Operating Instructions

Before operating the unit, please read this manual and supplied Quick Reference Manual thoroughly and retain them for future reference.

VPL-VW675ES
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Location of Controls

Front/Right Side

Warning indicators

1 ON/STANDBY indicator (page 49)
2 WARNING indicator (page 49)

Connectors

3 LAN connector (page 43)
4 USB connector (page 51)
5 HDMI 1/HDMI 2 connector (page 13)
6 REMOTE connector
   Connects to a computer, etc. for remote control.
7 IR IN connector
   Inputs signals to control the unit.
8 TRIGGER 1/TRIGGER 2 connector (page 39)

Others

9 Lamp cover (page 52)
10 Ventilation holes (exhaust)
11 Ventilation holes (intake) (page 54)
12 Remote control detector (page 8)
The buttons on the control panel have the same names as those on the remote control.

Control panel

1. I/\ (ON/STANDBY) button (page 8)
2. INPUT button (page 15)
3. MENU button (page 23)
4. ↑/↓/←/→ (arrow)/ [ (enter) button (page 23)
5. LENS button (page 8)

Others

6. Remote control detector (page 8)
7. Ventilation holes (intake) (page 54)
8. AC IN socket (page 8)
9. Projector suspension support attaching hole (page 70)
10. Front feet (adjustable) (page 11)
Remote Control

1. **LIGHT button**
   Illuminates the buttons on the remote control.

2. **Infrared transmitter**

3. **I/○ (ON/STANDBY) button**
   (page 8)

4. **INPUT button**
   (page 15)

5. **CALIBRATED PRESET buttons**
   (page 22)

6. **LENS ADJUSTMENT buttons**
   (page 9)

7. **POSITION button**
   (page 17)

8. **RESET button**
   (page 24)

9. **↑/↓/←/→ (arrow)/ ⊕ (enter) buttons**
   (page 23)

10. **MENU button**
    (page 23)

11. **MOTIONFLOW button**
    (page 27)

12. **ASPECT button**
    (page 19)

13. **COLOR SPACE button**
    (page 30)

14. **COLOR TEMP button**
    (page 27)

15. **GAMMA CORRECTION button**
    (page 28)

16. **3D button**
    (page 16)

17. **REALITY CREATION button**
    (page 26)

18. **ADVANCED IRIS button**
    (page 26)

19. **CONTRAST ENHANCER button**
    (page 26)

20. **SHARPNESS +/- button**
    (page 28)

21. **CONTRAST +/- button**
    (page 27)

22. **BRIGHTNESS +/- button**
    (page 27)
Installing the Unit

The installation distance between the unit and a screen varies depending on the size of the screen or whether or not you use the lens shift features. Install this unit so that it fits the size of your screen. For details on the distance between the unit and the screen (the projection distance) and the size of projected video, see “Projection Distance and Lens Shift Range” (page 65).

1. Position the unit so that the lens is parallel to the screen.

   **Top view**

2. Project an image on the screen and adjust the picture so that it fits the screen (page 8).

**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 unit or the zooming magnifications. This is not a malfunction of the unit.
Adjusting the Picture Position

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

Tips
- The I/O (ON/STANDBY), INPUT, MENU, and ↖/↓/←/→/□ (joystick) buttons on the side panel of the unit function the same as those on the remote control. The LENS button functions in the same way as the LENS ADJUSTMENT (FOCUS, ZOOM, SHIFT) buttons of the remote control.
- When adjusting the lens, each time you press the LENS button on the unit, the lens adjustment function switches between “Lens Focus,” “Lens Zoom” and “Lens Shift.”

FOCUS → ZOOM → SHIFT

1. After connecting the AC power cord to the unit, plug the AC power cord into a wall outlet. The ON/STANDBY indicator lights in red and the unit goes into standby mode.

2. Press the I/O (ON/STANDBY) button to turn on the unit. The ON/STANDBY indicator flashes in green, and then lights in green.

Note
Depending on the installation location of the unit, you may not be able to control it with the remote control. In this case, point the remote control at the remote control detector of the unit or the screen.

![Remote control detector](image)

1. Lights in red.

2. Flashes in green for tens of seconds and then lights in green.
3 Adjust the focus.
Press the LENS ADJUSTMENT (FOCUS) button to display the Lens Focus adjustment window (test pattern). Then adjust the focus of the picture by pressing the ↑/↓/←/→ buttons.

4 Adjust the picture size.
Press the LENS ADJUSTMENT (ZOOM) button to display the Lens Zoom adjustment window (test pattern). Then adjust the size of the picture by pressing the ↑/↓/←/→ buttons.

Tips
- When “Lens Control” is set to “Off” on the Installation menu, you cannot adjust the focus, the picture size or the proper position by pressing the FOCUS, ZOOM or SHIFT buttons (page 39).
- When “Test Pattern” is set to “Off” on the Function menu, the test pattern is not displayed (page 37).

Note
Adjust the lens by using buttons on the remote control or the control panel of the unit. Never make adjustments by directly turning the lens with your hands, which may cause damage or malfunction to the unit.
5 Adjust the picture position.
Press the LENS ADJUSTMENT (SHIFT) button to display the Lens Shift adjustment window (test pattern). Then adjust to the proper position of the picture by pressing the ↑/↓/←/→ buttons.

Tip
Whenever you press the button, the test pattern disappears.

Note
When adjusting the window position, do not touch the lens unit, otherwise your fingers may be pinched by the moving parts.

To adjust the horizontal position
Press ←/→.
The picture projected on the screen moves right or left by a maximum of 31% of the screen width from the center of the lens.

Top view

Press the RESET button on the remote control while the Lens Shift adjustment window is displayed, the horizontal position returns to the center of the lens (factory default position). The zoom and focus are not changed.
To adjust the vertical position

Press ↑/↓.
The picture projected on the screen moves up by a maximum of 85% or moves down by a maximum of 80% of the screen height from the center of the lens.

Side view

Note
The range to move the picture projected on the screen can be adjusted only within the octagon area illustrated below. For details, see “Projection Distance and Lens Shift Range” (page 65).

Range of movement of the projected picture

To adjust the tilt of the installation surface
If the unit is installed on an uneven surface, use the front feet (adjustable) to keep the unit level.

Notes
- If the unit is tilted up or down, the projected image may be trapezoidal.
- Be careful not to catch your finger when turning the front feet (adjustable).
Lens adjustment window (test pattern)

1.78:1 (16:9)
1.33:1 (4:3)
2.35:1
1.85:1

The dashed lines show the screen sizes of each aspect ratio.
Connecting to Video Equipment or a Computer

You can enjoy high picture quality by connecting a DVD player/recorder, Blu-ray Disc player/recorder, or PlayStation® equipped with HDMI output to the HDMI input of the unit.

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; poor connection at the plugs may cause a malfunction or poor picture quality. 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.

Use a High Speed HDMI cable or a Premium High Speed HDMI cable on which the cable type logo is specified.
Notes

- Use a High Speed HDMI cable or a Premium High Speed HDMI cable. With a standard HDMI cable, images of 1080p, DeepColor, 3D video and 4K video may not be displayed properly.
- When connecting an HDMI cable to the unit, make sure the ▼ mark on the upper part of the HDMI input of the unit and the ▲ mark on the connector of the cable is set at the same position.
- If the picture from equipment connected to the unit with an HDMI cable is not correct, check the settings of the connected equipment.
- If you set your computer, such as a notebook type, to output the signal to both computer’s display and this equipment, the picture of the equipment 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. For settings of the computer, consult with the manufacturer of the computer.
Projecting

Projecting the Picture

1 Turn on both the unit and the equipment connected to the unit.

2 Press INPUT to display the input palette on the screen.

3 Select the equipment from which you want to display images.
   Press INPUT repeatedly or press ↑/↓/② (enter) to select the equipment from which to project.

Example: To view the picture from the video equipment connected to the HDMI 1 connector of this unit.

Tip
When “Status” is set to “Off” on the Setup menu, the input palette does not appear. Press the INPUT button to switch between input terminals in sequence.

Turning Off the Power

1 Press the I/○ (ON/STANDBY) button.
   A message “POWER OFF?” appears on the screen.

2 Press the I/○ (ON/STANDBY) button again before the message disappears.
   The ON/STANDBY indicator flashes in green and the fan continues to run to reduce the internal heat.

The fan stops and the ON/STANDBY indicator changes from flashing green to remaining red.

The power is turned off completely, and you can disconnect the AC power cord.

Note
Never disconnect the AC power cord while the indicator is flashing.

Tip
You can turn off the unit by holding the I/○ (ON/STANDBY) button for about 1 second, instead of performing the above steps.
Watching 3D Video Images

You can enjoy powerful 3D video images, such as from 3D games and 3D Blu-ray Discs, using the optional Active 3D Glasses (TDG-BT500A).

1. Turn on the HDMI equipment for 3D compatibility connected to the unit, then play the 3D content.
   For details on how to play 3D content, refer to the operating instructions for the connected equipment.

2. Turn on the unit and project the 3D video image onto the screen.
   For details on how to project the image, see “Projecting the Picture” (page 15).

3. Turn on the 3D glasses, and then put them on so that they fit comfortably.
   For details on how to use the 3D glasses, see “Using the 3D Glasses” (page 16).

Tips
• The factory default setting for “2D-3D Display Sel.” is “Auto” to allow projecting 3D video images automatically when the unit detects 3D signals.
• To convert 3D video images to 2D video images, set “2D-3D Display Sel.” to “2D” (page 36).

Notes
• It may not be possible to display 3D video image, depending on the type of signal. Set the “2D-3D Display Sel.” to “3D,” and “3D Format” to “Side-by-Side” or “Over-Under” to suit the format of the 3D content you want to watch (page 36).
• Use the 3D glasses within the communication range (page 16).
• There are differences in perception of 3D video images among individuals.
• When the temperature of the usage environment is low, the 3D effect may be diminished.

Adjusting/Setting the 3D functions
You can adjust/set the 3D functions by pressing the 3D button on the remote control or with the “3D Settings” of the Function menu. For details, see “3D Settings” (page 36).

Using the 3D Glasses

1. Turn on the 3D glasses, and register them on the unit.
   For details on how to register the 3D glasses, refer to the operating instructions supplied with the 3D glasses.

2. Put on the 3D glasses.

3. Turn toward the screen.

Precautions for use
Misoperation may occur if:
• The viewing position is too far from the projector
• There are other communication devices, such as a wireless LAN (IEEE802.11 b/g/n) or a microwave with a bandwidth of 2.4 GHz, near the unit

3D glasses communication range
Figure below indicate the communication range of the 3D glasses. If you try to watch 3D video images from a distance greater than the communication range or install the unit outside the communication range, the 3D glasses may not be able to display the images properly. Also, the distance varies depending on the environment of the room and installation environment of the unit.
Using the Picture Position

You can store up to five combinations of lens settings (focus, picture size, picture position), aspect ratio, and blanking. These settings can be recalled. In the factory preset setting, the Picture Position is not stored.

1 Press POSITION.

The Picture Position selecting palette is displayed.

2 Press POSITION repeatedly, or press ↑/↓/+ to select the position.

The settings of the position selected is recalled.

