✓ Settings - Volume p.60   |
|   | ☞ "Adjusting the Volume" p.37  |
| Is A/V Mute active?   | Press the [A/V Mute] button on the remote control to cancel A/V Mute.  |
|   | ☞ "Hiding the Image and Sound Temporarily (A/V Mute)" p.42   |
| Is the audio cable's specification "No resistance"?   | When using a commercially available audio cable, make sure it is labeled "No resistance".                    |
| Is it connected with an HDMI cable?   | If no audio is output when connecting via an HDMI cable, set the connected equipment to PCM output.          |
| (EB-X15 only)   |  |
| Is Output audio from the projector selected?  | Click All Programs - EPSON Projector - Epson USB Display - Epson USB Display Vx.xx Settings, and then select |
| (Only when projecting USB Display)  | Output audio from the projector.   |

#### The remote control does not work

| Check  | Remedy   |
|--|--|
| Is the remote control light-emitting area pointing towards the | Point the remote control towards the remote receiver.    |
| remote receiver on the projector during operation?             | "Remote control operating range" p.16                    |
| Is the remote control too far from the projector?              | The operating range for the remote control is about 6 m. |
|  | "Remote control operating range" p.16                    |



| Check   | Remedy   |
|---|--|
| Is direct sunlight or strong light from fluorescent lamps shining onto the remote receiver? | Set the projector up in a location where strong light does not shine onto the remote receiver. Or set the remote receiver to <b>Off</b> from <b>Remote Receiver</b> in the Configuration menu.<br><b>Settings - Remote Receiver</b> p.60 |
| Is the correct setting for the <b>Remote Receiver</b> selected?                             | Check the <b>Remote Receiver</b> from the Configuration menu.<br>Settings - Remote Receiver p.60   |
| Are the batteries dead or have the batteries been inserted correctly?                       | Make sure the batteries are inserted correctly or replace the batteries with new ones if necessary.      "     "Replacing the remote control batteries" p.15   |

## I want to change the language for messages and menus

| Check                        | Remedy   |
|------------------------------|--|
| Change the Language setting. | Adjust the Language setting from the Configuration menu. |
|                              | Extended - Language p.61                                 |



## Maintenance

This chapter provides information on maintenance procedures to ensure the best level of performance from the projector for a long time to come.



You should clean the projector if it becomes dirty or if the quality of projected images starts to deteriorate.

## 🕂 Caution

Turn off the projector's power before cleaning. Otherwise, an electric shock may occur.

## **Cleaning the Projector's Surface**

Clean the projector's surface by wiping it gently with a soft cloth.

If the projector is particularly dirty, moisten the cloth with water containing a small amount of neutral detergent, and then firmly wring the cloth dry before using it to wipe the projector's surface.

#### Attention

Do not use volatile substances such as wax, alcohol, or thinner to clean the projector's surface. The quality of the case may change or become discolored.

## **Cleaning the Lens**

Use a commercially available cloth for cleaning glasses to gently wipe the lens.

## 🕂 Warning

Do not use sprays that contain flammable gas to remove dust and lint from the lens. The projector may catch fire due to the high internal temperature of the lamp.

#### Attention

Do not rub the lens with harsh materials or subject the lens to shocks, as it can easily become damaged.

## **Cleaning the Air Filter**

Clean the air filter and the air intake vent when the following message is displayed.

"The projector is overheating. Make sure nothing is blocking the air vent, and clean or replace the air filter."

#### Attention

- If dust collects on the air filter, it can cause the internal temperature of the projector to rise, and this can lead to problems with operation and shorten the optical engine's service life. Clean the air filter immediately when the message is displayed.
- Do not rinse the air filter in water. Do not use detergents or solvents.



## Cleaning





• If a message is frequently displayed, even after cleaning, it is time to replace the air filter. Replace it with a new air filter.

- ☞ "Replacing the Air Filter" p.84
- It is recommended that you clean these parts at least once every three months. Clean them more often than this if using the projector in a particularly dusty environment.

This section explains how to replace the lamp and the air filter.

## **Replacing the Lamp**

#### Lamp replacement period

- It is time to replace the lamp when:
- The following message is displayed.

