WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For the customers in the USA
If you have any questions about this product, you may call:
Sony Customer Information Service Center
1-800-222-7669 or http://www.sony.com/
The number below is for FCC related matters only.

Declaration of Conformity
Trade Name: SONY
Model No.: VPL-HS50/HS51
Responsible Party: Sony Electronics Inc.
Address: 16450 W. Bernardo Dr, San Diego, CA 92127 U.S.A.
Telephone Number: 858-942-2230

This device complies with Part 15 of the FCC Rules. 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.

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 communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or 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.
You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

This product contains mercury. Disposal of this product may be regulated if sold in the United States. For disposal or recycling information, please contact your local authorities or Electronics Industries Alliance (www.eiae.org http://www.eiae.org).
For the customers in Canada
(VPL-HS50 only)
This Class B digital apparatus complies with Canadian ICES-003.

Voor de klanten in Nederland

Gooi de batterij niet weg maar lever deze in als klein chemisch afval (KCA).

The socket-outlet should be installed near the equipment and be easily accessible.

CAUTION
RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSED OF USED BATTERIES ACCORDING TO THE LOCAL RULES.
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Precautions

On safety
- Check that the operating voltage of your unit is identical with the voltage of your local power supply.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it further.
- Unplug the unit from the wall outlet if it is not to be used for several days.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- The wall outlet should be near the unit and easily accessible.
- The unit is not disconnected to the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- Do not look into the lens while the lamp is on.
- Do not place your hand or objects near the ventilation holes. The air coming out is hot.

On preventing internal heat build-up
After you turn off the power with the I/ (on/standby) switch, do not disconnect the unit from the wall outlet while the cooling fan is still running.

Caution
The projector is equipped with ventilation holes (intake) and ventilation holes (exhaust). Do not block or place anything near these holes, or internal heat build-up may occur, causing picture degradation or damage to the projector.

On repacking
Save the original shipping carton and packing material; they will come in handy if you ever have to ship your unit. For maximum protection, repack your unit as it was originally packed at the factory.

This manual covers models VPL-HS50 and VPL-HS51.
The illustrations of the projector used in this manual are those of the VPL-HS50 unless the model name is specifically mentioned.
Connections and Preparations

This section describes how to install the projector and screen, how to connect the equipment from which you want to project the picture, etc.

Unpacking

Check the carton to make sure it contains the following items:

- Remote control (1)
- Size AA (R6) batteries (2)
- Air filter (for replacement) (1)
- AC power cord (1)
- CD-ROM (Application software and Operating Instructions) (VPL-HS51 only)
- Operating Instructions (this manual) (1)

Inserting the batteries into the remote control

Insert the batteries ⚡ side first as shown in the illustration. Inserting them forcibly or with the polarities reversed may cause a short circuit and may generate heat.
Step 1: Installing the Projector

The projector’s lens shift feature allows you to choose a variety of installation locations for your projector. You can enjoy home entertainment with this projector in the following situations.

**Enjoying home theater**

**Watching sports, etc. with your company**

**Enjoying video games on a large screen**

**Viewing images shot by a digital video camera on a large screen**
Before Setting Up the Projector

Do not place the projector in the following situations, which may cause malfunction or damage to the projector.

**Poorly ventilated**

- [Image of a projector in a poorly ventilated area]

**Highly heated and humid**

- [Image of a projector in a highly heated and humid area]

**Subject to direct cool or warm air from an air-conditioner**

- [Image of a projector subject to direct cool or warm air]

Installing in such a location may cause malfunction of the unit due to moisture condensation or rise in temperature.

**Near a heat or smoke sensor**

- [Image of a projector near a heat or smoke sensor]

Malfunction of the sensor may be caused.

Very dusty and extremely smoky

- [Image of a projector in a very dusty and smoky environment]

Make a special attention to the following while using the projector.

Do not block the ventilation holes.

**Tip**

For details on the location of the ventilation holes (intake or exhaust), see “Location of Controls” on pages 61 to 63.

**When installing the unit at altitudes**

When using the projector at an altitude of 1,500 m or higher, set “High Altitude Mode” in the Installation menu to “On” (page 42)

Failing to set this mode when using the projector at high altitudes could have adverse effects, such as reducing the reliability of certain components.
Installing the Projector and a Screen

The installation distance between the projector and a screen varies depending on the size of the screen.

1 **Determine the installation position of the projector and screen.**

You can obtain a good quality picture if you position the projector with the center of the lens within the areas indicated in the gray areas in the illustration. Use the values a, b, c, d and e in the table on page 11 as a guide.

![Diagram showing distances a, b, c, d, and e]

**a:** Minimum projection distance between the screen and the center of the projector’s lens  
**b:** Maximum projection distance between the screen and the center of the projector’s lens  
**c:** Vertical distance between the center of the screen and the center of the projector’s lens when using the maximum vertical lens shift feature*  
**d:** Horizontal distance between the center of the screen and the center of the projector’s lens when using the maximum horizontal lens shift feature*  
**e:** Maximum vertical distance between the center of the screen and the center of the projector’s lens when using both the vertical and horizontal lens shift features with the horizontal lens shift set to the maximum value*  

* The distances c, d and e indicated in the illustration show those in the lower or left direction. The same distances in the upper or right direction are appropriate for installation.

For details on the lens shift feature, see “Step 3: Adjusting the Picture Size and Position.” (page 17)
### Step 1: Installing the Projector

#### Connections and Preparations

When using the 16:9 aspect ratio screen

<table>
<thead>
<tr>
<th>Screen size (inches)</th>
<th>40</th>
<th>60</th>
<th>80</th>
<th>100</th>
<th>120</th>
<th>150</th>
<th>180</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td>a (minimum)</td>
<td>1170 (46 1/4)</td>
<td>1770 (69 3/4)</td>
<td>2380 (93 3/4)</td>
<td>2980 (117 3/8)</td>
<td>3580 (141)</td>
<td>4490 (176 7/8)</td>
<td>5390 (212 1/4)</td>
<td>6000 (236 1/4)</td>
</tr>
<tr>
<td>b (maximum)</td>
<td>1790 (70 1/2)</td>
<td>2710 (106 3/4)</td>
<td>3630 (143)</td>
<td>4540 (178 7/8)</td>
<td>5460 (215)</td>
<td>6830 (269)</td>
<td>8210 (323 3/8)</td>
<td>9120 (359 1/8)</td>
</tr>
<tr>
<td>c</td>
<td>498 (19 5/8)</td>
<td>747 (29 1/2)</td>
<td>996 (39 1/4)</td>
<td>1245 (49 1/8)</td>
<td>1494 (58 7/8)</td>
<td>1868 (73 5/8)</td>
<td>2241 (88 1/4)</td>
<td>2491 (98 1/8)</td>
</tr>
<tr>
<td>d</td>
<td>443 (17 1/2)</td>
<td>664 (26 1/4)</td>
<td>886 (35)</td>
<td>1107 (43 5/8)</td>
<td>1328 (52 3/8)</td>
<td>1660 (65 3/8)</td>
<td>1992 (78 1/2)</td>
<td>2214 (87 1/4)</td>
</tr>
<tr>
<td>e</td>
<td>249 (9 7/8)</td>
<td>374 (14 3/4)</td>
<td>498 (19 5/8)</td>
<td>623 (24 5/8)</td>
<td>747 (29 1/2)</td>
<td>934 (36 7/8)</td>
<td>1121 (44 1/4)</td>
<td>1245 (49 1/8)</td>
</tr>
</tbody>
</table>

To calculate the installation measurements (SS: Screen Size)

- a (minimum) = \((SS \times 21.27/0.7227) - 35.160899\) \times 1.025
- b (maximum) = \((SS \times 33.9409273/0.7227) - 37.678872\) \times 0.975
- c = \((SS/0.7227 \times 9)\)
- d = \((SS/0.7227 \times 8)\)
- e = \((SS/0.7227 \times 4.5)\)