Store or delete lens settings, aspect ratio, and blanking in the “Picture Position” of the Screen menu (page 32). The position where the lens settings, aspect ratio, and blanking are not stored is displayed as “---.”
Image of the lens moving
In the example below, the images with aspect ratio of 1.78:1 (16:9) and 2.35:1 are projected on a 2.35:1 screen.

When a 1.78:1 (16:9) image is input

When a 2.35:1 image is input

Press the POSITION button.

The 2.35:1 image expands to fill the screen.

Notes
• After you have selected and confirmed the lens position, the lens starts to move. Do not touch, or place anything near, the lens, otherwise it may cause injury or a malfunction.
• If you press any button on the remote control or the unit while the lens is moving, the lens stops. In this case, select the lens position again or adjust the lens manually.
• The Picture Position function is not guaranteed to reproduce the lens settings precisely.
• When you use the subtended screen angle of two or more aspects using lens zoom, install the unit within the specified parameters referring to “Projection distance” (page 66). With some setting positions, the range of lens shift may be restricted, even though the unit is installed within the specified parameters.
Selecting the Aspect Ratio According to the Video Signal

You can select an aspect ratio best suited for the video signal received.

Press ASPECT.
Each time you press the button, you can select the “Aspect” setting. You can also select it using the menu (page 33).

<table>
<thead>
<tr>
<th>Original image</th>
<th>Recommended setting and resultant images</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.85:1</td>
<td>1.85:1 Zoom</td>
</tr>
<tr>
<td>Squeezed 1.85:1</td>
<td></td>
</tr>
<tr>
<td>2.35:1</td>
<td>2.35:1 Zoom</td>
</tr>
<tr>
<td>Squeezed 2.35:1</td>
<td></td>
</tr>
<tr>
<td>Original image</td>
<td>Recommended setting and resultant images</td>
</tr>
<tr>
<td>----------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td><img src="image1" alt="1.78:1 (16:9)" /></td>
<td>Normal</td>
</tr>
<tr>
<td><img src="image2" alt="1.33:1 (4:3)" /></td>
<td><img src="image3" alt="1.33:1 (4:3) with side panels" /></td>
</tr>
<tr>
<td><img src="image4" alt="2.35:1" /></td>
<td>V Stretch</td>
</tr>
<tr>
<td><img src="image5" alt="16:9" /></td>
<td>Squeeze</td>
</tr>
</tbody>
</table>

When using an anamorphic lens
Selectable aspect modes vary depending on the input signal (page 62). The aspect cannot be selected for an input signal from a computer, or an input signal with a resolution of 4096 × 2160 (page 57).

Notes on switching the “Aspect” setting

- Select the aspect 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 unit is used for profit or for public viewing, modifying the original picture by switching the aspect 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 video source or room conditions. You can save and use different preset modes for 2D/3D respectively.

Press one of the CALIBRATED PRESET buttons.

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CINEMA FILM 1</td>
<td>Picture quality suited to reproducing the highly dynamic and clear images typical of master positive film.</td>
</tr>
<tr>
<td>CINEMA FILM 2</td>
<td>Picture quality suited to reproducing the rich tone and color typical of a movie theater, based on the Cinema Film 1.</td>
</tr>
<tr>
<td>REF</td>
<td>A picture quality setup suitable for when you want to reproduce faithfully the original image quality, or for enjoying image quality, without any adjustment.</td>
</tr>
<tr>
<td>TV</td>
<td>Picture quality suited for watching TV programs, sports, concerts, and other video images.</td>
</tr>
<tr>
<td>PHOTO</td>
<td>Ideal for projecting still images taken with a digital camera.</td>
</tr>
<tr>
<td>GAME</td>
<td>Picture quality suited to gaming, with well-modulated colors and fast response.</td>
</tr>
<tr>
<td>BRT CINE</td>
<td>Picture quality suited for watching movies in a bright environment, such as a living room.</td>
</tr>
<tr>
<td>BRT TV</td>
<td>Picture quality suited for watching TV programs, sports, concerts, and other video images in a bright environment, such as a living room.</td>
</tr>
<tr>
<td>USER</td>
<td>Adjusts the picture quality to suit your taste then saves the setting. The factory default setting is the same as “REF.”</td>
</tr>
</tbody>
</table>
**Using the Menus**

**Note**
The menu displays used for the explanation may be different from the actual menu display.

**Operation through the Menus**

The unit is equipped with an on-screen menu for making various adjustments and settings. If you select an item name followed by an arrow (►), the next menu window with setting items appears.

1. Press MENU.
   The menu window appears.

2. Press ▲/▼ to select a menu item, and press ◄ or ►.
   The items that can be set or adjusted with the selected menu appear. The item presently selected is shown in white.

3. Press ▲/▼ to select an item you want to set or adjust and press ◄ or ►.
   The setting items are displayed in a pop-up menu, in a setting menu, in an adjustment menu or in the next menu window.

**Pop-up menu**

**Setting menu**

**Adjustment menu**
4 Make the setting or adjustment of an item.

**When changing the adjustment level**
Press ↑/↓ to increase the value, and press ↓/← to decrease the value. Press + to store the setting and restore the original menu screen.

**When changing the setting**
Press ↑/↓ to change the setting. Press + to restore the original screen. You can restore the original screen using ← depending on the selected item.

---

**To clear the menu**
Press MENU.

**To reset the picture that has been adjusted**
Select “Reset” from the Picture menu.

When the screen display appears, select “Yes” using ← and press +. All of the following settings are reset to its factory preset value:

---

**To reset the items that have been adjusted**
Select an item in the menu screen, and display the pop-up menu, the setting menu, or the adjustment menu. Press RESET on the remote control to reset only the selected settings to its factory preset value.

**Note**
The RESET button on the remote control is available only when the adjustment menu or the setting menu is selected.
**Picture Menu**

The Picture menu is used for adjusting the picture.

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calib. Preset [CALIBRATED PRESET]</td>
<td>You can select the picture viewing mode that best suits the type of video source or the environment. You can save and use different preset modes for 2D/3D respectively.<strong>Cinema Film 1:</strong> Picture quality suited to reproducing the highly dynamic and clear images typical of master positive film. <strong>Cinema Film 2:</strong> Picture quality suited to reproducing the rich tone and color typical of a movie theater, based on the Cinema Film 1. <strong>Reference:</strong> A picture quality setup suitable for when you want to reproduce faithfully the original image quality, or for enjoying image quality, without any adjustment. <strong>TV:</strong> Picture quality suited for watching TV programs, sports, concerts, and other video images. <strong>Photo:</strong> Ideal for projecting still images taken with a digital camera. <strong>Game:</strong> Picture quality suited to gaming, with well-modulated colors and fast response. <strong>Bright Cinema:</strong> Picture quality suited for watching movies in a bright environment, such as a living room. <strong>Bright TV:</strong> Picture quality suited for watching TV programs, sports, concerts, and other video images in a bright environment, such as a living room. <strong>User:</strong> You can adjust the picture quality to suit your taste, and save the setting. The factory default setting is the same as “Reference.”</td>
</tr>
<tr>
<td>Reset</td>
<td>Resets all currently selected Calib. Preset mode settings to their default values (page 24). <strong>Tip</strong> Reset does not affect settings saved for items of “Color Temp.”</td>
</tr>
<tr>
<td>Setting items</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Reality Creation</td>
<td>Adjusts the detail and noise processing of images. (Super-resolution function)</td>
</tr>
<tr>
<td><strong>On:</strong></td>
<td>Adjusts the settings of “Reality Creation.”</td>
</tr>
<tr>
<td><strong>Database:</strong></td>
<td>Select “Normal” or “Mastered in 4K.”</td>
</tr>
<tr>
<td>“Mastered in 4K”</td>
<td>Provides image quality suitable for Blu-ray Disc™ releasing from Sony Pictures Home Entertainment.</td>
</tr>
<tr>
<td><strong>Resolution:</strong></td>
<td>When you increase the setting value, the texture and detail of the picture become sharper.</td>
</tr>
<tr>
<td><strong>Noise Filtering:</strong></td>
<td>When you increase the setting value, the noise (picture roughness) becomes less prominent.</td>
</tr>
<tr>
<td><strong>Test:</strong></td>
<td>Changes “On” and “Off” at a certain frequency to check the effect of “Reality Creation.”</td>
</tr>
<tr>
<td><strong>Tip</strong></td>
<td>The display position of status during the test works together with the “Menu Position” setting (page 34).</td>
</tr>
<tr>
<td><strong>Off:</strong></td>
<td>The “Reality Creation” function is not applied.</td>
</tr>
<tr>
<td>Cinema Black Pro</td>
<td></td>
</tr>
<tr>
<td>Advanced Iris</td>
<td><strong>Dynamic Control:</strong> Adjusts the range of movement of the iris (aperture).</td>
</tr>
<tr>
<td><strong>Full:</strong></td>
<td>Automatically optimizes the iris (aperture) and signal processing according to the brightness level of the input source. This results in a bright and high contrast image.</td>
</tr>
<tr>
<td><strong>Limited:</strong></td>
<td>Provides a slower movement of the iris (aperture) and lower brightness than “Full,” making the picture quality suitable for viewing in a dark room.</td>
</tr>
<tr>
<td><strong>Off:</strong></td>
<td>The “Dynamic Control” function is not applied.</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>Tip</strong></td>
<td>After adjusting “Brightness,” set “Dynamic Control” according to the brightness of the room and the picture itself.</td>
</tr>
<tr>
<td>Contrast Enhancer</td>
<td>Corrects the level of bright and dark parts automatically to optimize contrast according to a scene.</td>
</tr>
<tr>
<td><strong>High/Middle/Low:</strong></td>
<td>You can adjust the contrast enhancer.</td>
</tr>
<tr>
<td><strong>Off:</strong></td>
<td>The contrast enhancer function is not applied.</td>
</tr>
<tr>
<td>Lamp Control</td>
<td>Switches the lamp output.</td>
</tr>
<tr>
<td><strong>High:</strong></td>
<td>Increases the brightness, and projects brighter images.</td>
</tr>
<tr>
<td><strong>Low:</strong></td>
<td>Decreases the brightness, and enhances blacks by minimizing brightness.</td>
</tr>
<tr>
<td><strong>Tip</strong></td>
<td>Setting “Low” reduces fan noise, while also reducing energy consumption for longer lamp life.</td>
</tr>
<tr>
<td>Setting items</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| **Motionflow** [MOTIONFLOW] | **Impulse**: Reproduces original picture quality. Provides cinema-like picture, which may flicker.  
**Combination**: Reduces motion blur while maintaining brightness for high-speed picture content.  
**Smooth High**: Provides smoother picture movement; especially effective for film-based content.  
**Smooth Low**: Provides smoother picture movement for standard use.  
**True Cinema**: Images, such as a movie created in 24 frames per second, are reproduced at the original framerate.  
**Off**: The “Motionflow” function is not applied. |
| **Tips** | • Select “Off” if the selected “Smooth High,” “Smooth Low,” “Impulse,” “Combination,” or “True Cinema” results in a distorted picture.  
• Depending on the picture content, you may not see the effect visually even if you have changed the settings. |
| **Contrast** [CONTRAST] | Adjusts the contrast.  
Higher values increase the sharpness in images, while lower values decrease the sharpness.  
You can make adjustments by pressing the CONTRAST +/- on the remote control.  
When the HDR signal is input with “On” or “Auto” set for “HDR,” “Contrast(HDR)” appears instead of “Contrast.” |
| **Brightness** [BRIGHTNESS] | Adjusts the brightness of the picture.  
The higher the setting, the brighter the picture. The lower the setting, the darker the picture.  
You can make adjustments by pressing the BRIGHTNESS +/- on the remote control. |
| **Color** | Adjusts the color density.  
The higher the setting, the greater the intensity. The lower the setting, the lower the intensity. |
| **Hue** | Adjusts the color tone.  
The higher the setting, the more greenish the picture becomes. The lower the setting, the more reddish the picture becomes. |
| **Color Temp.** [COLOR TEMP] | Adjusts the color temperature.  
**D93**: Equivalent to 9,300 K color temperature normally used in TVs. Gives white colors a blue tint.  
**D75**: Equivalent to 7,500 K color temperature used as an ancillary standard illuminant. Gives a neutral tint between “D93” and “D65.”  
**D65**: Equivalent to 6,500 K color temperature used as a standard illuminant. Gives white colors a red tint.  
**D55**: Equivalent to 5,500 K color temperature used as an ancillary standard illuminant. Gives white colors an even redder tint.  
**Custom 1 to 5**: Enables you to adjust, set, and store your favorite color temperature.  
The factory default settings are as follows.  
**Custom 1**: Same as “D93” color temperature setting.  
**Custom 2**: Same as “D75” color temperature setting.  
**Custom 3**: Same as “D65” color temperature setting.  
**Custom 4**: Same as “D55” color temperature setting.  
**Custom 5**: Setting that prioritizes brightness. |
| **Tip** | You can adjust each item to a color temperature according to your preference. |
### Sharpness [SHARPNESS]