"Time to replace the lamp. Please contact your Epson projector reseller or visit www.epson.com to purchase."



The message is displayed for 30 seconds.

• The lamp indicator flashes orange.



• The projected image gets darker or starts to deteriorate.

#### Attention

• The lamp replacement message is set to appear after the following time periods in order to maintain the initial brightness and quality of the projected images.

When Power Consumption is set to Normal: About 3900 hours

When Power Consumption is set to ECO: About 4900 hours

- **Settings** Power Consumption p.60
- If you continue to use the lamp after the replacement period has passed, the possibility that the lamp may explode increases. When the lamp replacement message appears, replace the lamp with a new one as soon as possible, even if it is still working.
- Do not repeatedly turn off the power and immediately back on. Turning the power on and off frequently may shorten the lamp's operating life.
- Depending on the characteristics of the lamp and the way it has been used, the lamp may become darker or stop working before the lamp warning message appears. You should always have a spare lamp unit ready in case it is needed.

#### How to replace the lamp

The lamp can be replaced even when the projector is suspended from a ceiling.

TOP



## 🊹 Warning

- 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 cracked, and you should stand to the side of the lamp cover, not underneath it. Remove the lamp cover gently. Be careful when removing the lamp cover as shards of glass may fall out and could cause an injury. If any shards of glass get into your eyes or mouth, contact your local physician immediately.
- Never disassemble or remodel the lamp. If a modified or disassembled lamp is installed in the projector and used, it could cause a fire, electric shock, or an accident.

## 🕂 Caution

Wait until the lamp has cooled down sufficiently before removing the lamp cover. If the lamp is still hot, burns or other injuries may result. It takes about one hour after the power has been turned off for the lamp to be cool enough.



After you turn off the projector's power and the confirmation buzzer beeps twice, disconnect the power cord.

2 Wait until the lamp has sufficiently cooled down, and then remove the lamp cover at the top of the projector.

Loosen the Lamp cover fixing screw with the screwdriver supplied with the new lamp unit or a cross-head screwdriver. Then slide the lamp cover straight forward and lift it to remove.





Loosen the two lamp fixing screws.





**4** Take out the old lamp by pulling the handle. If the lamp is cracked, replace it with a new lamp, or contact your local dealer for further advice.

Epson Projector Contact List





#### Install the new lamp.

Insert the new lamp along the guide rail in the correct direction so that it fits in place, push in firmly, and once it is fully inserted tighten the two screws.







Replace the lamp cover.



#### Attention

- Make sure you install the lamp securely. If the lamp cover is removed, the power turns off automatically as a safety precaution. If the lamp or the lamp cover is not installed correctly, the power does not turn on.
- This product includes a lamp component that contains mercury (Hg). Please consult your local regulations regarding disposal or recycling. Do not dispose of it with normal waste.

#### Resetting the lamp hours

The projector records how long the lamp is turned on and a message and indicator notify you when it is time to replace the lamp. After replacing the lamp, make sure you reset the Lamp Hours from the Reset menu.

Reset - Reset Lamp Hours p.63

• Only reset the Lamp Hours after the lamp has been replaced. Otherwise the lamp replacement period is not indicated correctly.

## **Replacing the Air Filter**

#### Air filter replacement period

If the message is displayed frequently even though the air filter has been cleaned, replace the air filter.

#### How to replace the air filter

The air filter can be replaced even when the projector is suspended from a ceiling.



2

After you turn off the projector's power and the confirmation buzzer beeps twice, disconnect the power cord.

Open the air filter cover.



## **Replacing Consumables**



Remove the air filter.

Grip the air filter cover tab and pull it straight out.





Install the new air filter.

Slide the air filter from the outside and press in until it firmly clicks into place.





Close the air filter cover.

Dispose of used air filters properly in accordance with your local regulations. Filter frame: ABS Filter: Polyurethane foam

TOP



## Appendix

The following optional accessories and consumables are available. Please purchase these products as and when needed. The following list of optional accessories and consumables is current as of February 2012. Details of accessories are subject to change without notice and availability may vary depending on the country of purchase.

## **Optional Accessories**

Interactive Unit ELPIU01

Use when operating the computer screen on the projection surface.