When using the 4:3 aspect ratio screen

<table>
<thead>
<tr>
<th>Screen size (inches)</th>
<th>40</th>
<th>60</th>
<th>80</th>
<th>100</th>
<th>120</th>
<th>150</th>
<th>180</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td>a (minimum)</td>
<td>1440 (56 3/4)</td>
<td>2180 (85 7/8)</td>
<td>2920 (115)</td>
<td>3660 (114 1/8)</td>
<td>4390 (172 7/8)</td>
<td>5500 (216 5/8)</td>
<td>6610 (260 3/4)</td>
<td>7350 (289 1/2)</td>
</tr>
<tr>
<td>b (maximum)</td>
<td>2200 (86 5/8)</td>
<td>3330 (131 1/8)</td>
<td>4450 (175 1/4)</td>
<td>5570 (219 3/8)</td>
<td>6690 (263 1/2)</td>
<td>8370 (329 5/8)</td>
<td>10050 (395 3/4)</td>
<td>11170 (439 7/8)</td>
</tr>
<tr>
<td>c</td>
<td>610 (24 1/8)</td>
<td>914 (36)</td>
<td>1219 (48)</td>
<td>1524 (60)</td>
<td>1829 (72 1/2)</td>
<td>2286 (90 1/8)</td>
<td>2743 (108 1/8)</td>
<td>3048 (120 1/16)</td>
</tr>
<tr>
<td>d</td>
<td>542 (21 3/4)</td>
<td>813 (32 1/8)</td>
<td>1084 (42 3/4)</td>
<td>1355 (53 3/8)</td>
<td>1626 (64 1/8)</td>
<td>2032 (80 1/16)</td>
<td>2438 (96)</td>
<td>2709 (106 3/4)</td>
</tr>
<tr>
<td>e</td>
<td>305 (12 1/8)</td>
<td>457 (18)</td>
<td>610 (24 1/4)</td>
<td>762 (30)</td>
<td>914 (36)</td>
<td>1143 (45)</td>
<td>1372 (54 1/8)</td>
<td>1524 (60)</td>
</tr>
</tbody>
</table>

To calculate the installation measurements (SS: Screen Size)

- a (minimum) = \((SS \times 21.27/0.5906) - 35.160899\) \times 1.025
- b (maximum) = \((SS \times 33.9409273/0.5906) - 37.678872\) \times 0.975
- c = \((SS/0.5906 \times 9)\)
- d = \((SS/0.5906 \times 8)\)
- e = \((SS/0.5906 \times 4.5)\)
2 Position the projector so that the lens is parallel to the screen.

Top view

3 Project an image on the screen and adjust the picture so that it fits the screen. (page 17)

To project an image, connect video equipment to the projector. (page 13)

Note

When using a screen with an uneven surface, stripes pattern may rarely appear on the screen depending on the distance between the screen and the projector or the zooming magnifications. This is not a malfunction of the projector.

For installation of the projector on a ceiling, see “Ceiling Installation.” (page 58)
Step 2: Connecting the Projector

When making connections, be sure to do the following:
• Turn off all equipment before making any connections.
• Use the proper cables for each connection.
• Insert the cable plugs properly; plugs that are not fully inserted often generate noise. When pulling out a cable, be sure to pull it out from the plug, not the cable itself.
• Refer to the operating instructions of the connected equipment.

Connecting to a DVD Player/Recorder or Digital Tuner

To connect to a DVD player/recorder or digital tuner equipped with component video connectors

Tip
To connect the projector to a DVD player/recorder, digital tuner, etc. which is not equipped with component video connectors, use the S video cable to connect to the S-video output of the DVD player/recorder, digital tuner, etc. If the connected equipment is not equipped with the S-video output connector, use the video cable to connect to the video output jack on the equipment.
To connect to a DVD player/recorder equipped with HDMI output

You can enjoy better picture quality by connecting a DVD player/recorder equipped with HDMI output to the HDMI input of the projector.

---

HDMI, HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.
You can connect a DVD player/recorder which is not equipped with component video connectors, hard disk video recorder, VCR or laser disk player. See also the instruction manual of each equipment.

**Tip**
If you do not know to which connector you should connect the cable, S VIDEO (S video connector) or VIDEO (video connector), connect it to S VIDEO to enjoy better picture quality.
If the equipment to be connected has no S video connector, connect the cable to the video output.
Connecting to a Computer

Tip
Set “Input A Signal Sel.” in the Setup menu to “Auto” or “Computer.” If the input signal does not appear properly, set it to “Computer.”

Note
If you set your computer, such as a notebook type, to output the signal to both your computer’s display and an external monitor, the picture of the external monitor may not appear properly. Set your computer to output the signal to only the external monitor. For details, refer to the computer’s operating instructions supplied with your computer.
Step 3: Adjusting the Picture Size and Position

Project an image on the screen and then adjust the picture position.

**Tip**
The I/○ (on/standby), INPUT, MENU, and ▲▼◄►/ENTER (joystick) buttons on the side panel of the projector function the same as those on the remote control.

**Note**
Depending on the installation location of the projector, you may not control it with the remote control. In this case, point the remote control to the screen instead of the projector.

1 **Plug the AC power cord into a wall outlet.**
   The ON/STANDBY indicator lights in red and the projector goes into standby mode.
   
   ![Lights in red.](image_url)
2 Press the \( \text{I/}(\text{on/standby}) \) switch to turn on the projector. The ON/STANDBY indicator lights in green.

3 Turn on the equipment connected to the projector. Refer to the operating instructions of the connected equipment.

4 Press INPUT to project the picture on the screen. Each time you press the button, the input indication changes. ( page 24)

Tip
When “Auto Input Search” is set to “On” in the Function menu, the channel of the signal input is automatically displayed.

5 Move both LENS SHIFT dials to adjust the picture position.
**To adjust the horizontal position**

Turn the LENS SHIFT dial right or left. The picture moves right or left by a maximum of half of the screen size from the center of the lens.

![Top view diagram]

- : Picture position when moving the picture to the left at maximum
- : Picture position when moving the picture to the right at maximum

**To adjust the vertical position**

Turn the LENS SHIFT dial up or down. The picture moves up or down by a maximum of the screen size from the center of the lens.

![Side view diagram]

- : Picture position when moving the picture upward at maximum
- : Picture position when moving the picture downward at maximum
When you use the horizontal and vertical lens shift features at the same time, you can move the picture vertically by a maximum of half of the screen size.

6 Adjust the picture size using the zoom ring.

7 Adjust the focus using the focus ring.

To adjust the tilt of the installation surface
If the projector is installed on an uneven surface, use the adjusters to keep the projector level.
Step 4: Selecting the Menu Language

You can select one of fifteen languages for displaying the menu and other on-screen displays. The factory default setting is English.

Tip
You can operate the menu using the ↑/↓/←/→ (arrow) buttons on the side panel of the projector instead of the ↑/↓/←/→/ENTER buttons on the remote control.

1 Plug the AC power cord into a wall outlet.
   The ON/STANDBY indicator lights in red and the projector goes into standby mode.

2 Press the I/○ (on/standby) switch to turn on the projector.
   The ON/STANDBY indicator lights in green.

3 Press MENU.
   The menu appears.
4 Press ↑ or ↓ to select the Setup menu, and press → or ENTER.
The setting items of the selected menu appears.

5 Press ↑ or ↓ to select “Language,” and press → or ENTER.

6 Press ↑ or ↓ to select a language, and press ENTER.
The menu changes to the selected language.

To clear the menu
Press MENU.
This section describes how to operate the projector to view the picture from the equipment connected to the projector. It also describes how to adjust the quality of the picture to suit your taste.

### Projecting the Picture on the Screen

**VPL-HS50**
- Focus ring
- Zoom ring
- Remote control detector

**VPL-HS51**
- Remote control detector
- Focus ring
- Zoom ring

1. **Plug the AC power cord into a wall outlet.**
   The ON/STANDBY indicator lights in red and the projector goes into standby mode.
   - Lights in red.

2. **Press the I/ (on/standby) switch to turn on the projector.**
   The ON/STANDBY indicator lights in green.
   - Lights in green.

3. **Turn on the equipment connected to the projector.**
   Refer to the operating instructions of the connected equipment.
4 Press INPUT repeatedly to select the input you want to project on the screen.

Display the indication of the input you want.

Example: To view the picture from the video equipment connected to the VIDEO INPUT jack.

<table>
<thead>
<tr>
<th>To view the picture from</th>
<th>Press INPUT to display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video equipment connected to the VIDEO INPUT connector</td>
<td>Video</td>
</tr>
<tr>
<td>Video equipment connected to S VIDEO INPUT connector</td>
<td>S-Video</td>
</tr>
<tr>
<td>Component equipment connected to Y / Pb/Cb / Pr/Cr on the projector</td>
<td>Component</td>
</tr>
<tr>
<td>RGB/component equipment connected to the INPUT A connector</td>
<td>Input-A*</td>
</tr>
<tr>
<td>Equipment connected to the HDMI connector</td>
<td>HDMI</td>
</tr>
</tbody>
</table>

* Set the “Input-A Signal Sel.” setting in the Setup menu according to the signal input. When you set it to “Auto,” and cannot display the picture properly, select an appropriate signal with “Input-A Signal Sel.” (page 43)

Tip
When “Auto Input Search” is set to “On” in the Function menu, the channel of the input signal is automatically displayed.

5 Turn the zoom ring to adjust the size of the picture.
6 Turn the focus ring to adjust the focus.
Adjust to obtain sharp focus.