- **Description:** Sharpens the outline of the picture, or reduces the noise. The higher the setting, the sharper the picture. The lower the setting, the softer the picture, thus reducing the noise. You can make adjustments by pressing the SHARPNESS +/- on the remote control.

### Expert Setting

**Table:**

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR (Noise Reduction)</td>
<td>Reduces the roughness or noise of the picture.</td>
</tr>
<tr>
<td><strong>Auto:</strong></td>
<td>Detects the noise level to reduce the roughness or noise of the picture.</td>
</tr>
<tr>
<td><strong>High/Middle/Low:</strong></td>
<td>Select a setting according to the roughness or noise of the input signal source.</td>
</tr>
<tr>
<td><strong>Off:</strong></td>
<td>The NR (noise reduction) function is not applied.</td>
</tr>
</tbody>
</table>

**Tip:**

The noise level may not be detected accurately with “Auto” depending on the input signal source. If the picture is unacceptable with “Auto,” select a setting from among “High,” “Middle,” “Low” or “Off.”

**MPEG NR (MPEG Noise Reduction):**

- **Description:** Reduces block noise and mosquito noise, in particular in digital signals. 
- **Auto:** Detects the noise level to reduce the block noise and mosquito noise of the picture automatically.
- **High/Middle/Low:** Select a setting according to the block noise and mosquito noise of the input signal source.
- **Off:** The MPEG NR (MPEG noise reduction) function is not applied.

**Tip:**

The noise level may not be detected accurately with “Auto” depending on the input signal source. If the picture is unacceptable with “Auto,” select a setting from among “High,” “Middle,” “Low” or “Off.”

**Smooth Gradation:**

- **Description:** Smooths the gradation of the flat parts of images.
- **High/Middle/Low:** You can adjust the smooth gradation effect.
- **Off:** The smooth gradation function is not applied.

**Film Mode:**

- **Description:** According to the film source you have selected, make a setting for playback.
- **Auto:** Suitable for reproducing the original picture movement. Normally, set this to “Auto.”
- **Off:** Plays back the picture in progressive format without detecting video signals automatically.

**Gamma Correction [GAMMA CORRECTION]:**

- **Description:** Adjusts the response characteristics of the tone of the picture.
- **Select a favorite tone from 10 options.**
- **2.0:** Bright Produces a brighter picture overall.
- **Gamma 7:** Simulates the gamma curve of film.
- **Gamma 8:** Increases the sharpness in images. Select this when you watch in a bright environment, such as a living room.
- **Gamma 9:** Produces a brighter picture than Gamma 8.
- **Gamma 10:** Increases the sharpness in images. Select this when you watch TV programs, etc., in a bright environment, such as a living room.
- **Off:** The “Gamma Correction” function is not applied.
<table>
<thead>
<tr>
<th>Setting items</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color Correction</td>
<td><strong>On:</strong> Adjusts Hue, Saturation or Brightness of the selected colors. Repeat steps ① and ② described below to specify the target color. ① Press ↑/↓ to select “Color Select,” then press ←/→ to select the color you want to adjust among “Red,” “Yellow,” “Green,” “Cyan,” “Blue” and “Magenta.” ② Press ↑/↓ to select “Hue,” “Saturation” or “Brightness,” then adjust them to suit your taste using ←/→ while watching the projected picture. <strong>Off:</strong> The “Color Correction” effect is not applied.</td>
</tr>
<tr>
<td>Clear White</td>
<td>Emphasizes vivid whites. <strong>High/Low:</strong> You can adjust the “Clear White” effect. <strong>Off:</strong> The “Clear White” effect is not applied.</td>
</tr>
<tr>
<td>x.v.Color</td>
<td>Set this item when connecting the unit with equipment that supports x.v.Color and playing back an x.v.Color video signal. <strong>On:</strong> You can play back an x.v.Color video signal. <strong>Off:</strong> The “x.v.Color” function is not applied. For details on x.v.Color, see “About the x.v.Color” (page 51). <strong>Tip</strong> Setting x.v.Color to “On” disables gamma adjustment.</td>
</tr>
<tr>
<td>HDR</td>
<td>Sets how to play back HDR content. <strong>Auto:</strong> Distinguishes HDR content automatically and applies the optimal picture quality. When an input signal supports BT.2020, the “Color Space” is set to “BT.2020” automatically. When a signal other than BT.2020 is input, the mode set in “Color Space” is applied. (“BT.2020” is not available in this case.) <strong>On:</strong> Set when playing back HDR content. <strong>Off:</strong> Set when playing back content other than HDR content. “Color Space” is not set automatically when “On” or “Off” is selected. <strong>Note</strong> If the setting is not correct for the input content, the bright and dark areas of the video may appear too bright or too dark.</td>
</tr>
</tbody>
</table>
### Setting items

<table>
<thead>
<tr>
<th>Color Space [COLOR SPACE]</th>
<th>Converts the color space.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BT.709:</strong> An ITU-R BT.709 color space, which is used for high-definition television broadcast or Blu-ray Disc. The color space is equivalent to sRGB.</td>
<td></td>
</tr>
<tr>
<td><strong>BT.2020:</strong> The color space is wider than BT.709. Use this setting when playing back HDR content.</td>
<td></td>
</tr>
<tr>
<td><strong>Color Space 1:</strong> The color space suited for watching TV programs and video images, such as sport, concerts, etc.</td>
<td></td>
</tr>
<tr>
<td><strong>Color Space 2:</strong> The color space suited for watching TV programs, sport, concerts, and other video images in a bright environment, such as a living room.</td>
<td></td>
</tr>
<tr>
<td><strong>Color Space 3:</strong> The color space suited for watching movies in a bright environment, such as a living room.</td>
<td></td>
</tr>
<tr>
<td><strong>Custom:</strong> You can adjust the color space setting.</td>
<td></td>
</tr>
</tbody>
</table>

### Input Lag Reduction

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Lag Reduction</td>
<td>Reduces the delay of the display for a video.</td>
</tr>
<tr>
<td>On: Reproduces a smooth fast-moving video image with a reduced sense of afterimage.</td>
<td></td>
</tr>
<tr>
<td>Off: Turns the Input Lag Reduction function off.</td>
<td></td>
</tr>
</tbody>
</table>

### Tip

When “Input Lag Reduction” is set to “On,” Motionflow, NR, and MPEG NR cannot be set.
Advanced Picture Menu

You can adjust the gaps in color that have occurred after a long period of use.

| Advanced Picture |
|---|---|
| Auto Calibration | Pre Check: Checks the color difference against the factory default settings, before calibration starts. |
| | Adjust: Performs Auto Calibration. |
| | Before/After: Toggles the factory default setting and the setting after the calibration at a certain frequency. You can check the effect of the calibration by monitoring the actual image. |
| | Reset: Resets the calibration results, and returns to the factory default settings. |

Notes

- Auto Calibration results in relatively coarse calibration. No warranty is given for the color settings to be the same as the factory default values.
- While performing “Pre Check” or “Adjust,” the colors are projected automatically. This is not a malfunction.
- Do not turn off the power or operate the remote control or control panel during “Pre Check” or “Adjust,” as the process may be canceled.

Tips

- dE is an indicator of changing color. The smaller the value of dE, the fewer the changes caused by the color.
- Perform the calibration after the power has been on for more than 30 minutes.
- It takes a few minutes for “Pre Check” or “Adjust” to complete.
- When “Pre Check” or “Adjust” starts, the screen position may shift, as the lens returns to its factory default position. After completion, the screen returns to its previous position automatically.
- If the environment changes, such as the brightness of the room, while performing “Pre Check” or “Adjust”, measurement may be affected.
- If the “Pre Check” or “Adjust” function fails, try it once again.

Setting items Description
Auto Calibration
Pre Check: Checks the color difference against the factory default settings, before calibration starts.
Adjust: Performs Auto Calibration.
Before/After: Toggles the factory default setting and the setting after the calibration at a certain frequency. You can check the effect of the calibration by monitoring the actual image.
Reset: Resets the calibration results, and returns to the factory default settings.
Screen Menu

You can set the picture size, aspect mode, etc.

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Description</th>
</tr>
</thead>
</table>
| Picture Position [POSITION] | You can store up to five combinations of lens settings, aspect ratio, and blanking. After setting the lens, aspect, and blanking, select from “1.85:1,” “2.35:1,” “Custom 1,” “Custom 2,” or “Custom 3” depending on the subtended screen angle, and after confirming, continue by selecting “Save,” “Delete,” or “Select.”
| Save: | Stores the current lens settings (focus, window size, window position) in the selected position. If a setting is already stored in that position, it is overwritten.
| Delete: | Deletes the stored setting. After the setting is deleted, “1.85:1,” “2.35:1,” “Custom 1,” “Custom 2,” or “Custom 3” in the display change to “---.”
| Select: | Recalls the settings of the selected position.

Tips

- The optimal aspect ratio is preset for each picture position. The aspect ratio can be changed and saved for each picture position.
- When saving the Picture Position, temporarily move the picture from the saving point down 5 cm or more. Move the picture up again and save. This improves the precision of the Picture Position when calling it.

Notes

- After you have selected and confirmed the lens position, the lens starts to move. Do not touch the lens and the area around the lens, otherwise it may cause injury or a malfunction.
- If you press any button on the unit while the lens is moving, the lens stops. In this case, select the lens position again or adjust the lens manually.
- When you use a 2.35:1 or a 16:9 subtended screen angle with the Picture Position function, make sure that the installation position is suitable (page 17).
- The Picture Position function is not guaranteed to reproduce the lens settings precisely.