#### Document Camera ELPDC06/ELPDC11

Use when projecting images such as books, OHP documents, or slides by connecting the document camera to the projector via a computer.

#### Soft carrying case ELPKS63

A soft case to carry the projector.

**50" portable screen ELPSC32** A compact screen that can be carried easily. (Aspect Ratio<sup>+)</sup> 4:3)

60" portable screen ELPSC27

80" portable screen ELPSC28

100" screen ELPSC29

Portable roll-type screens. (aspect ratio 4:3)

70" portable screen ELPSC23

80" portable screen ELPSC24

90" portable screen ELPSC25

Portable roll-type screens. (aspect ratio 16:10)

53" portable screen ELPSC30

64" portable screen ELPSC31

Portable magnetic screens. (aspect ratio 4:3)

#### Multi-aspect screen ELPSC26

A portable multi-aspect screen.

| Computer cable ELPKC02<br>(1.8 m - for mini D-Sub15-pin/mini D-Sub 15pin)   |
|---|
| Computer cable ELPKC09<br>(3 m - for mini D-Sub15-pin/mini D-Sub 15pin)<br>Computer cable ELPKC10<br>(20 m - for mini D-Sub15-pin/mini D-Sub 15pin) |
| Component video cable ELPKC19<br>(3 m - for mini D-Sub 15-pin/RCA male×3)<br>Use to connect a <u>component video</u> source.                        |
| Ceiling pipe (450 mm)* ELPFP13<br>Ceiling pipe (700 mm)* ELPFP14<br>Use when installing the projector on a high ceiling.                            |
| Ceiling mount <sup>*</sup> ELPMB23  |

Use when installing the projector on a ceiling.

- \* Special expertise is required to suspend the projector from a ceiling. Contact your local dealer or the nearest address provided in the Epson Projector Contact List.
- Epson Projector Contact List

## Consumables

#### Lamp unit ELPLP67

Use as a replacement for used lamps.

#### **Air filter ELPAF32**

Use as a replacement for used air filters.

TOP

## Projection Distance (For EB-X15/EB-X14H/EB-X11H)





- Projection distance
- ② Distance from the center of the lens to the base of the screen (or to the top of the screen, if suspended from a ceiling)
- 3 Center of lens

|                 |       |                                     | Unit: cm |
|-----------------|-------|-------------------------------------|----------|
|                 |       | 0                                   |          |
| 4:3 Screen Size |       | Minimum (Wide) to Maximum<br>(Tele) | 2        |
| 30"             | 61x46 | 89 - 107                            | -5       |
| 40"             | 81x61 | 119 - 143                           | -7       |

|                 |         | 0                                   |     |
|-----------------|---------|-------------------------------------|-----|
| 4:3 Screen Size |         | Minimum (Wide) to Maximum<br>(Tele) | 2   |
| 50"             | 100x76  | 150 - 180                           | -8  |
| 60"             | 120x91  | 180 - 217                           | -10 |
| 80"             | 160x120 | 241 - 290                           | -14 |
| 100"            | 200x150 | 302 - 363                           | -17 |
| 150"            | 300x230 | 454 - 546                           | -25 |
| 200"            | 410x300 | 607 - 729                           | -34 |
| 250"            | 510x380 | 759 - 912                           | -42 |
| 300"            | 610x460 | 912 - 1095                          | -51 |

Unit: cm

|         |            | 0                                   |   |
|---------|------------|-------------------------------------|---|
| 16:9 So | creen Size | Minimum (Wide) to Maximum<br>(Tele) | 2 |
| 30"     | 66x37      | 97 - 117                            | 1 |
| 40"     | 89x50      | 130 - 156                           | 1 |
| 50"     | 110x62     | 163 - 196                           | 1 |
| 60"     | 130x75     | 196 - 236                           | 1 |
| 80"     | 180x100    | 263 - 316                           | 2 |
| 100"    | 220x120    | 329 - 396                           | 2 |
| 150"    | 330x190    | 495 - 595                           | 3 |
| 200"    | 440x250    | 661 - 794                           | 5 |
| 250"    | 550x310    | 827 - 994                           | 6 |
| 275"    | 610x340    | 910 - 1093                          | 6 |