Turning Off the Power

1 Press the I/ (on/standby) switch.
A message “POWER OFF?” appears on the screen.

2 Press the I/ switch again.
The ON/STANDBY indicator flashes in green and the fan continues to run to reduce the internal heat. First, the ON/STANDBY indicator flashes quickly, during which you will not be able to light up the ON/STANDBY indicator with the I/ switch.

3 Unplug the AC power cord from the wall outlet after the fan stops running and the ON/STANDBY indicator lights in red.

You can turn off the projector by holding the I/ (on/standby) switch for about one second, instead of performing the above steps.
Selecting the Wide Screen Mode

You can enjoy various wide screen mode according to the video signal received. You can also select it using the menu. (☞ page 40)

Press WIDE MODE.

Each time you press the button, you can select the “Wide Mode” setting.

Full

A picture squeezed to 4:3 is displayed with the correct aspect ratio. A 4:3 picture is enlarged horizontally to fit the 16:9 screen.

Tip

Squeezed: An original 16:9 aspect ratio picture is recorded horizontally compressed to a 4:3 picture.
Normal
A picture with normal 4:3 aspect ratio is displayed in the center of the screen to fill the vertical screen size.

Wide Zoom
A 4:3 aspect ratio picture is enlarged and the upper and lower portions of the picture are compressed to fit the 16:9 screen. Use this mode to view news, variety shows, etc.

Zoom
A normal 4:3 aspect ratio picture is enlarged vertically and horizontally in the same ratio to fill the 16:9 screen. This mode is ideal for viewing a wide-format movie.

Subtitle
The subtitle area is compressed and displayed in the lower part of the screen. Use this mode to view a movie with subtitles.

Notes
- You can adjust the vertical position of the picture with “V Position” in the Signal menu only when “Zoom” or “Subtitle” is selected.
- You can adjust the position of the subtitles with “Title Area” in the Signal menu only when “Subtitle” is selected.
Notes on selecting the wide screen mode

- Select the wide screen mode taking into account that changing the aspect ratio of the original picture will provide a different look from that of the original image.
- Note that if the projector is used for profit or for public viewing, modifying the original picture by switching to the wide mode may constitute an infringement of the rights of authors or producers, which are legally protected.
Selecting the Picture Viewing Mode

You can select the picture viewing mode that best suits the type of program or room condition.

Press one of the PICTURE MODE buttons (DYNAMIC, STANDARD, CINEMA and USER 1, 2 and 3).

DYNAMIC
Select for enhanced picture sharpness in bright environment.

STANDARD
Recommended for normal viewing condition in your home.

CINEMA
Select for soft, film-like picture in dark environment.

USER 1, 2 and 3
You can adjust the quality of the picture to suit your taste and store the settings into the selected memory of the projector. Press one of the USER 1, 2 and 3 buttons, then adjust the picture by using the buttons on the remote control or the menus. (pages 30 and 37) The settings are stored, and you can view the picture with the adjusted picture quality by pressing the button.
Adjusting the Picture Quality

You can adjust the picture quality that suits your taste by selecting the adjustment items with the remote control. The adjusted data can be stored in each picture mode.

1 Press ADJ PIC.

Each time you press the button, the following adjustment windows* are displayed in sequence.

Contrast → Brightness → Color → Hue → Sharpness

Lamp Control

Black Level Adj.

Advanced Iris ← DDE ← Color Temp. ← Gamma Correction

* Some of the above adjustment windows will not be displayed depending on the input signal. For details, see “Input Signals and Adjustable/setting Items.” (page 54)
Example: To adjust the contrast

For details on each adjustment, see “Adjust Picture” in the Picture menu. (page 37)

2 Make the setting or adjustment on an item.

When changing the adjustment level
To increase the value, press or .
To decrease the value, press or .

When changing the setting
Press or to change the setting.

To adjust contrast and brightness
Press CONTRAST +/- on the remote control to adjust the contrast.
Press BRIGHT +/- on the remote control to adjust the brightness.
Adjusting the Picture Using Real Color Processing

The Real Color Processing (RCP) feature allows you to adjust the color and hue of each target of the projected picture you specify independently. You can thus obtain a picture more suitable to your taste.

Tip
Freeze the scene of the video source when you are adjusting the picture using Real Color Processing.

1 Press RCP on the remote control.
2 Press ↑ or ↓ to select “User 1,” “User 2” or “User 3,” then press →.
   The RCP (Real Color Processing) window appears.
3 Select the target color you want to adjust.
   Repeat steps ① and ② described below to specify the target color.
   ① Press ↑ or ↓ to select “Color Select,” then press ← or → to select the color you want to adjust among “Red,” “Magenta,” “Blue,” “Cyan,” “Green” and “Yellow.”
   Only the portions that correspond to the specified color will be colored and the other portions will be displayed in black and white. The reference palette in the RCP window also shows the adjustable colors. Decide the target while you are watching the projected picture, and watching the reference palette as a guide.
2 Press ↑ or ↓ to select “Position” or “Range,” and specify it more delicate color and color range you want to adjust using ← or →.

4 Adjust the color of the specified portions.
   Press ↑ or ↓ to select “RCP Color” or “RCP Hue,” then adjust the color or hue of the portions selected in step 3 to suit your taste using ← or → while watching the projected picture. The picture is returned to normal color during adjustment.

5 After the adjustment is complete, press RCP.
   The RCP window disappears and the normal picture is restored. The adjusted data will be stored in a memory selected in step 2 and will be recalled later.

Tip
There are some limitations on selection of position and range.
Using the Menus

This section describes how to make various adjustments and settings using the menus.

Operation through the Menus

The projector is equipped with an on-screen menu for making various adjustments and settings. Some of the adjustable/setting items are displayed in a pop-up menu, in a setting menu or adjustment menu with no main menu, or in the next menu window. If you select an item name followed by an arrow (►), the next menu window with setting items appears.

To change the on-screen menu language, see “Selecting the Menu Language.” (☞ page 21)

1 Press MENU.
   The menu window appears.

1 Press MENU.
   The menu window appears.
2 Press ↑ or ↓ to select a menu item, and press → or ENTER.
The items that can be set or adjusted with the selected menu appear. The item presently selected is shown as a yellow button.

3 Press ↑ or ↓ to select an item you want to set or adjust and press → or ENTER.
The setting items are displayed in a pop-up menu, in a setting menu, in an adjustment menu or in the next menu window.
4 Make the setting or adjustment on an item.

When changing the adjustment level
   To increase the value, press \( \uparrow \) or \( \rightarrow \).
   To decrease the value, press \( \downarrow \) or \( \leftarrow \).
   Press ENTER to restore the original screen.

When changing the setting
   Press \( \uparrow \) or \( \downarrow \) to change the setting.
   Press ENTER to restore the original screen.
   You can restore the original screen using \( \leftarrow \) depending on the selected item.

To clear the menu
Press MENU.

To reset the items that have been adjusted
Select the item you want to reset, then press RESET.
   “Complete! ” appears on the screen and the setting is reset to its factory preset value.
   Items that can be reset are:
   • “Contrast,” “Brightness,” “Color,” “Hue,” “Sharpness” and “Color Temp.” in “Adjust Picture” and “RCP” of the Picture menu
   • “Dot Phase,” “H Size” and “Shift” in “Adjust Signal” of the Signal menu
   • “V Keystone” of the Installation menu

Items that cannot be adjusted
Adjustable items are limited depending on the input signals. The items that cannot be adjusted or set do not appear in the menu. (page 54)
The Picture menu is used for adjusting the picture.

### Adjust Picture menu

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Picture Mode</strong></td>
<td>You can select picture viewing mode that best suits the type of picture or the environment. <strong>Dynamic</strong>: Select for enhanced picture contrast and sharpness. <strong>Standard</strong>: Recommended for normal viewing condition. Also select to reduce roughness when viewing the picture with Dynamic. <strong>Cinema</strong>: Select for soft, film-like picture. <strong>User 1, 2 and 3</strong>: You can adjust the quality of the picture to suit your taste and store the settings. Once the settings are stored, you can view the picture with the adjusted picture quality by pressing the PICTURE MODE button on the remote control.</td>
</tr>
</tbody>
</table>
| **To store the settings** | 1. Select User 1, User 2 or User 3.  
2. Adjust the items you want in the menus. 
   Items that can be stored are: “Adjust Picture” items and “Wide Mode” setting. |
| **Tip** | You can also adjust the picture quality in “Dynamic,” “Standard” or “Cinema,” and store the settings. To reset to the factory setting, press RESET. |