Note

These items may not be available, depending on the type of input signal. For details, see “Input Signals and Adjustable/Setting Items” (page 59).

Item names in brackets represent those printed on the remote control.
### Setting items

| Aspect [ASPECT] | You can set the aspect ratio of the picture to be displayed for the current input signal (page 19). You can set the function only when a video signal other than a resolution of 4096 × 2160 pixels is input. **1.85:1 Zoom:** A 1.85:1 aspect ratio picture is displayed in its original aspect ratio, enlarged so that black bands do not appear at the top and bottom of the screen. **2.35:1 Zoom:** A 2.35:1 aspect ratio picture is displayed in its original aspect ratio, enlarged so that black bands at the top and bottom of the screen are as small as possible. When you select “2.35:1 Zoom” from “Trigger Select 1/2” on the Installation menu, a 12 V signal is output from the TRIGGER 1 or TRIGGER 2 connector (page 39). **Normal:** Input video is displayed in its original aspect ratio, enlarged to fill the screen. This mode is suitable for viewing 1.78:1 (16:9) and 1.33:1 (4:3) video. **V Stretch:** This is the most suitable mode for using a 2.35:1 screen to view 2.35:1 video with a commercially available anamorphic lens. When you select “V Stretch” from “Trigger Select 1/2” on the Installation menu, a 12 V signal is output from the TRIGGER 1 or TRIGGER 2 connector (page 39). **Squeeze:** With this setting, 1.78:1 (16:9) and 1.33:1 (4:3) video will be displayed in their correct aspect ratios when you use a commercially available anamorphic lens. **Stretch:** Displays video that has been squeezed to 1.33:1 (4:3) as 1.78:1 (16:9) aspect ratio. **Tips**

- When you select “V Stretch” or “Squeeze,” select the anamorphic lens type from “Anamorphic Lens” in the Installation menu.
- Selectable aspect modes vary depending on the input signal (page 62).
- The aspect cannot be selected for an input signal from a computer, or an input signal with a resolution of 4096 × 2160 (pages 57, 58, 62).

| Blanking | This feature allows you to adjust the displayable region within the four directions of the screen. **On:** Select the edge to adjust by highlighting Left, Right, Top, or Bottom using the ↑/↓ buttons. Adjust the amount of blanking using the ←/→ buttons. **Off:** Turns off the Blanking function. **Tip** Depending on the aspect ratio setting, right/left blanking may not be available. |
Setup Menu

The Setup menu is used to change the factory preset settings, etc.

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Description</th>
</tr>
</thead>
</table>
| Status              | Sets whether or not the on-screen display is displayed.  
Set to “Off” to turn off the on-screen displays except for certain menus, message when turning off the power, and warning messages. |
| Language            | Selects the language used in the menu and on-screen displays.               |
| Menu Position       | You can change the position to display the menu on the screen.            |
|                     | **Bottom Left:** Displays the menu on the bottom left area of the screen.  
**Center:** Displays the menu on the center of the screen. |
| High Altitude Mode  | Sets the unit to operate at the prevailing atmospheric pressure.           |
|                     | **On:** Use this setting when using the unit at an altitude of 1,500 m (approx. 4,900 ft) or higher.  
**Off:** Use this setting when using the unit at normal altitudes. |
| Tip                 | When this item is set to “On,” the fan noise becomes slightly louder since the fan speed increases. |
|                     | **On:** You can turn on the power from a PC or a terminal which is connected to a network.  
**Off:** Turns off the Remote Start function. |
| Tips                | - To use the function, the unit should be connected to the network in advance (page 41).  
- To turn on the power with the Remote Start function, a special command should be sent from a PC or a terminal. For details, consult with qualified Sony personnel. |
<p>| Note                | When Remote Start is set to “On,” the standby power requirement will increase. When Network Management is set to “On,” the Remote Start setting is set to “On” automatically, and you cannot change the setting. Also, this is not displayed on the menu. |</p>
<table>
<thead>
<tr>
<th>Setting items</th>
<th>Description</th>
</tr>
</thead>
</table>
| Network Management | **On:** Set when connected to the network and continuously communicating with the projector control equipment.  
**Note:** When Network Management is set to “On,” the network function is continuously enabled. Set Network Management to “Off” for normal use. If you set to “On,” the power consumption increases. |
| Power Saving       | Sets the power saving mode.  
**Standby:** If no signal is input for 10 minutes, power is turned off automatically and the projector goes into standby mode.  
**Off:** Disables the power saving function. |
| Lamp Setting       | When replacing the lamps, set the desired lamp setting (page 52). |
| All Reset          | All settings are initialized to their factory preset values.  
The “Lamp Timer” in the Information menu is not reset. |
**Function Menu**

The Function menu is used for changing the settings of the various functions of the unit.

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D Settings</td>
<td>You can change the settings of the 3D function.</td>
</tr>
<tr>
<td>2D-3D Display Sel.</td>
<td>For Switching the video images to “2D” or “3D.”</td>
</tr>
<tr>
<td></td>
<td><strong>Auto:</strong> Displays 3D video images when HDMI signals with 3D information* are input. Displays 2D video images when other signals are input.</td>
</tr>
<tr>
<td></td>
<td><strong>3D:</strong> Displays 3D video images according to the 3D system selected in “3D Format.” However, when HDMI signals with 3D information are input to the unit, displays 3D video images according to the 3D system of those HDMI signals.</td>
</tr>
<tr>
<td></td>
<td><strong>2D:</strong> Displays 2D video images.</td>
</tr>
<tr>
<td></td>
<td>*The 3D information is additional information to discriminate 3D. Some HDMI signals have additional information to discriminate 3D and some HDMI signals have none.</td>
</tr>
<tr>
<td>3D Format</td>
<td>Set the 3D system when the input HDMI signals do not include 3D information.</td>
</tr>
<tr>
<td></td>
<td><strong>Simulated 3D:</strong> Converts 2D video images to 3D video images. The setting can be made only for input the HD signals.</td>
</tr>
<tr>
<td></td>
<td>The simulated 3D feature may have limited effect, depending on the video source.</td>
</tr>
<tr>
<td></td>
<td>There are differences in perception of 3D video images among individuals.</td>
</tr>
<tr>
<td></td>
<td><strong>Side-by-Side:</strong> Select this to display 3D images as two similar images, side-by-side.</td>
</tr>
<tr>
<td></td>
<td><strong>Over-Under:</strong> Select this to display 3D images as two similar images, one above the other.</td>
</tr>
<tr>
<td><strong>Tips</strong></td>
<td>• “2D-3D Display Sel.” cannot be set to “3D” for some video sources. For available 3D signals, see “Compatible 3D Signals” (page 60).</td>
</tr>
<tr>
<td></td>
<td>• The simulated 3D feature may have limited effect, depending on the screen size (100 to 120 inches recommended) and the video source.</td>
</tr>
<tr>
<td></td>
<td>• The menu display has a ghost while a 3D video image is displayed and is best viewed with the 3D glasses.</td>
</tr>
<tr>
<td>3D Brightness</td>
<td>For adjusting the brightness of the picture when watching 3D video images.</td>
</tr>
<tr>
<td></td>
<td>You can select the brightness “High” or “Standard.”</td>
</tr>
</tbody>
</table>
### Setting items

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D Depth Adjust</td>
<td>For adjusting the depth of the 3D video images on the screen. The setting can be made only when a 3D Format other than “Simulated 3D” is selected.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Depth Diagram" /></td>
</tr>
<tr>
<td>Simulated 3D Effect</td>
<td>For adjusting the 3D effect when 2D content is converted to 3D video images. You can select the effect from among “High,” “Middle,” and “Low.”</td>
</tr>
<tr>
<td>Dynamic Range</td>
<td>Sets the video input level for HDMI 1 and HDMI 2 connectors.</td>
</tr>
<tr>
<td>Limited:</td>
<td>The video input level is set for signals of 16-235.</td>
</tr>
<tr>
<td>Full:</td>
<td>The video input level is set for signals of 0-255.</td>
</tr>
<tr>
<td>Test Pattern</td>
<td>Displays a test pattern according to the setting.</td>
</tr>
<tr>
<td>On:</td>
<td>A test pattern appears on the screen to be used when adjusting the lens with “Lens Focus,” “Lens Zoom,” and “Lens Shift.”</td>
</tr>
<tr>
<td>Off:</td>
<td>A test pattern does not appear.</td>
</tr>
<tr>
<td>Settings Lock</td>
<td>Locks menu item settings to prevent operational error (page 38).</td>
</tr>
</tbody>
</table>

### Notes

- If the video output setting of the connected HDMI device is not set correctly, light and dark parts of the video may appear too light or too dark.

### Tips

- A picture or sound may not be output normally when “Enhanced Format” is selected. In this case, set to “Standard Format.”
- Set “Enhanced Format” only when the corresponding devices are used.

### Settings Lock

- **Off:** Cancels the Settings Lock.
- **Level A:** Group 1 items (below) are not displayed on the menu, and are not available.
- **Level B:** Group 1 and Group 2 items (below) are not displayed on the menus, and are not available.
### Items Locked by Settings Lock

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Picture menu</strong></td>
<td><strong>Setup menu</strong></td>
</tr>
<tr>
<td>Reset</td>
<td>Status</td>
</tr>
<tr>
<td>Reality Creation</td>
<td>Language</td>
</tr>
<tr>
<td>Advanced Iris</td>
<td>Menu Position</td>
</tr>
<tr>
<td>Contrast Enhancer</td>
<td>High Altitude Mode</td>
</tr>
<tr>
<td>Lamp Control</td>
<td>Remote Start</td>
</tr>
<tr>
<td>Motionflow</td>
<td>Network Management</td>
</tr>
<tr>
<td>Contrast</td>
<td>Power Saving</td>
</tr>
<tr>
<td>Brightness</td>
<td>Lamp Setting</td>
</tr>
<tr>
<td>Color</td>
<td>All Reset</td>
</tr>
<tr>
<td>Hue</td>
<td></td>
</tr>
<tr>
<td>Color Temp.</td>
<td><strong>Function menu</strong></td>
</tr>
<tr>
<td>Sharpness</td>
<td>Dynamic Range</td>
</tr>
<tr>
<td>NR</td>
<td>Test Pattern</td>
</tr>
<tr>
<td>MPEG NR</td>
<td><strong>Image Flip</strong></td>
</tr>
<tr>
<td>Smooth Gradation</td>
<td></td>
</tr>
<tr>
<td>Film Mode</td>
<td><strong>Lens Control</strong></td>
</tr>
<tr>
<td>Gamma Correction</td>
<td>Anamorphic Lens</td>
</tr>
<tr>
<td>Color Correction</td>
<td>Trigger Select</td>
</tr>
<tr>
<td>Clear White</td>
<td>IR Receiver</td>
</tr>
<tr>
<td>x.v.Color</td>
<td>Panel Alignment</td>
</tr>
<tr>
<td>HDR</td>
<td>Network Setting</td>
</tr>
<tr>
<td>Color Space</td>
<td></td>
</tr>
<tr>
<td>Input Lag Reduction</td>
<td></td>
</tr>
</tbody>
</table>

**Advanced Picture menu**

- Auto Calibration
## Installation Menu

The Installation menu is used for changing the installation settings.