TOP



## **Projection Distance (For EB-S11H)**





| 0 | Projection distance |
|---|---------------------|

- ② Distance from the center of the lens to the base of the screen (or to the top of the screen, if suspended from a ceiling)
- 3 Center of lens

|        |           |                                     | Unit: cm |
|--------|-----------|-------------------------------------|----------|
|        |           | 0                                   | 2        |
| 4:3 Sc | reen Size | Minimum (Wide) to Maximum<br>(Tele) | (Wide)   |
| 30"    | 61x46     | 88 - 119                            | -5       |
| 50"    | 100x76    | 147 - 200                           | -8       |
| 60"    | 120x91    | 177 - 240                           | -10      |

|         |           | 0                                   | 2      |
|---------|-----------|-------------------------------------|--------|
| 4:3 Sci | reen Size | Minimum (Wide) to Maximum<br>(Tele) | (Wide) |
| 70"     | 142x107   | 207 - 280                           | -12    |
| 80"     | 160x120   | 237 - 321                           | -13    |
| 100"    | 200x150   | 297 - 401                           | -17    |
| 150"    | 300x230   | 446 - 603                           | -25    |
| 200"    | 410x300   | 595 - 805                           | -33    |

Unit: cm

|         |            | 0                                   | 2      |
|---------|------------|-------------------------------------|--------|
| 16:9 So | creen Size | Minimum (Wide) to Maximum<br>(Tele) | (Wide) |
| 30"     | 66x37      | 96 - 130                            | 1      |
| 50"     | 110x62     | 161 - 218                           | 1      |
| 60"     | 130x75     | 193 - 262                           | 2      |
| 70"     | 155x87     | 226 - 306                           | 2      |
| 80"     | 180x100    | 258 - 349                           | 2      |
| 100"    | 220x120    | 323 - 437                           | 3      |
| 150"    | 330x190    | 486 - 657                           | 4      |
| 200"    | 440x250    | 649 - 877                           | 5      |



## **Supported Resolutions**

#### **Computer signals (analog RGB)**

#### For EB-X15/EB-X14H/EB-X11H

| Signal | Refresh Rate (Hz) | Resolution (dots) |
|--------|-------------------|-------------------|
| VGA    | 60/72/75/85       | 640x480           |
| SVGA   | 56/60/72/75/85    | 800x600           |
| XGA    | 60/70/75/85       | 1024x768          |
| WXGA   | 60                | 1280x768          |
|        | 60                | 1366x768          |
|        | 60/75/85          | 1280x800          |
| WXGA+  | 60/75/85          | 1440x900          |
| WXGA++ | 60                | 1600x900          |
| SXGA   | 70/75/85          | 1152x864          |
|        | 60/75/85          | 1280x1024         |
|        | 60/75/85          | 1280x960          |
| SXGA+  | 60/75             | 1400x1050         |
| UXGA   | 60                | 1600x1200         |
| MAC13" | 67                | 640x480           |
| MAC16" | 75                | 832x624           |
| MAC19" | 75                | 1024x768          |
|        | 59                | 1024x768          |
| MAC21" | 75                | 1152x870          |

| For EB-S11H |  |
|-------------|--|
|-------------|--|

| Signal | Refresh Rate (Hz) | Resolution (dots) |
|--------|-------------------|-------------------|
| VGA    | 60/72/75/85       | 640x480           |

| Signal | Refresh Rate (Hz) | Resolution (dots) |
|--------|-------------------|-------------------|
| SVGA   | 56/60/72/75/85    | 800x600           |
| XGA    | 60/70/75/85       | 1024x768          |
| WXGA   | 60                | 1280x768          |
| -      | 60                | 1366x768          |
| -      | 60/75             | 1280x800          |
| WXGA+  | 60                | 1440x900          |
| SXGA   | 70/75             | 1152x864          |
| -      | 60                | 1280x1024         |
| -      | 60                | 1280x960          |
| SXGA+  | 60                | 1400x1050         |
| MAC13" | 67                | 640x480           |
| MAC16" | 75                | 832x624           |
| MAC19" | 75                | 1024x768          |
| -      | 59                | 1024x768          |
| MAC21" | 75                | 1152x870          |

Even when signals other than those mentioned above are input, it is likely that the image can be projected. However, not all functions may be supported.