### Adjust Picture

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contrast</strong></td>
<td>The higher the setting, the greater the contrast. The lower the setting, the lower the contrast.</td>
</tr>
<tr>
<td><strong>Brightness</strong></td>
<td>The higher the setting, the brighter the picture. The lower the setting, the darker the picture.</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>The higher the setting, the greater the intensity. The lower the setting, the lower the intensity.</td>
</tr>
<tr>
<td><strong>Hue</strong></td>
<td>The higher the setting, the more greenish the picture becomes. The lower the setting, the more purplish the picture becomes.</td>
</tr>
<tr>
<td><strong>Sharpness</strong></td>
<td>The higher the setting, the sharper the picture. The lower the setting, the softer the picture.</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Black Level Adj (Adjust)| Emphasizes black color to produce a bolder “dynamic” picture. Set according to the input signal source.  
**High:** Gives higher emphasis to the black color.  
**Low:** Gives lower emphasis to the black color.  
**Off:** Cancels this feature.                                                                                                                                                                                                                                                   |
| Gamma Correction        | Selects a favorite tone from three options.  
**Off:** The feature does not function.  
**Gamma1:** Makes the dark portion of a scene a little brighter.  
**Gamma2:** Makes the dark portion of a scene brighter than that in Gamma1.  
**Gamma3:** Makes the whole scene brighter.  
**For the VPL-HS51 only**  
Using the specified controller, “ImageDirector*” supplied as a CD-ROM allows you to adjust, set and store a favorite tone. Adjustable range is limited. *For detailed operations of “ImageDirector,” refer to the Operating Instructions stored in the supplied CD-ROM. “ImageDirector” cannot be used with Macintosh. |
| Color Temp.             | **High:** Gives the white colors a blue tint.  
**Middle:** Gives the white colors a neutral tint.  
**Low:** Gives the white colors a red tint.  
**Custom1, Custom2, Custom3:** Enables you to adjust, set and store the favorite color temperature.                                                                                                                                                                             |
| DDE (Dynamic Detail Enhancer) | **Off:** Plays a video signal in an interlace format without converting.  
**Progressive:** Converts an interlace format video signal to a progressive format.  
**Film:** Normally, select this option. Reproduces the 2-3 Pull-Down film sources with smooth picture movement. When the video signal with a format other than the 2-3 Pull-Down is input, “Progressive” is automatically selected. |
| Cinema Black Pro        | **Advanced Iris**  
Switches the iris function during projection.  
**Off:** Normal contrast.  
**On:** Enhances the black by emphasizing the contrast.  
**Auto:** Automatically switches to an optimum iris according to a projected scene. The contrast of the scene is emphasized most.  
**Lamp Control**  
Switches the lamp wattage during projection.  
**High:** Normal wattage.  
**Low:** Enhances the black by reducing the lamp wattage.  
**Tip**  
If “Lamp Control” is set to “Low,” the next time the power is turned on, the lamp will use the “High” setting initially, and then go to “Low.”                                                                                                                                                                           |
### Item Description

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
</table>
| RCP (Real Color Processing) | You can adjust the color and hue of each selected portion of the picture independently.  
**Off:** Cancels this feature.  
**User 1, 2 and 3:** You can adjust the picture using Real Color Processing and store the settings. Once the settings are stored, you can view the picture with the adjusted picture quality.  
For details, see “Adjusting the Picture Using Real Color Processing.” ([page 32](#)) |
The Signal menu is used to adjust the input signal. You can adjust the size of the picture, and select wide screen mode, etc.

### Adjust Signal menu

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjust Signal</td>
<td>Adjusts the picture from a computer for clearer picture after it is adjusted by pressing the APA button.</td>
</tr>
<tr>
<td>Dot Phase</td>
<td>Adjusts the horizontal size of the picture from a computer. The higher the setting, the wider the picture. The lower the setting, the narrower the picture.</td>
</tr>
<tr>
<td>H Size</td>
<td>As the setting for H (horizontal) increases, the picture moves to the right, and as the setting decreases, the picture moves to the left. Use ← or → to adjust the horizontal position. As the setting for V (vertical) increases, the picture moves up, and as the setting decreases, the picture moves down. Use ↑ or ↓ to adjust the vertical position.</td>
</tr>
<tr>
<td>Wide Mode</td>
<td>You can select the wide screen mode. <strong>Full:</strong> A picture squeezed to 4:3 is displayed with the correct aspect. <strong>Normal:</strong> The 4:3 aspect ratio picture is displayed to fill the vertical screen size. <strong>Wide Zoom:</strong> The 4:3 aspect ratio picture is enlarged and the upper and lower portions are compressed to fit the 16:9 screen. <strong>Zoom:</strong> The 4:3 aspect ratio picture is enlarged vertically and horizontally at the equal ratio to fill the 16:9 screen. <strong>Subtitle:</strong> The subtitle area is compressed and displayed at the lower part of the screen.</td>
</tr>
<tr>
<td>V Position</td>
<td>Adjusts the vertical position of the picture in wide screen mode. As the setting increases, the picture moves up. As the setting decreases, the picture moves down. <strong>Note</strong> This item is adjustable only when “Zoom” or “Subtitle” is selected.</td>
</tr>
<tr>
<td>Title Area</td>
<td>Adjusts the subtitle area. As the setting increases, the subtitle area moves up. As the setting decreases, the subtitle area moves down. <strong>Note</strong> This item is adjustable only when “Subtitle” is selected.</td>
</tr>
</tbody>
</table>
The Function menu is used for changing the settings of the function of the projector.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart APA</td>
<td>With this item set to <strong>On</strong>, the APA function works automatically for a signal input from a computer so that the picture can be seen clearly. You can also activate the APA function by pressing the APA button on the remote control. <strong>Tip</strong> The APA (Auto Pixel Alignment) automatically adjusts the input signal from a computer so that the picture can be seen clearly.</td>
</tr>
<tr>
<td>Auto Input Search</td>
<td>When set to <strong>On</strong>, the projector detects whether Component, HDMI, Video, S Video or Input-A signal is input when the INPUT button is pressed. Then the detected input channel is automatically displayed. Set to <strong>Off</strong> when you want to select the channel with no input signal, or you want to switch the channel manually.</td>
</tr>
<tr>
<td>Standby Mode</td>
<td>When set to <strong>Low</strong>, the power consumption in standby mode is lowered.</td>
</tr>
<tr>
<td>Power Saving</td>
<td>When set to <strong>On</strong>, the POWER SAVING indicator lights. The projector goes into power saving mode if no signal is input for 10 minutes, and the lamp goes out and the cooling fan keeps running. In power saving mode, no button functions for the first 60 seconds, then it is cancelled when a signal is input or any button is pressed. If you do not set the projector to power saving mode, select <strong>Off</strong>.</td>
</tr>
</tbody>
</table>
The Installation menu is used for changing the installation settings.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>V Keystone</td>
<td>Corrects the vertical trapezoidal distortion of the picture. Sets a lower value (− direction) when the bottom of the trapezoid is longer than the top ( ). Sets a higher value (+ direction) when the top of the trapezoid is longer than the bottom ( ).</td>
</tr>
<tr>
<td>Note</td>
<td>Depending on the picture position adjusted with the lens shift feature, the aspect ratio of the picture may change from the original or picture distortion may occur with V Keystone adjustment.</td>
</tr>
<tr>
<td>Image Flip</td>
<td>Flips the picture on the screen horizontally and/or vertically.</td>
</tr>
<tr>
<td>Off:</td>
<td>The picture does not flip.</td>
</tr>
<tr>
<td>HV:</td>
<td>Flips the picture horizontally and vertically.</td>
</tr>
<tr>
<td>H:</td>
<td>Flips the picture horizontally.</td>
</tr>
<tr>
<td>V:</td>
<td>Flips the picture vertically.</td>
</tr>
<tr>
<td>Background</td>
<td>Selects the background color of the screen when no signal is input. You can select “Black” or “Blue.”</td>
</tr>
<tr>
<td>Illumination</td>
<td>Turns on the illumination on the top panel of the projector when set to On. It turns off when set to Off.</td>
</tr>
<tr>
<td>High Altitude Mode</td>
<td>Off: Use this setting when using the projector at normal altitudes. On: Use this setting when using the projector at an altitude of 1,500 m or higher.</td>
</tr>
<tr>
<td>Network Setting (VPL-HS51 only)</td>
<td>Displays settings in the network configuration of this projector.</td>
</tr>
<tr>
<td>Notes</td>
<td>You cannot change the network settings with this projector. For information on networking, consult with qualified Sony personnel.</td>
</tr>
<tr>
<td></td>
<td>Be sure to set “Standby Mode” in the Function menu to “Standard” when you use the network function. (page 41)</td>
</tr>
</tbody>
</table>
The Setup menu is used to change the factory preset settings.