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image Flip</td>
<td>Flips the picture on the screen horizontally and/or vertically.</td>
</tr>
<tr>
<td></td>
<td><strong>HV:</strong> Flips the picture horizontally and vertically.</td>
</tr>
<tr>
<td></td>
<td><strong>H:</strong> Flips the picture horizontally.</td>
</tr>
<tr>
<td></td>
<td><strong>V:</strong> Flips the picture vertically.</td>
</tr>
<tr>
<td></td>
<td><strong>Off:</strong> The picture does not flip.</td>
</tr>
<tr>
<td></td>
<td>Use this item for installation for the backside projection or ceiling</td>
</tr>
<tr>
<td></td>
<td>installation.</td>
</tr>
<tr>
<td>Lens Control</td>
<td>Avoids any operation of the lens such as “Lens Focus,” “Lens Zoom,”</td>
</tr>
<tr>
<td></td>
<td>and “Lens Shift,” by mistake.</td>
</tr>
<tr>
<td></td>
<td><strong>On:</strong> Enables adjustment of the lens.</td>
</tr>
<tr>
<td></td>
<td><strong>Off:</strong> Prevents any adjustment of the lens.</td>
</tr>
<tr>
<td>Anamorphic Lens</td>
<td>Select a setting to match the anamorphic lens conversion ratio.</td>
</tr>
<tr>
<td></td>
<td><strong>1.24x:</strong> Select this when you use an anamorphic lens with a horizontal</td>
</tr>
<tr>
<td></td>
<td>rate of 1.24×.</td>
</tr>
<tr>
<td></td>
<td><strong>1.32x:</strong> Select this when you use an anamorphic lens with a horizontal</td>
</tr>
<tr>
<td></td>
<td>rate of 1.32×.</td>
</tr>
<tr>
<td>Trigger Select</td>
<td>Switches the output function of the TRIGGER 1/TRIGGER 2 connector.</td>
</tr>
<tr>
<td></td>
<td><strong>Off:</strong> Turns off the TRIGGER connector function.</td>
</tr>
<tr>
<td></td>
<td><strong>Power:</strong> Outputs 12 V signals from the TRIGGER 1/TRIGGER 2 connectors</td>
</tr>
<tr>
<td></td>
<td>when the unit is on. The TRIGGER 1/TRIGGER 2 connectors do not output any</td>
</tr>
<tr>
<td></td>
<td>signals when the unit is in standby.</td>
</tr>
<tr>
<td></td>
<td><strong>V Stretch:</strong> Works with the “Aspect” setting’s “V Stretch” (page 33) and</td>
</tr>
<tr>
<td></td>
<td>outputs a 12 V signal from the TRIGGER 1 or TRIGGER 2 connector.</td>
</tr>
<tr>
<td></td>
<td><strong>2.35:1 Zoom:</strong> Works with the “Aspect” setting’s “2.35:1 Zoom” (page 33)</td>
</tr>
<tr>
<td></td>
<td>and outputs a 12 V signal from the TRIGGER 1 or TRIGGER 2 connector.</td>
</tr>
<tr>
<td>IR Receiver</td>
<td>Selects the remote control detectors (IR Receiver) on the front and rear</td>
</tr>
<tr>
<td></td>
<td>of the unit.</td>
</tr>
<tr>
<td></td>
<td><strong>Front &amp; Rear:</strong> Activates both the front and rear detectors.</td>
</tr>
<tr>
<td></td>
<td><strong>Front:</strong> Activates the front detector only.</td>
</tr>
<tr>
<td></td>
<td><strong>Rear:</strong> Activates the rear detector only.</td>
</tr>
</tbody>
</table>
Panel Alignment

This feature allows you to adjust the gaps in the color of characters or the picture on the screen.

**Adjust:** Adjusts the gaps in the colors selecting “Adjust Color” or “Adjust Item.”

**Adjust Item:** Selects how to make adjustments from below.

- **Shift:** Shifts the whole picture and makes adjustments.
- **Zone:** Selects the desired range and makes adjustments.

**Adjust Color:** Assigns the desired color to adjust the gaps in color. Select “R” (Red) or “B” (Blue) to make adjustments based on “G” (Green).

**Pattern Color:** Select “R/G” (Red and Green) or “R/G/B” (White, all colors) when “Adjust Color” is “R” (Red). Select “B/G” (Blue and Green) or “R/G/B” (White, all colors) when the “Adjust Color” is “B” (Blue).

**Adjust:** The shift adjustment and zone adjustment of the color selected in “Adjust Color” can be made with < / > buttons.

- When “Shift” is selected: Assign the settings of the horizontal direction (H) with < / > buttons and the vertical direction (V) with ↑ / ↓ buttons on the shift adjustment screen.

<table>
<thead>
<tr>
<th>Panel Shift Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjust Color: R</td>
</tr>
<tr>
<td>↑</td>
</tr>
<tr>
<td>↓</td>
</tr>
<tr>
<td>H: 0</td>
</tr>
<tr>
<td>V: 0</td>
</tr>
<tr>
<td>Adjust: ← → → Set: 0</td>
</tr>
</tbody>
</table>

- When “Zone” is selected: Select the position to adjust with < / > buttons for the horizontal position (H position) and ↑ / ↓ buttons for the vertical position (V position), then press ↓ .

<table>
<thead>
<tr>
<th>Panel Zone Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjust Color: R</td>
</tr>
<tr>
<td>↑</td>
</tr>
<tr>
<td>H Position: 10</td>
</tr>
<tr>
<td>↓</td>
</tr>
<tr>
<td>V Position: 10</td>
</tr>
<tr>
<td>Set: R (Back: 0)</td>
</tr>
</tbody>
</table>

- Set the amount to adjust with < / > buttons for the horizontal direction (H direction) and with ↑ / ↓ buttons for the vertical direction (V direction). You can select the position to adjust again by pressing ↓ .

<table>
<thead>
<tr>
<th>Panel Zone Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjust Color: R</td>
</tr>
<tr>
<td>↑</td>
</tr>
<tr>
<td>H: 0</td>
</tr>
<tr>
<td>↓</td>
</tr>
<tr>
<td>V: 0</td>
</tr>
<tr>
<td>Adjust: ← → → Set: 0</td>
</tr>
</tbody>
</table>

**Reset:** Returns to the factory settings.

**Preset:** The optimized data has been preset.

**Note:** Depending on the adjustments made above, colors may become uneven or the resolution may change.
<table>
<thead>
<tr>
<th>Setting items</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Setting</td>
<td>Perform internet protocol settings.</td>
</tr>
</tbody>
</table>
| IPv4 Setting | **IP Address Setup:** Selects the IP address setting method.  
  **Auto (DHCP):** The IP address is assigned automatically from the DHCP server such as a router.  
  **Manual:** Specifies the IP address manually.  
  When “Manual” is selected for “IP Address Setup,” input “IP Address,” “Subnet Mask,” and “Default Gateway.” Select each item with the ↑/↓ buttons, then press + button. Select the frame to input with the ←/→ buttons and input the value with the ↑/↓ buttons.  
  When all items are entered, select “Apply,” and then press the + button. The entered settings will be registered.  
  **IP Address:** Sets the unit’s IP address.  
  **Subnet Mask:** Sets the unit’s subnet mask.  
  **Default Gateway:** Sets the unit’s default gateway.  
  **MAC Address:** Displays the unit’s MAC address. This cannot be changed.  
  **Apply:** Enables the IP address that is set manually. |
| IPv6 Information | Displays the IPv6 information.  
  When you set the IPv6 IP address, set it on a Web browser (page 43). |
Information Menu

The Information menu displays the model name, serial number, input signal type, software version and the cumulated hours of usage of the lamp.

<table>
<thead>
<tr>
<th>Items</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Name</td>
<td>Displays the model name</td>
</tr>
<tr>
<td>Serial No.</td>
<td>Displays the serial number</td>
</tr>
<tr>
<td>Signal type</td>
<td>Displays the type of the input signal. When input signals with 3D information are input, the type of input signals and the 3D format are displayed. When the input signal is compatible with HDR, the “HDR” is displayed.</td>
</tr>
<tr>
<td>Software Version</td>
<td>Displays the software version.</td>
</tr>
<tr>
<td>Lamp Timer</td>
<td>Indicates how long the lamp has been turned on (total usage).</td>
</tr>
</tbody>
</table>

Note

You cannot adjust or change the displays listed above.

About the Preset Memory

This unit has default image data to adjust preset data for input signals appropriately according to the signals shown in “Preset Signals” (page 57) (the preset memory). When the preset signal is input, the unit automatically detects the signal type and recalls the data for the signal from the preset memory to adjust it to an optimum picture. The signal type is displayed in the Information menu.

Note

Depending on the computer input signal, parts of screen may be hidden or displayed incorrectly.
Using Network Features

Connection to the network allows you to operate the following features:
• Checking the current status of the unit via a Web browser.
• Making the network settings for the unit.
• Network monitoring and controlling with control protocol (SDAP [Advertisement], SDCP [PJ Talk], DDDP [AMX], Crestron RoomView, Control4).

Notes
• When connecting this projector with the network, consult with the person who sets up the network. The network must be secured.
• When using this projector connected with the network, access the Control window via a Web browser and change the access limitation of the factory preset values (page 45). It is recommended to change the password regularly.
• When the setting on the Web browser is completed, close the Web browser to log out.
• The menu displays used for the explanation below may be different depending on the model you are using.
• Supported Web browsers are Internet Explorer 8/9/10/11.
• The menu displays only English.
• If the browser of your computer is set to [Use a proxy server] when you have access to the unit from your computer, click the check mark to set accessing without using a proxy server.
• AMX DDDP is not compatible with IPv6.
• These network functions are available when the unit is turned on.

Displaying the Control Window of the Unit with a Web Browser

1 Connect the LAN cable.

2 Set the network settings for the unit using “Network Setting” on the Installation menu (page 41).

3 Start a Web browser on the computer, enter the following in the address field, then press the Enter key on your computer.
   http://xxx.xxx.xxx.xxx
   (xxx.xxx.xxx.xxx: IP address for the unit)

   When connecting by the IPv6 address
   http://[xxxx:xxxx:: xxxx]

   You can confirm the IP address of the unit under “Network Setting” on the Installation menu.

The following window appears in the Web browser:
Once you make the network settings, you can open the Control window only by performing step 3 of this procedure.

**Operating the Control Window**

**Switching the Page**

Click one of the Page Switching buttons to display the desired setting page.

**Setting the Access Limitation**

You can limit a user for accessing any particular page.

**Administrator:** Allowed access to all pages

**User:** Allowed access to all pages except the Setup page

When you access the Setup page for the first time, input “root” as the user name and “Projector” as the password in the authentication dialog.

When you log in for the first time, the window that prompts you to change the password is displayed. Follow the instructions on the screen to change the password.

The name of the administrator is preset to “root.”
The password can be changed in the Password page in the Setup page. When you change the password, input a new password after deleting the password (***** that was set. The password of the administrator and user should be 8 to 16 characters that includes both alphabet and numeric characters. Alphabet is case-sensitive. The default password “Projector” cannot be set as a new password.