#### **Component Video**

| Signal      | Refresh Rate (Hz) | Resolution (dots) |
|-------------|-------------------|-------------------|
| SDTV (480i) | 60                | 720x480           |
| SDTV (576i) | 50                | 720x576           |
| SDTV (480p) | 60                | 720x480           |
| SDTV (576p) | 50                | 720x576           |



| Signal       | Refresh Rate (Hz) | Resolution (dots) |
|--------------|-------------------|-------------------|
| HDTV (720p)  | 50/60             | 1280x720          |
| HDTV (1080i) | 50/60             | 1920x1080         |

# Signal Refresh Rate (Hz) Resolution (dots) HDTV (1080i) 50/60 1920x1080 HDTV (1080p) 24/30/50/60 1920x1080

#### Composite video

| Signal     | Refresh Rate (Hz) | Resolution (dots) |
|------------|-------------------|-------------------|
| TV (NTSC)  | 60                | 720x480           |
| TV (SECAM) | 50                | 720x576           |
| TV (PAL)   | 50/60             | 720x576           |

#### Input signal from the HDMI port (EB-X15 only)

| Signal           | Refresh Rate (Hz) | Resolution (dots) |
|------------------|-------------------|-------------------|
| VGA              | 60                | 640x480           |
| SVGA             | 60                | 800x600           |
| XGA              | 60                | 1024x768          |
| WXGA             | 60                | 1280x800          |
|                  | 60                | 1366x768          |
| WXGA+            | 60                | 1440x900          |
| WXGA++           | 60                | 1600x900          |
| SXGA             | 60                | 1280x960          |
| SAGA             | 60                | 1280x1024         |
| SXGA+            | 60                | 1400x1050         |
| UXGA             | 60                | 1600x1200         |
| SDTV (480i/480p) | 60                | 720x480           |
| SDTV (576i/576p) | 50                | 720x576           |
| HDTV (720p)      | 50/60             | 1280x720          |



## **Projector General Specifications**

| Product name           |                   | EB-X15   | EB-X14H           | EB-X11H  | EB-S11H             |
|------------------------|-------------------|--|-------------------|--|---------------------|
| Dimensions             |                   | 295 (W) x 79 (H) x 228 (D) mm  |                   |  |                     |
| LCD panel size         |                   | 0.55"  |                   |  |                     |
| Display method         |                   |  | Polysilicon TF    | Γ active matrix  |                     |
| Resolution             |                   | XGA (1024 (W) x 768 (H) XGA (1024 (W) x 768 (H) XGA (1024 (W) x 768 (H) SVGA (800 (W) x  |                   | 480,000 pixels<br>SVGA (800 (W) x 600 (H)<br>dots) x 3 |                     |
| Focus adjustment       |                   |  | Mai               | ıual   |                     |
| Zoom adjustment        |                   | Manual (1 to 1.2)  | Manual (1 to 1.2) | Manual (1 to 1.2)                                      | Digital (1 to 1.35) |
| Lamp                   |                   | UHE lamp, 200 W Model No.: ELPLP67   |                   |  |                     |
| Max. audio output      |                   | 2 W  |                   |  |                     |
| Speaker                |                   | 1  |                   |  |                     |
| Power supply           |                   | 100 to 240 V AC±10%, 50/60 Hz 2.9 to 1.3 A   |                   |  |                     |
| Power consump-<br>tion | 100 to 120 V area | Operating: 283 W<br>Standby power consumption (Communication On): 2.9 W<br>Standby power consumption (Communication Off): 0.36 W |                   |  |                     |
|                        | 220 to 240 V area | Operating: 270 W<br>Standby power consumption (Communication On): 3.3 W<br>Standby power consumption (Communication Off): 0.47 W |                   |  |                     |
| Operating altitude     |                   | Altitude 0 to 2,286 m  |                   |  |                     |
| Operating temperature  |                   | 5 to +35°C (No condensation)   |                   |  |                     |
| Storage temperatu      | ıre               | -10 to +60°C (No condensation)   |                   |  |                     |
| Mass                   |                   | Approx. 2.3 kg   |                   |  |                     |