<table>
<thead>
<tr>
<th>Items</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>Set to <strong>Off</strong> to turn off the on-screen displays except for the menus, message when turning off the power, and warning messages.</td>
</tr>
<tr>
<td>Language</td>
<td>Selects the language used in the menu and on-screen displays. Available languages are: English, Dutch, French, Italian, German, Spanish, Portuguese, Russian, Swedish, Norwegian, Japanese, Chinese (Simplified Chinese), Chinese (Traditional Chinese), Korean and Thai.</td>
</tr>
</tbody>
</table>
| Input-A Signal Sel. | Selects the type of signal input from the equipment by selecting “Input-A” with the INPUT button.  
**Auto:** Selects the input signal type automatically.  
**Computer:** Inputs the signal from a computer.  
**Component:** Inputs the component signal from a DVD player/recorder, digital tuner, etc.  
**Video GBR:** Inputs the signal from a TV game or HDTV broadcast.  
**Note**  
When the input signal is not displayed correctly with this item set to Auto, select the item according to the input signal. |
| Color System   | Select the color system of the input signal.  
**Auto:** Selects the color system of the input signal automatically from among NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PAL-N or PAL60.  
“**NTSC3.58**”–“**PAL-N**”: Sets the color system to the selected system manually. |
The Information menu is used to display the horizontal and vertical frequencies of the input signal, used time of the lamp, etc.

### Item Description

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>fH</td>
<td>Displays the horizontal frequency of the input signal.</td>
</tr>
<tr>
<td>fV</td>
<td>Displays the vertical frequency of the input signal.</td>
</tr>
<tr>
<td>(Memory No.)</td>
<td>Displays the preset memory number of the input signal.</td>
</tr>
<tr>
<td>(Signal type)</td>
<td>Displays the type of the input signal.</td>
</tr>
<tr>
<td>Lamp Timer</td>
<td>Indicates how long the lamp has been turned on.</td>
</tr>
</tbody>
</table>

**Note**

You cannot change the displays above.

### About the Preset Memory No.

This projector has 32 types of preset data for input signals (the preset memory). When the preset signal is input, the projector automatically detects the signal type and recalls the data for the signal from the preset memory to adjust it to an optimum picture. The memory number and signal type of that signal are displayed in the Information menu.

You can also adjust the preset data through the Signal menu.

This projector also has 20 types of user memories for Input-A into which you can save the setting of the adjusted data for an unpreset input signal.

When an unpreset signal is input for the first time, a memory number is displayed as 0. When you adjust the data of the signal in the Signal menu, it will be registered to the projector. If more than 20 user memories are registered, the newest memory always overwrites the oldest one.

See the chart on page 56 to find if the signal is registered to the preset memory.

**Note**

When the aspect ratio of input signal does not match the screen size, a part of the screen is displayed in black.
Adjusting Picture Quality of a Signal from the Computer

You can automatically adjust to obtain the clearest picture when projecting a signal from the computer.

1 Project a still picture from the computer.
2 Press the APA (Auto Pixel Alignment) button.
   When the picture is adjusted properly, “complete!” appears on the screen.

Notes
- When “Smart APA” is set to “On,” the APA function is automatically activated.
- Press the APA button when the image appears on the whole display area of the computer. If there are black edges around the image, the APA function will not function properly and the image may extend beyond the screen.
- If you switch the input signal or re-connect a computer, press the APA button again to get the suitable picture.
- To restore the original screen, press the APA button again during the adjustment.
- When a signal of which the timing is the same as the “Memory No.37” or the “Memory No.55” signal (refer to the “Preset Signals” chart) is input, if the polarity of the synchronized signal is different, the input signal may be misjudged and the image may not appear properly (incorrect aspect ratio or lack of a part of the image). In this case, press the APA button to adjust the image. This APA processing time may be longer than the APA processing time of signal in another case. If the image does not still appear properly, input the signal as described in the following example, then press the APA button again.

Example:
Display of multiple icons or Windows bar in the lower part on a whitish wallpaper
- The picture may not be adjusted properly depending on the types of input signals.
- Adjust the items in the Signal menu when you adjust the picture manually. (page 40)
This section describes how to solve the problems, how to replace a lamp and air filter, etc.

**Troubleshooting**

If the projector appears to be operating erratically, try to diagnose and correct the problem using the following instructions. If the problem persists, consult with qualified Sony personnel.

### Power

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause and Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>The power is not turned on.</td>
<td>➔ Wait for about one minute before turning on the power. (☞ page 25)</td>
</tr>
<tr>
<td></td>
<td>➔ Close the lamp cover securely. (☞ page 49)</td>
</tr>
<tr>
<td></td>
<td>➔ Close the air filter cover securely. (☞ page 50)</td>
</tr>
</tbody>
</table>

### Picture

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause and Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>No picture.</td>
<td>➔ Check that the proper connections have been made. (☞ page 13)</td>
</tr>
<tr>
<td></td>
<td>➔ Select the input source correctly using the INPUT button. (☞ page 24)</td>
</tr>
<tr>
<td></td>
<td>➔ Set the computer signal to output from an external monitor.</td>
</tr>
<tr>
<td></td>
<td>➔ Set the computer signal to output only to an external monitor.</td>
</tr>
<tr>
<td></td>
<td>➔ Select “Computer,” “Component” or “Video GBR” for “Input-A Signal Sel.” in the Setup menu according to the input signal. (☞ page 43)</td>
</tr>
<tr>
<td>The picture from the INPUT A connector is colored strange.</td>
<td>➔ Select “Computer,” “Component” or “Video GBR” for “Input-A Signal Sel.” in the Setup menu according to the input signal. (☞ page 43)</td>
</tr>
<tr>
<td>The picture from the VIDEO or S VIDEO INPUT connector is colored strange.</td>
<td>➔ Adjust the picture in the “Adjust Picture” of the Picture menu (☞ page 37)</td>
</tr>
<tr>
<td></td>
<td>➔ Set “Color System” in the Setup menu to match the color system being input. (☞ page 43)</td>
</tr>
<tr>
<td>The picture is too dark.</td>
<td>➔ Adjust the contrast or brightness in the “Adjust Picture” of the Picture menu properly. (☞ page 37)</td>
</tr>
<tr>
<td>The picture is not clear.</td>
<td>➔ Adjust the focus with the focus ring. (☞ page 25)</td>
</tr>
<tr>
<td></td>
<td>➔ Condensation has occurred on the lens. Leave the projector for about two hours with the power on.</td>
</tr>
<tr>
<td>The picture flickers.</td>
<td>➔ Adjust “Dot Phase” for “Adjust Signal” in the signal menu properly. (☞ page 40)</td>
</tr>
</tbody>
</table>
On-screen display

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause and Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-screen display does not appear.</td>
<td>➔ Set “Status” in the Setup menu to “On.” (page 43)</td>
</tr>
</tbody>
</table>

Remote control

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause and Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>The remote control does not work.</td>
<td>➔ Batteries could be weak. Replace with new batteries. (page 7)</td>
</tr>
<tr>
<td></td>
<td>➔ Insert the batteries with correct polarities. (page 7)</td>
</tr>
</tbody>
</table>

Warning Indicators

The LAMP/COVER or TEMP/FAN indicator on the control panel lights up or flashes if there is any trouble with your projector.

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause and Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAMP/COVER flashes.</td>
<td>➔ Attach the lamp cover or the air filter cover securely. (pages 49 and 50)</td>
</tr>
<tr>
<td>LAMP/COVER lights up.</td>
<td>➔ The lamp has reached the end of its life. Replace the lamp. (page 49)</td>
</tr>
<tr>
<td></td>
<td>➔ The lamp becomes a high temperature. Wait until the lamp cools, and then turn on the power again. (page 25)</td>
</tr>
<tr>
<td>TEMP/FAN flashes.</td>
<td>➔ The fan is broken. Consult with qualified Sony personnel.</td>
</tr>
<tr>
<td>TEMP/FAN lights up.</td>
<td>➔ The internal temperature is unusually high. Check to see if nothing is blocking the ventilation holes or whether or not the projector is being used at high altitudes.</td>
</tr>
<tr>
<td>LAMP/COVER and TEMP/FAN light up.</td>
<td>➔ Disconnect the AC power cord, connect it, then turn on the power again. If the indicators still light up, the electrical system breaks down. Consult with qualified Sony personnel.</td>
</tr>
</tbody>
</table>
Message Lists

**Warning messages**

<table>
<thead>
<tr>
<th>Message</th>
<th>Cause and Remedy</th>
</tr>
</thead>
</table>
| High temp.! Lamp off in 1 min.              | ➡️ Turn off the power.  
➡️ Check to see if nothing is blocking the ventilation holes.                                                                                           |
| Frequency is out of range!                  | ➡️ Input a signal that is within the acceptable range of the frequency.  
➡️ Set the output signal on an external monitor of the connected computer to SVGA.  
➡️ Set “Input-A Signal Sel.” in the Setup menu to “Computer”. ([page 43])                                                                                   |
| Please check Input-A Signal Sel.            | ➡️ Set “Input-A Signal Sel.” in the Setup menu to “Computer” when RGB signal is input from the computer. ([page 43])                                                                 |
| Please replace the LAMP.                    | ➡️ It is time to replace the lamp. Replace the lamp. ([page 49])                                                                                      |
| Please replace the filter.                  | ➡️ It is time to replace the air filter. Replace the air filter. ([page 50])                                                                             |
| High temp.! Probably use in high altitude.  | ➡️ When using the projector at an altitude of 1,500 m or higher: select “Yes” to set to “High Altitude Mode”. ([page 42])                             |
|                                             | ➡️ If this message is displayed when using the projector at an altitude of less than 1,500 m: check to see if nothing is blocking the ventilation holes. |

**Caution messages**

<table>
<thead>
<tr>
<th>Message</th>
<th>Cause and Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>×=center</td>
<td>➡️ No signal is input in the selected input. Check connections. ([page 13])</td>
</tr>
<tr>
<td>Not applicable!</td>
<td>➡️ Press the appropriate button.</td>
</tr>
</tbody>
</table>
Replacing the Lamp

The lamp used for the light source has a certain life. When the lamp dims, the color balance of the picture becomes strange, or “Please replace the LAMP.” appears on the screen, the lamp may be exhausted. Replace the lamp with a new one (not supplied). Use LMP-H130 Projector Lamp as the replacement lamp.