**Note**
If you forget your password, consult with qualified Sony personnel.

---

**Confirming the Information Regarding the Unit**

You can confirm the current settings for the unit on the Information page.
## Troubleshooting

If the unit 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>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The power is not turned on.</td>
<td>The power may not turn on if you turn the power off with I/lector (ON/STANDBY) button and turn it on again in a short time. After about 1 minute, turn the power on.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Close the lamp cover securely, then tighten the screws securely.</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Check warning indicators.</td>
<td>49</td>
</tr>
<tr>
<td>The power is suddenly turned off.</td>
<td>Check that “Power Saving” in the Setup mode is set to “Standby.”</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Set “Power Saving” to “Off.”</td>
<td>35</td>
</tr>
</tbody>
</table>

### Picture

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause and Remedy</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>No picture.</td>
<td>Check that the connecting cable is connected to the external equipment properly.</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Select the input source correctly using the INPUT button.</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Check that the computer signal is set for output to an external monitor.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If the notebook computer, etc., signal is output to its display and an external monitor, the external monitor’s image may not be displayed correctly. Set your computer to output the signal to only an external monitor.</td>
<td>16, 36</td>
</tr>
<tr>
<td>The picture has ghosts.</td>
<td>Video images are displayed in 3D. Watch the 3D video images using the 3D glasses, and set “2D-3D Display Sel.” to “3D.” To convert 3D video images to 2D video images, set “2D-3D Display Sel.” to “2D.”</td>
<td>16, 36</td>
</tr>
<tr>
<td>Bright or dark area of the video appears too bright or too dark.</td>
<td>This symptom may occur when signal level other than those of HDMI standard is input. Switch the output level of the connected equipment, or switch the Dynamic Range on the Function menu of the unit.</td>
<td>37</td>
</tr>
<tr>
<td>The picture is too dark.</td>
<td>Adjust “Contrast” or “Brightness” on the Picture menu properly.</td>
<td>27</td>
</tr>
<tr>
<td>The picture is not clear.</td>
<td>Adjust the focus.</td>
<td>9</td>
</tr>
<tr>
<td>The color of characters or the picture is not appropriate.</td>
<td>Select the desired color registration in “Panel Alignment” of the Installation menu.</td>
<td>40</td>
</tr>
</tbody>
</table>
### On-screen display

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause and Remedy</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image is left on the screen. (image retention)</td>
<td>When high contrast non-moving images are displayed for a long period of time, there may be some image retention on the screen. This is only a temporary condition. Turning off the power for a while will eliminate the retained image.</td>
<td>–</td>
</tr>
</tbody>
</table>

### Remote control

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause and Remedy</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-screen display does not appear.</td>
<td>Set “Status” on the Setup menu to “On.”</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Check if the ON/STANDBY indicator should light in green. When the ON/STANDBY indicator blinks in green, the unit is starting up. Wait until it stops blinking and remains lit in green.</td>
<td>8</td>
</tr>
<tr>
<td>The model name does not disappear from the screen.</td>
<td>The display mode of the unit may be set at the time of purchase. Consult with your local dealer or qualified Sony personnel.</td>
<td>–</td>
</tr>
</tbody>
</table>

### 3D video images

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause and Remedy</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-screen display does not appear.</td>
<td>Set “Status” on the Setup menu to “On.”</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Check if the ON/STANDBY indicator should light in green. When the ON/STANDBY indicator blinks in green, the unit is starting up. Wait until it stops blinking and remains lit in green.</td>
<td>8</td>
</tr>
<tr>
<td>The model name does not disappear from the screen.</td>
<td>The display mode of the unit may be set at the time of purchase. Consult with your local dealer or qualified Sony personnel.</td>
<td>–</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause and Remedy</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The remote control does not work.</td>
<td>Batteries could be weak. Replace them with new batteries.</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Insert the batteries with the correct polarities.</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>If there is a fluorescent lamp near the remote control detector, the unit may work improperly or inadvertently.</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Confirm the position of the remote control detector on the unit.</td>
<td>4, 5</td>
</tr>
<tr>
<td></td>
<td>Set “IR Receiver” to “Front &amp; Rear” on the Installation menu.</td>
<td>39</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause and Remedy</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The video image does not seem like 3D video images.</td>
<td>Check if the 3D glasses are turned on.</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Make sure that the battery in the 3D glasses could be weak or is sufficiently charged.</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Set “2D-3D Display Sel.” to “Auto” or “3D.”</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Check if the input signals are compatible 3D signals.</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>The 3D signals may not be input depending on the specifications of the connected AV selector/AV amplifier/external equipment. If the 3D signal is not input, confirm the specifications and/or settings of the AV selector/AV amplifier/external equipment.</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>When the viewing position is too far from the unit, the 3D glasses may not be able to display the images properly.</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>The screen size is not appropriate. Set the zooming magnification to low or watch the image from farther away from the screen.</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>For details, see “Precautions for use” of “Using the 3D Glasses.”</td>
<td>16</td>
</tr>
</tbody>
</table>
## Others

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause and Remedy</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The fan is noisy.</td>
<td>Check the setting of “High Altitude Mode” on the Setup menu.</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Make sure that the room temperature is not too high.</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Check the installation requirements of the unit.</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Fan speed increases to maintain the product reliability of the projector’s components in a room, where the temperature is higher than normal. The fan noise becomes slightly louder. The approximate normal temperature is 25°C (77°F).</td>
<td></td>
</tr>
<tr>
<td>The lens shift cannot be adjusted.</td>
<td>The lens shift cannot be adjusted over the range of movement. Adjust the lens shift within the range of movement.</td>
<td>11, 65</td>
</tr>
</tbody>
</table>
Warning Indicators

The ON/STANDBY or WARNING indicator lights up or flashes if there is any trouble with your projector.

<table>
<thead>
<tr>
<th>Flashing/Lighting indicators</th>
<th>The number of flashes</th>
<th>Cause and Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Flashes in red)</td>
<td>Twice</td>
<td>Close the lamp cover securely, then tighten the screws securely (page 53).</td>
</tr>
<tr>
<td>(Flashes in red)</td>
<td>Three times</td>
<td>The temperature of lamp is unusually high. Turn off the power and wait for the lamp to cool, then turn on the power again. If the symptom persists, the lamp may be at the end of its service life. In this case, replace the lamp with a new one (page 52).</td>
</tr>
<tr>
<td>Both indicators flash</td>
<td>Twice</td>
<td>The internal temperature is unusually high. Check to ensure that if nothing is blocking the ventilation holes or whether or not the unit is being used at high altitudes.</td>
</tr>
<tr>
<td></td>
<td>Three times</td>
<td>The fan is broken. Consult with qualified Sony personnel.</td>
</tr>
</tbody>
</table>

Note

When a warning indicator other than the above starts flashing, and the symptom persists even after carrying out the above methods, consult with qualified Sony personnel.
## Message Lists

### Warning messages

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause and Remedy</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>High temp.! Lamp off in 1 min.</td>
<td>Turn off the power.</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Check to ensure that nothing is blocking the ventilation holes.</td>
<td>4, 5</td>
</tr>
<tr>
<td>Frequency is out of range!</td>
<td>Frequency is out of range. Input a signal that is within the acceptable frequency range of the unit.</td>
<td>57</td>
</tr>
<tr>
<td>Please replace the Lamp.</td>
<td>It is time to replace the lamp. Replace the lamp.</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>If this message appears again after you replace the lamp, the lamp replacement process is not complete. Check the lamp replacement process.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>To clear this message, press any button either on the remote control or the control panel of the unit once.</td>
<td></td>
</tr>
<tr>
<td>Projector temperature is high. High Altitude Mode should be “On” if projector is being used at high altitude.</td>
<td>Check to ensure that nothing is blocking the ventilation holes.</td>
<td>4, 5</td>
</tr>
<tr>
<td></td>
<td>When using the unit at high altitude, set “High Altitude Mode” to “On.”</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>When temperature inside the unit remains high, “High Altitude Mode” is switched to “On” in 1 minute, then the fan speed increases.</td>
<td></td>
</tr>
<tr>
<td>Power Saving Mode is set. Projector will automatically enter Standby Mode in 1 minute.</td>
<td>“Power Saving” is set to “Standby.”</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>If no signal is input, the power turns off after 1 minute, and the projector goes into standby mode.</td>
<td></td>
</tr>
</tbody>
</table>

### Caution messages

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause and Remedy</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>x↔</td>
<td>No signal is input in the selected input. Check connections.</td>
<td>13</td>
</tr>
<tr>
<td>Not applicable!</td>
<td>Press the appropriate button. The operation to be activated by the button is currently prohibited.</td>
<td>–</td>
</tr>
<tr>
<td>Settings Lock enabled.</td>
<td>“Settings Lock” is set to “Level A” or “Level B.”</td>
<td>37</td>
</tr>
</tbody>
</table>
Updating the Software

You can download files to update the software of the unit. Copy the downloaded files to your USB memory, insert the USB memory to the USB terminal of the unit, then perform the update.

To use the features updated, insert a USB memory device into a PC connected to the internet.

Download the update files from the following Sony website:
https://esupport.sony.com/
The website also explains how to install the update.

Note
Some USB memories may not be supported for use. For details, refer to the website above.

About HDR (high dynamic range)

HDR is a video expression which improves the ability to express dark places and bright places compared to previous video expressions.

About the x.v.Color

- “x.v.Color” is a promotion name given to the products that have the capability to realize a wide color space based on the xvYCC specifications and is a trademark of Sony Corporation.
- xvYCC is an international standard of the technical specifications of the extended-gamut color space for video signals. The color gamut of xvYCC is wider than the one of sRGB that is used with the current television system.

About the simulated 3D feature

- Use the simulated 3D function taking into account that the picture will provide a different look from the original images, because this function converts the video images.
- Note that if the unit is used for profit or for public viewing, displaying 2D video images as 3D video images by converting to the simulated 3D may constitute an infringement of the rights of authors or producers, which are legally protected.
Replacing the Lamp

The lamp used for the light source has a certain lifespan. 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) without delay.

Tip
The lifespan of the lamp used for the light source changes depending on the installation environment or use conditions. You can use the lamp longer by avoiding turning the lamp off until several minutes pass after turning the lamp on.

Tools you need to get started:
• Projector Lamp LMP-H280 (Optional)
• Standard Phillips screwdriver
• Cloth (for scratch protection)

Caution
• The lamp remains hot after the unit is turned off with the (ON/STANDBY) button. If you touch the lamp, you may burn your fingers. When you replace the lamp, wait for at least 1 hour for the lamp to cool.
• Do not touch the surface of the lamp. If you touch it, wipe off the fingerprints with a soft cloth.
• Pay special attention to replacing the lamp when the unit is installed on the ceiling.
• When replacing the lamp of a unit which is on the ceiling, do not stand directly under the lamp cover. When removing the lamp door (inner cover), avoid twisting it. If the lamp explodes, fragments may cause injury.
• 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.

Notes
• Be sure to turn off the unit and unplug the power cord before replacing the lamp, then check the ON/STANDBY indicator has already been turned off.

1 Turn off the unit and unplug the AC power cord.

2 When setting the unit on a flat surface such as a desk etc., put a cloth to prevent the surface from being scratched. Place the unit on the cloth.

   Note
   Be sure that the unit is placed on a stable surface.