| Connectors | Computer1 port | 1 | Mini D-Sub15-pin (female) |
|------------|----------------|---|---------------------------|
|            | Computer2 port | 1 | Mini D-Sub15-pin (female) |



| Video port                     | 1 | RCA pin jack                          |
|--------------------------------|---|---------------------------------------|
| S-Video port                   | 1 | Mini DIN 4-pin                        |
| Audio port                     | 1 | Stereo mini jack                      |
| Audio Output port              | 1 | Stereo mini jack                      |
| Monitor Out port <sup>*1</sup> | 1 | Mini D-Sub15-pin (female)             |
| HDMI port <sup>*2</sup>        | 1 | HDMI (Audio is only supported by PCM) |
| USB(TypeB) port*3              | 1 | USB connector (Type B)                |
| RS-232C port                   | 1 | Mini D-Sub 9-pin (male)               |

\*1 (EB-X14H/EB-X11H/EB-S11H only)

\*2 (EB-X15 only)

\*3 Supports USB 2.0. However, USB ports are not guaranteed to operate all devices that support USB.



This product is also designed for IT power distribution system with phase-to-phase voltage 230V.

Angle of tilt



If you use the projector tilted at an angle of more than 30° it could be damaged and cause an accident.

#### **DECLARATION of CONFORMITY** According to 47CFR, Part 2 and 15

Class B Personal Computers and Peripherals; and/or CPU Boards and Power Supplies used with Class B Personal Computers

| We:         | Epson America, Inc.     |
|-------------|-------------------------|
| Located at: | 3840 Kilroy Airport Way |
|             | MS: 3-13                |
|             | Long Beach, CA 90806    |
| Tel:        | 562-290-5254            |
|             |                         |

Declare under sole responsibility that the product identified herein, complies with 47CFR Part 2 and 15 of the FCC rules as a Class B digital device. Each product marketed, is identical to the representative unit tested and found to be compliant with the standards. Records maintained continue to reflect the equipment being produced can be expected to be within the variation accepted, due to quantity production and testing on a statistical basis as required by 47CFR 2.909. Operation is subject to the following two conditions : (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

| Trade Name:      | EPSON                   |
|------------------|-------------------------|
| Type of Product: | Projector               |
| Model:           | H518C/H519C/H520C/H521C |

## TOP

#### FCC Compliance Statement For United States Users

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### WARNING

The connection of a non-shielded equipment interface cable to this equipment will invalidate the FCC Certification or Declaration of this device and may cause interference levels which exceed the limits established by the FCC for this equipment. It is the responsibility of the user to obtain and use a shielded equipment interface cable with this device. If this equipment has more than one interface connector, do not leave cables connected to unused interfaces. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

## Appearance



#### EB-X15



• Center of the lens

2 Distance from center of lens to suspension bracket fixing point



Units: mm



#### EB-X14H/EB-X11H/EB-S11H



Center of the lens

② Distance from the center of the lens to the suspension bracket fixing point



Units: mm



This section briefly explains the difficult terms that are not explained in the text of this guide. For details, refer to other commercially available publications.