When replacing the lamp after using the projector
Turn off the projector, then unplug the power cord. Wait for at least an hour for the lamp to cool.

Caution
The lamp becomes a high temperature after turning off the projector with the I/$(on/standby) switch. If you touch the lamp, you may scald your finger. When you replace the lamp, wait for at least an hour for the lamp to cool. When removing the lamp unit, make sure it remains horizontal, then pull straight up. Do not tilt the lamp unit. If you pull out the lamp unit while tilted and if the lamp breaks, the pieces may scatter, causing injury.

1 Turn off the projector and unplug the AC power cord.
2 Place a protective sheet (cloth) beneath the projector. Turn the projector over so you can see its underside.

Note
Be sure that the projector is stable after turning it over.

3 Loosen a screw with the Philips screwdriver 1, then open the lamp cover 2.

4 Loosen the three screws on the lamp unit with the Philips screwdriver 1. Pull out the lamp unit by the handle 2.

5 Insert the new lamp all the way in until it is securely in place 1. Tighten the three screws 2. Fold down the handle.

6 Close the lamp cover and tighten the screw.

7 Turn the projector back over.

8 Connect the power cord and set the projector to standby mode.
9 Press the following buttons on the remote control in the following order for less than five seconds each: RESET, ◀, ▶, ENTER.

Notes
- Do not put your hands into the lamp replacement spot, or not fall any liquid or object into it to avoid electrical shock or fire.
- Be sure to use the LMP-H130 Projector Lamp for replacement. If you use lamps other than LMP-H130, the projector may cause a malfunction.
- Be sure to turn off the projector and unplug the power cord before replacing the lamp.
- The projector will not turn on unless the lamp is securely installed in place.
- The projector will not turn on unless the lamp cover is securely closed.

Disposal of the used lamp
For the customers in the USA
This product contains mercury. Disposal of this product may be regulated if sold in the United States. For disposal or recycling information, please contact your local authorities or Electronics Industries Alliance (http://www.eiae.org).

Replacing the Air Filter

The air filter should be replaced periodically. When “Please replace the filter.” appears on the screen, replace the air filter immediately.

Notes
- Replacing the air filter is very important to maintain the high efficiency of the projector and to prevent a malfunction. When the replacement message appears on the screen, replace the air filter without delay. It is recommended to replace the air filter approximately every 1000 hours of use.
- When removing the air filter from the projector, be careful that no dust or object gets into the inside of the projector.

1 Turn off the projector, then unplug the AC power cord.

2 Open the filter cover toward you, while pushing the three filter lock knobs upward.

3 Remove the air filter from the projector by holding the tab on the filter.
4 Insert the new air filter into the projector.

5 Replace the filter cover.

**Note**
The projector will not turn on unless the filter cover is securely closed.
# Specifications

## System

**Projection system**  
3 LCD panels, 1 lens, projection system

**LCD panel**  
0.73-inch TFT LCD panel with micro-lens array, 2,764,800 pixels (921,600 pixels × 3)

**Lens**  
1.6 times zoom lens (manual)  
f21.3 – 34.1 mm/F2.4 – 3.16

**Lamp**  
135 W UHP type

**Projection picture size**  
40 to 200 inches (measured diagonally)

**Color system**  
NTSC 3.58/PAL/SECAM/NTSC4.43/PAL-M/PAL-N/PAL60 system, switched automatically/ manually (PAL60 system not switched manually)

**Acceptable video signals**  
15 kHz RGB/component 50/60 Hz, Progressive component 50/60 Hz, DTV (480/60i, 575/50i, 480/60p, 575/50p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/24PsF), Composite video, Y/C video

**Acceptable computer signals**  
fH: 19 to 72 kHz  
fV: 48 to 92 Hz  
Maximum resolution WXGA 1280 × 768, fV: 60 Hz

## Input

**Video input**  
VIDEO: phono type  
Composite video: 1 Vp-p±2 dB sync negative (75 ohms terminated)

**S VIDEO**  
Y/C mini DIN 4-pin type  
Y (luminance): 1 Vp-p±2 dB sync negative (75 ohms terminated)  
C (chrominance): burst 0.286 Vp-p±2 dB (NTSC) (75 ohms terminated)  
burst 0.3 Vp-p±2 dB (PAL) (75 ohms terminated)

**Y/Pb/Cb/Pb/Cr**  
Component: phono type  
G with Sync/Y: 1 Vp-p±2dB sync negative (75 ohms terminated)

**HDMI**  
Digital RGB/Y/Cb(Pb)Cr(Ps)

**INPUT A**  
HD D-sub 15-pins

**TRIGGER**  
Minijack  
Power on: DC 12 V, output impedance: 4.7 kilohms  
Power off: 0 V

**Ethernet (VPL-HS51 only)**  
RJ-45  
10BASE-T/100BASE-TX

## General

**Dimensions**  
348 × 135 × 360 mm  
(13 5/8 × 5 7/8 × 14 5/8 inches) (w/h/d)

**Mass**  
VPL-HS50:  
 Approx. 5.6 kg (12 lb 6 oz)

VPL-HS51:  
 Approx. 5.7 kg (12 lb 6 oz)

**Power requirements**  
AC 100 to 240 V, 0.8–1.95 A, 50/60 Hz

**Power consumption**  
VPL-HS50:  
Max. 195 W  
Standby mode: 3 W  
ECO mode: 0.5 W

VPL-HS51:  
Max. 195 W  
Standby mode: 4.5 W  
ECO mode: 0.5 W

**Operating temperature**  
0°C to 35°C (32°F to 95°F)
Specifications

Operating humidity
35% to 85% (no condensation)

Storage temperature
–20°C to 60°C (–4°F to 140°F)

Storage humidity
10% to 90%

**Supplied accessories**

- Remote control RM-PJHS50 (1)
- Size AA (R6) batteries (2)
- AC power cord (1)
- Air filter (for replacement) (1)
- Operating Instructions (1)
- CD-ROM (Application software and Operating Instructions) (VPL-HS51 only)

Design and specifications are subject to change without notice.

Safe regulations
VPL-HS50:
UL60950, CSA No. 950, FCC class B, IC class B, EN60950 (NEMKO), CE, C-Tick

VPL-HS51:
UL60950, FCC class B

**Optional accessories**

- Projector Lamp LMP-H130 (for replacement)
- Air filter PK-HS10FL (for replacement)
- Projector Suspension Support PSS-610
Warning on power connection
Use a proper power cord for your local power supply.

<table>
<thead>
<tr>
<th>Specification</th>
<th>The United States, Canada</th>
<th>Continental Europe</th>
<th>UK, Ireland, Australia, New Zealand</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plug type</td>
<td>VM0233</td>
<td>290B</td>
<td>YP-12A</td>
<td>COX-07</td>
</tr>
<tr>
<td>Female end</td>
<td>VM0089</td>
<td>386A</td>
<td>YC-13B</td>
<td>COX-02</td>
</tr>
<tr>
<td>Cord type</td>
<td>SJT</td>
<td>SJT</td>
<td>H05VV-F</td>
<td>H05VV-F</td>
</tr>
<tr>
<td>Rated Voltage &amp; Current</td>
<td>10A/125V</td>
<td>10A/125V</td>
<td>10A/250V</td>
<td>10A/250V</td>
</tr>
<tr>
<td>Safety approval</td>
<td>UL/CSA</td>
<td>UL/CSA</td>
<td>VDE</td>
<td>VDE</td>
</tr>
</tbody>
</table>

* Use a rated plug that complies with the regulation of each country and the specifications.

**Input Signals and Adjustable/setting Items**

Some of the items in the menus cannot be adjusted depending on the input signal. The following tables indicate them.