3 While pressing the part indicated in the lamp cover illustration, slide and then open the lamp cover.

4 Loosen the lamp door (inner cover) screw with a Phillips screwdriver, and then open the lamp door.

   Notes
   • Be sure to use an LMP-H280 Projector Lamp for replacement. If you use lamps other than the LMP-H280, the unit may malfunction.
5 Loosen the 3 screws on the lamp with the Phillips screwdriver. Hold up the handle, then pull the lamp straight out.

6 Push in the new lamp by the handle securely until it reaches the end, and then tighten the 3 screws.

Note
Be careful not to touch the optical block inside the unit.

7 Close the lamp door (inner cover), and then tighten the screw.

8 Close the lamp cover.

Notes
- Do not loosen other screws except the 3 specified screws.
- Hold the lamp by the handle to remove and attach it.
9 Wipe dust off the ventilation holes (intake) with a soft cloth.

10 Turn on the unit, then select the lamp setting item on the Setup menu. The menu screen below will be appeared.

<table>
<thead>
<tr>
<th>Lamp Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Settings for lamp replacement. Has the projection lamp been replaced?</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Set:</td>
</tr>
</tbody>
</table>

**Tip**
If “Settings Lock” is set to “Level B,” set to “Off” once.

11 Select “Yes.”

<table>
<thead>
<tr>
<th>Lamp Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lamp replacement process is now complete.</td>
</tr>
<tr>
<td>OK</td>
</tr>
<tr>
<td>Set:</td>
</tr>
</tbody>
</table>

**Caution**
Do not put your hands into the lamp replacement slot, and do not allow any liquid or other objects into the slot to avoid electrical shock or fire.

**Notes**
- The unit will not turn on unless the lamp cover are securely closed.
- To clear a message displayed on the screen, press any button either on the remote control or the control panel of the unit once.

**Note on replacing the lamp when broken, in the case of a ceiling installation**
If the lamp breaks, broken lamp pieces may scatter and cause injury.
When the unit is on the ceiling, remove the lamp door (inner cover) by sliding it horizontally slowly after raising it with 30 degree opened. Avoid twisting the lamp door (inner cover).

**Disposal of the used lamp**

**For the customers in the U.S.A. and Canada**

Hg Lamp contains mercury. Dispose according to applicable local, state/province and federal laws.
For additional information, see [www.sony.com/mercury](http://www.sony.com/mercury)
Cleaning

Cleaning the cabinet

- To remove dust from the cabinet, wipe gently with a soft cloth. If dust is persistent, wipe with a soft cloth slightly moistened with a diluted mild detergent solution.
- Never use any type of abrasive pad, alkaline/acid cleaner, scouring powder, or volatile solvent, such as alcohol, benzene, thinner or insecticide.
- Clean the unit with a cleaning cloth. Wiping with a dirty cloth may scratch the unit.
- Using such materials or maintaining prolonged contact with rubber or vinyl materials may result in damage to the screen surface and cabinet material.
## Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display system</td>
<td>SXRD panel, projection system</td>
</tr>
<tr>
<td>Display device</td>
<td><strong>Size of effective display area</strong></td>
</tr>
<tr>
<td></td>
<td>0.74-inch (18.8 mm) SXRD</td>
</tr>
<tr>
<td></td>
<td>Number of pixels</td>
</tr>
<tr>
<td></td>
<td>26,542,080 pixels (8,847,360 pixels × 3)</td>
</tr>
<tr>
<td>Projection lens</td>
<td>2.06 times zoom lens (motorized)</td>
</tr>
<tr>
<td></td>
<td>f = 21.7 mm to 44.7 mm</td>
</tr>
<tr>
<td></td>
<td>F3.0 to F4.0</td>
</tr>
<tr>
<td>Light source</td>
<td>Ultra High Pressure Lamp 280 W type</td>
</tr>
<tr>
<td>Screen size</td>
<td>60 inches to 300 inches (1,524 mm to 7,620 mm)</td>
</tr>
<tr>
<td></td>
<td>(measured diagonally)</td>
</tr>
<tr>
<td>Accepted digital signals</td>
<td>480/60p, 576/50p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/24p, 3840 × 2160/24p, 3840 × 2160/30p, 3840 × 2160/50p, 4096 × 2160/24p, 4096 × 2160/25p, 4096 × 2160/30p, 4096 × 2160/50p, 4096 × 2160/60p</td>
</tr>
<tr>
<td>HDMI (2 inputs), HDCP compliant</td>
<td>RGB</td>
</tr>
<tr>
<td></td>
<td>Y Pb/Cb Pr/Cr</td>
</tr>
<tr>
<td>Other inputs/outputs</td>
<td>TRIGGER</td>
</tr>
<tr>
<td></td>
<td>(2 connectors) Minijack, DC 12 V Max. 100 mA</td>
</tr>
<tr>
<td></td>
<td>REMOTE RS-232C: D-sub 9-pin (female)</td>
</tr>
<tr>
<td></td>
<td>LAN RJ45, 10BASE-T/100BASE-TX</td>
</tr>
<tr>
<td></td>
<td>IR IN Minijack</td>
</tr>
<tr>
<td></td>
<td>USB DC 5 V, Max. 500 mA</td>
</tr>
<tr>
<td>Outside dimensions (w/h/d)</td>
<td>495.6 mm × 195.3 mm × 463.6 mm (19 1/2 × 7 11/16 × 18 1/4 inches) (without protrusions)</td>
</tr>
<tr>
<td>Mass</td>
<td>Approx. 14 kg (31 lb)</td>
</tr>
<tr>
<td>Power requirements</td>
<td>AC 100 V to 240 V, 4.1 A to 1.7 A, 50/60 Hz</td>
</tr>
<tr>
<td>Power consumption</td>
<td>410 W</td>
</tr>
<tr>
<td>Power consumption Standby</td>
<td>0.3 W (when “Remote Start” is set to “Off”)</td>
</tr>
<tr>
<td></td>
<td>Networked Standby 1.0 W (LAN) (when “Remote Start” is set to “On”)</td>
</tr>
<tr>
<td></td>
<td>When a LAN terminal is not connected, it becomes a low power consumption mode (0.5 W).</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>5°C to 35°C (41°F to 95°F)</td>
</tr>
<tr>
<td>Operating humidity</td>
<td>35% to 85% (no condensation)</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>–20°C to +60°C (–4°F to +140°F)</td>
</tr>
<tr>
<td>Storage humidity</td>
<td>10% to 90%</td>
</tr>
<tr>
<td>Optional accessories</td>
<td><strong>Projector Lamp:</strong> LMP-H280 (for replacement)</td>
</tr>
<tr>
<td></td>
<td><strong>Projector Suspension Support:</strong> PSS-H10</td>
</tr>
<tr>
<td></td>
<td><strong>Active 3D Glasses:</strong> TDG-BT500A</td>
</tr>
</tbody>
</table>
Notes

- The values for mass and dimensions are approximate.
- Not all optional accessories are available in all countries and area. Please check with your local Sony Authorized Dealer.
- Information on accessories in this manual is current as of September 2016.

Design and specifications of this unit and its optional accessories are subject to change without notice.

### Preset Signals

The following table shows the signals and video formats which you can project using this unit. When a signal other than the preset signal shown below is input, the picture may not be displayed properly.

<table>
<thead>
<tr>
<th>Preset memory no.</th>
<th>Preset signal (resolution)</th>
<th>fH (kHz)</th>
<th>fV (Hz)</th>
<th>Sync</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>480/60p 480/60p (Progressive NTSC) (720 × 480p)</td>
<td>31.470</td>
<td>60.000</td>
<td>–</td>
</tr>
<tr>
<td>6</td>
<td>576/50p 576/50p (Progressive PAL) (720 × 576p)</td>
<td>31.250</td>
<td>50.000</td>
<td>–</td>
</tr>
<tr>
<td>7</td>
<td>1080/60i 1080/60i (1920 × 1080i)</td>
<td>33.750</td>
<td>60.000</td>
<td>–</td>
</tr>
<tr>
<td>8</td>
<td>1080/50i 1080/50i (1920 × 1080i)</td>
<td>28.130</td>
<td>50.000</td>
<td>–</td>
</tr>
<tr>
<td>10</td>
<td>720/60p 720/60p (1280 × 720p)</td>
<td>45.000</td>
<td>60.000</td>
<td>–</td>
</tr>
<tr>
<td>11</td>
<td>720/50p 720/50p (1280 × 720p)</td>
<td>37.500</td>
<td>50.000</td>
<td>–</td>
</tr>
<tr>
<td>12</td>
<td>1080/60p 1080/60p (1920 × 1080p)</td>
<td>67.500</td>
<td>60.000</td>
<td>–</td>
</tr>
<tr>
<td>13</td>
<td>1080/50p 1080/50p (1920 × 1080p)</td>
<td>56.260</td>
<td>50.000</td>
<td>–</td>
</tr>
<tr>
<td>14</td>
<td>1080/24p 1080/24p (1920 × 1080p)</td>
<td>26.973</td>
<td>23.976</td>
<td>–</td>
</tr>
<tr>
<td>18</td>
<td>720/60p (Frame packing) 720/60p (1280 × 720p)</td>
<td>90.000</td>
<td>60.000</td>
<td>–</td>
</tr>
<tr>
<td>19</td>
<td>720/50p (Frame packing) 720/50p (1280 × 720p)</td>
<td>75.000</td>
<td>50.000</td>
<td>–</td>
</tr>
<tr>
<td>20</td>
<td>1080/24p (Frame packing) 1080/24p (1920 × 1080p)</td>
<td>53.946</td>
<td>23.976</td>
<td>–</td>
</tr>
<tr>
<td>26</td>
<td>640 × 480 VESA 60</td>
<td>31.469</td>
<td>59.940</td>
<td>H-NEG, V-NEG</td>
</tr>
<tr>
<td>32</td>
<td>800 × 600 VESA 60</td>
<td>37.879</td>
<td>60.317</td>
<td>H-POS, V-POS</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>
</tr>
<tr>
<td>45</td>
<td>1280 × 960 VESA 60</td>
<td>60.000</td>
<td>60.000</td>
<td>H-POS, V-POS</td>
</tr>
<tr>
<td>47</td>
<td>1280 × 1024 VESA 60</td>
<td>63.974</td>
<td>60.013</td>
<td>H-POS, V-POS</td>
</tr>
<tr>
<td>50</td>
<td>1400 × 1050 SXGA+</td>
<td>65.317</td>
<td>59.978</td>
<td>H-NEG, V-POS</td>
</tr>
<tr>
<td>55</td>
<td>1280 × 768 1280 × 768/60</td>
<td>47.776</td>
<td>59.87</td>
<td>H-NEG, V-POS</td>
</tr>
<tr>
<td>71</td>
<td>1920 × 1080/60i (Frame packing) 1080/60i (1920 × 1080i)</td>
<td>67.500</td>
<td>60.000</td>
<td>–</td>
</tr>
<tr>
<td>Preset memory no.</td>
<td>Preset signal (resolution)</td>
<td>fH (kHz)</td>
<td>fV (Hz)</td>
<td>Sync</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------------</td>
<td>---------</td>
<td>--------</td>
<td>------</td>
</tr>
<tr>
<td>72</td>
<td>1920 × 1080/50i (Frame packing)</td>
<td>1080/50i (1920 × 1080)</td>
<td>56.250</td>
<td>50.000</td>
</tr>
<tr>
<td>74*</td>
<td>3840 × 2160/60p</td>
<td>3840×2160/60p (3840 × 2160)</td>
<td>135.000</td>
<td>60.000</td>
</tr>
<tr>
<td>75*</td>
<td>3840 × 2160/50p</td>
<td>3840 × 2160/50p (3840 × 2160)</td>
<td>112.500</td>
<td>50.000</td>
</tr>
<tr>
<td>76*</td>
<td>4096 × 2160/60p</td>
<td>4096 × 2160/60p (4096 × 2160)</td>
<td>135.000</td>
<td>60.000</td>
</tr>
<tr>
<td>77*</td>
<td>4096 × 2160/50p</td>
<td>4096 × 2160/50p (4096 × 2160)</td>
<td>112.500</td>
<td>50.000</td>
</tr>
<tr>
<td>78</td>
<td>4096 × 2160/30p</td>
<td>4096 × 2160/30p (4096 × 2160)</td>
<td>67.500</td>
<td>30.000</td>
</tr>
<tr>
<td>79</td>
<td>4096 × 2160/25p</td>
<td>4096 × 2160/25p (4096 × 2160)</td>
<td>56.250</td>
<td>25.000</td>
</tr>
<tr>
<td>93</td>
<td>3840 × 2160/24p</td>
<td>3840 × 2160/24p (3840 × 2160)</td>
<td>53.946</td>
<td>23.976</td>
</tr>
<tr>
<td>94</td>
<td>3840 × 2160/25p</td>
<td>3840 × 2160/25p (3840 × 2160)</td>
<td>56.25</td>
<td>25</td>
</tr>
<tr>
<td>95</td>
<td>3840 × 2160/30p</td>
<td>3840 × 2160/30p (3840 × 2160)</td>
<td>67.4325</td>
<td>29.97</td>
</tr>
<tr>
<td>96</td>
<td>4096 × 2160/24p</td>
<td>4096×2160/24p (4096 × 2160)</td>
<td>54</td>
<td>24</td>
</tr>
</tbody>
</table>