| Aspect Ratio    | The ratio between an image's length and its height. Screens with a horizontal:vertical ratio of 16:9, such as HDTV screens, are known as wide screens.   |
|-----------------|--|
| <b>a</b>        | SDTV and general computer displays have an aspect ratio of 4:3.  |
| Component Video | A method that separates the video signal into a luminance component (Y), and a blue minus luminance (Cb or Pb) and a red minus luminance (Cr or Pr).   |
| Composite video | A method that combines the video signal into a luminance component and a color component for transmission down a single cable.   |
| Contrast        | The relative brightness of the light and dark areas of an image can be increased or decreased to make text and graphics stand out more clearly, or to make them appear softer. Adjusting this particular property of an image is called contrast adjustment.   |
| HDCP            | HDCP is an abbreviation for High-bandwidth Digital Content Protection. It is used to prevent illegal copying and protect copyrights by encrypting digital signals sent over DVI and HDMI ports. Because the HDMI port on this projector supports HDCP, it can project digital images protected by HDCP technology. However, the projector may not be able to project images protected with updated or revised versions of HDCP encryption. |
| HDTV            | <ul> <li>An abbreviation for High-Definition Television that refers to high-definition systems which satisfy the following conditions.</li> <li>Vertical resolution of 720p or 1080i or greater (p = <u>Progressive</u>), i = <u>Interlace</u>)</li> <li>Screen <u>aspect ratio</u> of 16:9</li> </ul>   |
| Interlace       | Transmits information needed to create one screen by sending every other line, starting from the top of the image and working down to the bottom.<br>Images are more likely to flicker because one frame is displayed every other line.  |
| Progressive     | Projects information to create one screen at a time, displaying the image for one frame. Even though the number of scan lines is the same, the amount of flicker in images decreases because the volume of information has doubled compared with an interlace system.  |
| Refresh Rate    | The light-emitting element of a display maintains the same luminosity and color for an extremely short time. Because of this, the image must be scanned many times per second to refresh the light-emitting element. The number of refresh operations per second is called the Refresh Rate and is expressed in hertz (Hz).  |
| SDTV            | An abbreviation for Standard Definition Television that refers to standard television systems which do not satisfy the conditions for HDTV High-Definition Television.   |
| sRGB            | An international standard for color intervals that was formulated so that colors that are reproduced by video equipment can be handled easily by computer operating systems (OS) and the Internet. If the connected source has an sRGB mode, set both the projector and the connected signal source to sRGB.   |
| SVGA            | A screen size standard with a resolution of 800 (horizontal) x 600 (vertical) dots.  |
| S-Video         | A method that separates the video signal into a luminance component (Y) and a color component (C).   |
| SXGA            | A screen size standard with a resolution of 1,280 (horizontal) x 1,024 (vertical) dots.  |
| Sync.           | The signals output from computers have a specific frequency. If the projector frequency does not match this frequency, the resulting images are not of a good quality. The process of matching the phases of these signals (the relative position of the crests and the troughs in the signal) is called Synchronization. If the signals are not synchronized, flickering, blurriness, and horizontal interference occur.                  |



| Tracking | The signals output from computers have a specific frequency. If the projector frequency does not match this frequency, the resulting images are not of a good quality. The process of matching the frequency of these signals (the number of crests in the signal) is called Tracking. If Tracking is not carried out correctly, wide vertical stripes appear in the signal. |
|----------|--|
| VGA      | A screen size standard with a resolution of 640 (horizontal) x 480 (vertical) dots.  |
| XGA      | A screen size standard with a resolution of 1,024 (horizontal) x 768 (vertical) dots.  |

## **General Notes**



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The contents of this guide may be changed or updated without further notice.

Illustrations in this guide and the actual projector may differ.

#### **Restriction of Use**

When this product is used for applications requiring high reliability/safety such as transportation devices related to aviation, rail, marine, automotive etc.; disaster prevention devices; various safety devices etc; or functional/precision devices etc, you should use this product only after giving consideration to including fail-safes and redundancies into your design to maintain safety and total system reliability. Because this product was not intended for use in applications requiring extremely high reliability/safety such as aerospace equipment, main communication equipment, nuclear power control equipment, or medical equipment related to direct medical care etc, please make your own judgment on this product's suitability after a full evaluation.

#### **About Notations**

Microsoft® Windows® 98 operating system Microsoft® Windows® Me operating system Microsoft® Windows® 2000 operating system Microsoft® Windows® XP operating system Microsoft® Windows Vista® operating system Microsoft® Windows® 7 operating system

In this guide, the operating systems above are referred to as "Windows 98", "Windows Me", "Windows 2000", "Windows XP", "Windows Vista", and "Windows 7". Furthermore, the collective term Windows may be used to refer to Windows 98, Windows Me, Windows 2000, Windows XP, Windows Vista, and Windows 7, and multiple versions of Windows may be referred to as, for example, Windows 98/Me/2000/XP/Vista/7, with the Windows notation omitted.

Mac OS X 10.3.x Mac OS X 10.4.x Mac OS X 10.5.x Mac OS X 10.6.x Mac OS X 10.7.x

In this guide, the operating systems above are referred to as "Mac OS X 10.3.x", "Mac OS X 10.4.x", "Mac OS X 10.5.x", "Mac OS X 10.6.x", and "Mac OS X 10.7.x". Furthermore, the collective term "Mac OS X" is used to refer to them.



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