The items that cannot be adjusted are not displayed in the menu.

**Adjust Picture menu**

<table>
<thead>
<tr>
<th>Item</th>
<th>Video or S video (Y/C)</th>
<th>Component</th>
<th>Video GBR</th>
<th>Computer</th>
<th>HDMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contrast</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Brightness</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Color</td>
<td>● (except for B &amp; W)</td>
<td>●</td>
<td>●</td>
<td>–</td>
<td>●</td>
</tr>
<tr>
<td>Hue</td>
<td>● (NTSC3.58/NTSC4.43 only, except for B &amp; W)</td>
<td>●</td>
<td>●</td>
<td>–</td>
<td>●</td>
</tr>
<tr>
<td>Sharpness</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>–</td>
<td>●</td>
</tr>
<tr>
<td>Black Level Adj</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>–</td>
<td>●</td>
</tr>
<tr>
<td>Gamma Correction</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Color Temp.</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>
### DDE

<table>
<thead>
<tr>
<th>Item</th>
<th>Input signal</th>
<th>Video or S video (Y/C)</th>
<th>Component</th>
<th>Video GBR</th>
<th>Computer</th>
<th>HDMI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>–</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(preset memory numbers 3, 4, 7, 8, 9 only)</td>
<td>(preset memory numbers 3, 4, 7, 8, 9 only)</td>
<td>–</td>
<td>(preset memory numbers 3, 4, 7, 8, 9 only)</td>
<td></td>
</tr>
</tbody>
</table>

- ●: Adjustable/can be set
- –: Not adjustable/cannot be set

### Signal menu

<table>
<thead>
<tr>
<th>Item</th>
<th>Input signal</th>
<th>Video or S video (Y/C)</th>
<th>Component</th>
<th>Video GBR</th>
<th>Computer</th>
<th>HDMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dot Phase</td>
<td></td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>●</td>
<td>–</td>
</tr>
<tr>
<td>H size</td>
<td></td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>●</td>
<td>–</td>
</tr>
<tr>
<td>Shift</td>
<td></td>
<td>–</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(preset memory numbers 5, 6, 7, 8, 9, 10, 11 only)</td>
<td>(preset memory numbers 5, 6, 7, 8, 9, 10, 11 only)</td>
<td>●</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Wide Mode</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>–</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(preset memory numbers 3, 4, 5, 6 only)</td>
<td>(preset memory numbers 3, 4, 5, 6 only)</td>
<td>–</td>
<td>(preset memory numbers 3, 4, 5, 6 only)</td>
<td></td>
</tr>
</tbody>
</table>

- ●: Adjustable/can be set
- –: Not adjustable/cannot be set
## Preset Signals

<table>
<thead>
<tr>
<th>Memory No.</th>
<th>Preset signal</th>
<th>fH (kHz)</th>
<th>fV (Hz)</th>
<th>Sync</th>
<th>H Size</th>
<th>HDMI input</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>VIDEO/60</td>
<td>15.734</td>
<td>59.940</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2</td>
<td>VIDEO/50</td>
<td>15.625</td>
<td>50.000</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>3</td>
<td>480/60i</td>
<td>15.734</td>
<td>59.940</td>
<td>SonG/Y or composite sync</td>
<td>–</td>
<td>●</td>
</tr>
<tr>
<td>4</td>
<td>575/50i</td>
<td>15.625</td>
<td>50.000</td>
<td>SonG/Y or composite sync/ composite video</td>
<td>–</td>
<td>●</td>
</tr>
<tr>
<td>5</td>
<td>480/60p (Progressive NTSC)</td>
<td>31.470</td>
<td>60.000</td>
<td>SonG/Y</td>
<td>–</td>
<td>●</td>
</tr>
<tr>
<td>6</td>
<td>575/50p (Progressive PAL)</td>
<td>31.250</td>
<td>50.000</td>
<td>SonG/Y</td>
<td>–</td>
<td>●</td>
</tr>
<tr>
<td>7</td>
<td>1035/60i, 1080/60i</td>
<td>33.750</td>
<td>60.000</td>
<td>SonG/Y</td>
<td>–</td>
<td>●</td>
</tr>
<tr>
<td>8</td>
<td>1080/50i</td>
<td>28.130</td>
<td>50.000</td>
<td>SonG/Y</td>
<td>–</td>
<td>●</td>
</tr>
<tr>
<td>9</td>
<td>1080/24PsF</td>
<td>27.000</td>
<td>48.000</td>
<td>SonG/Y</td>
<td>–</td>
<td>●</td>
</tr>
<tr>
<td>10</td>
<td>720/60p</td>
<td>45.000</td>
<td>60.000</td>
<td>SonG/Y</td>
<td>–</td>
<td>●</td>
</tr>
<tr>
<td>11</td>
<td>720/50p</td>
<td>37.500</td>
<td>50.000</td>
<td>SonG/Y</td>
<td>–</td>
<td>●</td>
</tr>
<tr>
<td>21</td>
<td>640 × 350</td>
<td>31.469</td>
<td>70.086</td>
<td>H-pos, V-neg</td>
<td>800</td>
<td>–</td>
</tr>
<tr>
<td>22</td>
<td>VESA 85 (VGA350)</td>
<td>37.861</td>
<td>85.080</td>
<td>H-pos, V-neg</td>
<td>832</td>
<td>–</td>
</tr>
<tr>
<td>23</td>
<td>NEC PC98</td>
<td>24.823</td>
<td>56.416</td>
<td>H-neg V-neg</td>
<td>848</td>
<td>–</td>
</tr>
<tr>
<td>24</td>
<td>VGA-2 (TEXT)/ VESA70</td>
<td>31.469</td>
<td>70.086</td>
<td>H-neg V-pos</td>
<td>800</td>
<td>–</td>
</tr>
<tr>
<td>25</td>
<td>VESA 85 (VGA400)</td>
<td>37.861</td>
<td>85.080</td>
<td>H-neg, V-pos</td>
<td>832</td>
<td>–</td>
</tr>
<tr>
<td>26</td>
<td>VESA 60</td>
<td>31.469</td>
<td>59.940</td>
<td>H-neg, V-neg</td>
<td>800</td>
<td>●</td>
</tr>
<tr>
<td>27</td>
<td>Mac 13</td>
<td>35.000</td>
<td>66.667</td>
<td>H-neg, V-neg</td>
<td>864</td>
<td>–</td>
</tr>
<tr>
<td>28</td>
<td>VESA 72</td>
<td>37.861</td>
<td>72.809</td>
<td>H-neg, V-neg</td>
<td>832</td>
<td>–</td>
</tr>
<tr>
<td>29</td>
<td>VESA 75 (IBM M3)</td>
<td>37.500</td>
<td>75.000</td>
<td>H-neg, V-neg</td>
<td>840</td>
<td>–</td>
</tr>
<tr>
<td>30</td>
<td>VESA 85 (IBM M4)</td>
<td>43.269</td>
<td>85.008</td>
<td>H-neg, V-neg</td>
<td>832</td>
<td>–</td>
</tr>
</tbody>
</table>
When a signal other than the preset signals shown above is input, the picture may not appear properly.

<table>
<thead>
<tr>
<th>Memory No.</th>
<th>Preset signal</th>
<th>fH (kHz)</th>
<th>fV (Hz)</th>
<th>Sync</th>
<th>H Size</th>
<th>HDMI input</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>800 × 600 VESA 56</td>
<td>35.156</td>
<td>56.250</td>
<td>H-pos, V-pos</td>
<td>1024</td>
<td>–</td>
</tr>
<tr>
<td>32</td>
<td>VESA 60</td>
<td>37.879</td>
<td>60.317</td>
<td>H-pos, V-pos</td>
<td>1056</td>
<td>–</td>
</tr>
<tr>
<td>33</td>
<td>VESA 72</td>
<td>48.077</td>
<td>72.188</td>
<td>H-pos, V-pos</td>
<td>1040</td>
<td>–</td>
</tr>
<tr>
<td>34</td>
<td>VESA 75 (IBM M5)</td>
<td>46.875</td>
<td>75.000</td>
<td>H-pos, V-pos</td>
<td>1056</td>
<td>–</td>
</tr>
<tr>
<td>35</td>
<td>VESA 85</td>
<td>53.674</td>
<td>85.061</td>
<td>H-pos, V-pos</td>
<td>1048</td>
<td>–</td>
</tr>
<tr>
<td>36</td>
<td>832 × 624 Mac 16</td>
<td>49.724</td>
<td>74.550</td>
<td>H-neg, V-neg</td>
<td>1152</td>
<td>–</td>
</tr>
<tr>
<td>37</td>
<td>1024 × 768 VESA 60</td>
<td>48.363</td>
<td>60.004</td>
<td>H-neg, V-neg</td>
<td>1344</td>
<td>–</td>
</tr>
<tr>
<td>38</td>
<td>VESA 70</td>
<td>56.476</td>
<td>70.069</td>
<td>H-neg, V-neg</td>
<td>1328</td>
<td>–</td>
</tr>
<tr>
<td>39</td>
<td>VESA 75</td>
<td>60.023</td>
<td>75.029</td>
<td>H-pos, V-pos</td>
<td>1312</td>
<td>–</td>
</tr>
<tr>
<td>55</td>
<td>1280 × 768 WXGA 60</td>
<td>47.776</td>
<td>59.870</td>
<td>H-neg, V-pos</td>
<td>1664</td>
<td>–</td>
</tr>
<tr>
<td>56</td>
<td>1280 × 720 WXGA 60</td>
<td>44.772</td>
<td>59.855</td>
<td>H-neg, V-pos</td>
<td>1664</td>
<td>–</td>
</tr>
</tbody>
</table>

**Note**

When a signal other than the preset signals shown above is input, the picture may not appear properly.
Ceiling Installation

Use the PSS-610 Projector Suspension Support when you install the projector on a ceiling. The projection distances for ceiling installation are shown below.

- **a**: Distance between the screen and the front hole for the mount bracket on the bottom surface of the unit
- **b**: Distance from the ceiling to the bottom surface of the unit
- **x**: Distance between the ceiling and the center of the screen

**When using the 16:9 aspect ratio screen**

<table>
<thead>
<tr>
<th>Screen Size (inches)</th>
<th>40</th>
<th>60</th>
<th>80</th>
<th>100</th>
<th>120</th>
<th>150</th>
<th>180</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td>a Minimum Distance</td>
<td>1290</td>
<td>1890</td>
<td>2500</td>
<td>3100</td>
<td>3700</td>
<td>4610</td>
<td>5510</td>
<td>6120</td>
</tr>
<tr>
<td></td>
<td>(50 7/8)</td>
<td>(74 1/2)</td>
<td>(98 1/2)</td>
<td>(122 1/8)</td>
<td>(145 3/4)</td>
<td>(181 5/8)</td>
<td>(217)</td>
<td>(241)</td>
</tr>
<tr>
<td>Maximum Distance</td>
<td>1910</td>
<td>2830</td>
<td>3750</td>
<td>4660</td>
<td>5580</td>
<td>6950</td>
<td>8330</td>
<td>9240</td>
</tr>
<tr>
<td></td>
<td>(75 1/4)</td>
<td>(111 1/2)</td>
<td>(147 3/4)</td>
<td>(183 1/2)</td>
<td>(219 3/4)</td>
<td>(273 3/4)</td>
<td>(328)</td>
<td>(363 7/8)</td>
</tr>
<tr>
<td>x Minimum Distance</td>
<td>174</td>
<td>299</td>
<td>423</td>
<td>548</td>
<td>672</td>
<td>859</td>
<td>1046</td>
<td>1170</td>
</tr>
<tr>
<td>Maximum Distance</td>
<td>b+423</td>
<td>b+672</td>
<td>b+921</td>
<td>b+1170</td>
<td>b+1419</td>
<td>b+1793</td>
<td>b+2166</td>
<td>b+2416</td>
</tr>
<tr>
<td></td>
<td>(b+16 3/4)</td>
<td>(b+26 1/2)</td>
<td>(b+36 3/4)</td>
<td>(b+46 1/8)</td>
<td>(b+55 7/8)</td>
<td>(b+70 3/8)</td>
<td>(b+85 3/8)</td>
<td>(b+95 1/4)</td>
</tr>
</tbody>
</table>
| b                    | 150, 175, 200, 250, 300 mm (6, 7, 7 7/8, 9 7/8, 10 7/8, 11 7/8 inches) adjustable when using PSS-610

To calculate the installation measurements (SS: Screen Size)
- a (minimum) = \(((SS \times 21.270/0.7227) – 35.160899) \times 1.025 + 123.5
- a (maximum) = \(((SS \times 33.9409273/0.7227) – 37.678872) \times 0.975 + 123.5
- x (minimum) = \((SS/0.7227 \times 4.5) – 75
- x (maximum) = b + (SS/0.7227 \times 9) – 75
When using the 4:3 aspect ratio screen

Unit: mm (inches)

<table>
<thead>
<tr>
<th>Screen Size (inches)</th>
<th>40</th>
<th>60</th>
<th>80</th>
<th>100</th>
<th>120</th>
<th>150</th>
<th>180</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td>a Minimum Distance</td>
<td>1560</td>
<td>2300</td>
<td>3040</td>
<td>3780</td>
<td>4510</td>
<td>5620</td>
<td>6730</td>
<td>7470</td>
</tr>
<tr>
<td>a Maximum Distance</td>
<td>2320</td>
<td>3450</td>
<td>4570</td>
<td>5690</td>
<td>6810</td>
<td>8490</td>
<td>10170</td>
<td>11290</td>
</tr>
<tr>
<td>x Minimum Distance</td>
<td>230</td>
<td>382</td>
<td>535</td>
<td>687</td>
<td>839</td>
<td>1068</td>
<td>1297</td>
<td>1449</td>
</tr>
<tr>
<td>x Maximum Distance</td>
<td>b+535</td>
<td>b+839</td>
<td>b+1144</td>
<td>b+1449</td>
<td>b+1754</td>
<td>b+2211</td>
<td>b+2668</td>
<td>b+2973</td>
</tr>
<tr>
<td></td>
<td>(b+21 1/8)</td>
<td>(b+33 1/8)</td>
<td>(b+45 1/8)</td>
<td>(b+57 1/8)</td>
<td>(b+69 1/8)</td>
<td>(b+87 1/8)</td>
<td>(b+105 1/8)</td>
<td>(b+117 1/8)</td>
</tr>
</tbody>
</table>

To calculate the installation measurements (SS: Screen Size)

\[ a \text{ (minimum)} = \left( SS \times \frac{21.27}{0.5906} \right) - 35.160899 \times 1.025 + 123.5 \]

\[ a \text{ (maximum)} = \left( SS \times \frac{33.9409273}{0.5906} \right) - 37.678872 \times 0.975 + 123.5 \]

\[ x \text{ (minimum)} = SS \times \frac{4.5}{0.5906} - 75 \]

\[ x \text{ (maximum)} = b + SS \times \frac{9}{0.5906} - 75 \]

**Attaching the PSS-610 projector suspension support**

For details on installation on a ceiling, refer to the Installation manual for Dealers of the PSS-610. Make sure to consult with a qualified Sony personnel for installation.

The installation measurements are shown below when installing the projector on a ceiling.

**Top view**

Install the projector so that the center of the lens is parallel to the center of the screen.
Front view

Distance between the ceiling and the surface of the mount bracket
Using adjustment pipe (b): 150/175/200 mm (6 / 7 / 7 7/8 inches)
Using adjustment pipe (c): 250/275/300 mm (9 7/8 / 10 7/8 / 11 7/8 inches)

Side view
Location of Controls

Front

You can use the buttons on the control panel with the same names as those on the remote control to operate the projector.
Rear

Air filter cover (☞ page 50)

Ventilation holes (intake) (☞ page 9)

Air filter (☞ page 50)

TRIGGER jack (minijack)
Outputs a 12 V signal when the power is on.

USB connector (VPL-HS51 only)
Connects to a computer with the USB cable (A ↔ mini-B: not supplied) when performing “Gamma Correction” using the specified controller, “ImageDirector.” (☞ page 38)

~ AC IN socket

INPUT A connector (☞ page 16)

HDMI connector (☞ page 14)

S VIDEO INPUT connector (mini DIN 4-pin)/VIDEO INPUT jack (phono type) (☞ page 15)

Y/Pb/Cb/Pr/CR (phono type) (☞ page 13)
Bottom

Adjusters (page 20)

Lamp cover (page 49)

Ventilation holes (intake) (page 9)

Projector suspension support attachment holes (page 59)
Infrared transmitter

INPUT button (page 24)

LIGHT button Illuminates the buttons on the remote control.

PICTURE MODE buttons (page 29)

ADJ PIC button (page 30)

APA button (page 45)

WIDE MODE button (page 26)

BRIGHT +/- button (page 31)

BRIGHT CONTRAST +/– button (page 31)

REAL COLOR PROCESSING

DYNAMIC STANDARD CINEMA USER 1 USER 2 USER 3

ENTER buttons (page 22)

MENU button (page 21)

RESET button (page 36)

RCP button (page 32)
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Printed on 100% recycled paper.
Power consumption in standby is 0.5 W.
Lead-free solder is used for soldering.
Halogenated flame retardants are not used in cabinets and printed wiring boards.
Polystyrene foam for the packaging cushions is not used in packaging.
100% recycled paper is used for the carton.