* Available only for YCbCr 4:2:0 signal.

**Preset memory numbers for each input signal**

**Digital signal**

<table>
<thead>
<tr>
<th>Signal</th>
<th>Preset memory number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component signal (HDMI 1, 2 connectors)</td>
<td>5 to 8, 10 to 14, 18 to 20, 71, 72, 74 to 79, 93 to 96</td>
</tr>
<tr>
<td>Video GBR signal (HDMI 1, 2 connectors)</td>
<td>5 to 8, 10 to 14, 18 to 20, 71, 72, 78, 79, 93 to 96</td>
</tr>
<tr>
<td>Computer signal (HDMI 1, 2 connectors)</td>
<td>10 to 13*, 26, 32, 37, 45, 47, 50, 55</td>
</tr>
</tbody>
</table>

* Some digital signals input from computers may be displayed as preset memory number of Component or Video GBR signal.
The items in the menus available to adjust differ depending on the input signal. The following tables indicate them. The items that cannot be adjusted/set are not displayed in the menu.

### Picture menu

<table>
<thead>
<tr>
<th>Item</th>
<th>Component signal</th>
<th>Video GBR signal</th>
<th>Computer signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reality Creation</td>
<td>●</td>
<td>●</td>
<td>–</td>
</tr>
<tr>
<td>Advanced Iris</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Contrast Enhancer</td>
<td>●</td>
<td>●</td>
<td>–</td>
</tr>
<tr>
<td>Lamp Control</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Motionflow(^1)</td>
<td>●</td>
<td>●</td>
<td>–</td>
</tr>
<tr>
<td>Contrast</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Brightness</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Color</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Hue</td>
<td>●</td>
<td>●</td>
<td>–</td>
</tr>
<tr>
<td>Color Temp.</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Sharpness</td>
<td>●</td>
<td>●</td>
<td>–</td>
</tr>
<tr>
<td>NR</td>
<td>●</td>
<td>●</td>
<td>–</td>
</tr>
<tr>
<td>MPEG NR</td>
<td>●</td>
<td>●</td>
<td>–</td>
</tr>
<tr>
<td>Smooth Gradation</td>
<td>●</td>
<td>●</td>
<td>–</td>
</tr>
<tr>
<td>Film Mode</td>
<td>●</td>
<td>●</td>
<td>–</td>
</tr>
<tr>
<td>Gamma Correction</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Color Correction</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Clear White</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>x.v.Color</td>
<td>●</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>HDR</td>
<td>●</td>
<td>●</td>
<td>–</td>
</tr>
<tr>
<td>Color Space</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>
●: Adjustable/can be set
-=: Not adjustable/cannot be set
*1: For further details, refer to the tables in “Motionflow” (page 63).

Screen menu

<table>
<thead>
<tr>
<th>Item</th>
<th>Component signal</th>
<th>Video GBR signal</th>
<th>Computer signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspect*1</td>
<td>● (excluding preset memory numbers 76 to 79 and 96)</td>
<td>● (excluding preset memory numbers 78, 79 and 96)</td>
<td>–</td>
</tr>
</tbody>
</table>

●: Adjustable/can be set
-=: Not adjustable/cannot be set
*1: For further details, refer to the tables in “Aspect Mode” (page 62).

Note
When connecting a cable such as an HDMI cable, etc., check the type of the signal in the Information menu (page 42) and “Digital signal” (page 58), and check items that are adjustable/can be set.

Compatible 3D Signals

This unit accepts the following types of 3D signals.

<table>
<thead>
<tr>
<th>Resolution</th>
<th>3D signal format</th>
</tr>
</thead>
<tbody>
<tr>
<td>720/60p, 720/50p</td>
<td>Side-by-Side format</td>
</tr>
<tr>
<td></td>
<td>Over-Under format*</td>
</tr>
<tr>
<td></td>
<td>Frame packing*</td>
</tr>
<tr>
<td>1080/60i, 1080/50i</td>
<td>Side-by-Side format</td>
</tr>
<tr>
<td></td>
<td>Frame packing</td>
</tr>
<tr>
<td>1080/24p</td>
<td>Side-by-Side format</td>
</tr>
<tr>
<td></td>
<td>Over-Under format*</td>
</tr>
<tr>
<td></td>
<td>Frame packing*</td>
</tr>
<tr>
<td>1080/60p, 1080/50p</td>
<td>Side-by-Side format</td>
</tr>
<tr>
<td></td>
<td>Over-Under format</td>
</tr>
</tbody>
</table>

*: Mandatory 3D format of the HDMI standards.

3D Signals and Adjustable/Setting Items

Some items on the menus may not be available to adjust/set, depending on the 3D signals. The items that cannot be adjusted are not displayed on the menu. The following tables indicate those items.

<table>
<thead>
<tr>
<th>Item</th>
<th>3D signals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>720/60p, 720/50p</td>
</tr>
<tr>
<td>Reality Creation</td>
<td>●</td>
</tr>
<tr>
<td>Advanced Iris</td>
<td>–</td>
</tr>
<tr>
<td>Lamp Control</td>
<td>●</td>
</tr>
</tbody>
</table>
When the unit is set to convert 2D video images to 3D video images, some items on the menus may be not available to adjust/set, depending on the “3D Format” settings on the Function menu. The items that cannot be adjusted are not displayed on the menu. The following tables indicate these items.

<table>
<thead>
<tr>
<th>Item</th>
<th>3D signals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>720/60p, 720/50p</td>
</tr>
<tr>
<td>Motionflow*1</td>
<td>●</td>
</tr>
<tr>
<td>NR</td>
<td>–</td>
</tr>
<tr>
<td>MPEG NR</td>
<td>–</td>
</tr>
<tr>
<td>Smooth Gradation</td>
<td>–</td>
</tr>
<tr>
<td>Film Mode</td>
<td>–</td>
</tr>
<tr>
<td>x.v.Color</td>
<td>●</td>
</tr>
<tr>
<td>HDR</td>
<td>–</td>
</tr>
<tr>
<td>Aspect*2</td>
<td>●</td>
</tr>
</tbody>
</table>

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

*1: The item is not available for Over-Under on 720/60p, or Over-Under on 1080/60p.

*2: For further details, refer to the tables in “Aspect Mode” (page 62).
## Aspect Mode

Selectable items vary depending on the type of input signal or 3D format. For details, see the tables below. Items that cannot be selected are not displayed in the menu.

### 2D

<table>
<thead>
<tr>
<th>Acceptable signals</th>
<th>4096 × 2160</th>
<th>3840 × 2160</th>
<th>1920 × 1080</th>
<th>1280 × 720</th>
<th>720 × 576</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preset memory number (page 57)</td>
<td>76 to 79, 96</td>
<td>74, 75, 93 to 95</td>
<td>7, 8, 10 to 14</td>
<td>5, 6</td>
<td>26, 32, 37, 45, 47, 50, 55</td>
<td></td>
</tr>
<tr>
<td>1.85:1 Zoom</td>
<td>–</td>
<td>–</td>
<td>●</td>
<td>●</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2.35:1 Zoom</td>
<td>–</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Normal</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>V Stretch</td>
<td>–</td>
<td>–</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>–</td>
</tr>
<tr>
<td>Squeeze</td>
<td>–</td>
<td>–</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>–</td>
</tr>
<tr>
<td>Stretch</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>●</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

*1: Not displayed in the menu as fixed at Normal.

### 3D

<table>
<thead>
<tr>
<th>Acceptable signals</th>
<th>1920 × 1080, 1280 × 720</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D format</td>
<td>Side-by-Side</td>
</tr>
<tr>
<td>Preset memory number (page 57)</td>
<td>7, 8, 10 to 14</td>
</tr>
<tr>
<td>1.85:1 Zoom</td>
<td>●</td>
</tr>
<tr>
<td>2.35:1 Zoom</td>
<td>●</td>
</tr>
<tr>
<td>Normal</td>
<td>●</td>
</tr>
<tr>
<td>V Stretch</td>
<td>●</td>
</tr>
<tr>
<td>Squeeze</td>
<td>●</td>
</tr>
<tr>
<td>Stretch</td>
<td>–</td>
</tr>
</tbody>
</table>
Selectable items vary depending on the type of input signal or 3D format. For details, see the tables below. Items that cannot be selected are not displayed in the menu.

### Motionflow

Each adjustable/setting item is individually stored for each input connector. For further details, see the tables below.

#### 2D

<table>
<thead>
<tr>
<th>Acceptable signals</th>
<th>1920 × 1080</th>
<th>1280 × 720</th>
<th>720 × 480</th>
<th>720 × 576</th>
<th>3840 × 2160</th>
<th>4096 × 2160</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preset memory number (page 57)</td>
<td>5 to 8, 10 to 14</td>
<td>74 to 79, 93 to 96</td>
<td>–</td>
<td>–</td>
<td>26, 32, 37, 45, 47, 50, 55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impulse</td>
<td>●</td>
<td>●</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combination</td>
<td>●</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smooth High</td>
<td>●</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smooth Low</td>
<td>●</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>True Cinema</td>
<td>●</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 3D

<table>
<thead>
<tr>
<th>Acceptable signals</th>
<th>1920 × 1080, 1280 × 720</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D format</td>
<td>Frame packing</td>
</tr>
<tr>
<td>Preset memory number (page 57)</td>
<td>18</td>
</tr>
<tr>
<td>Impulse</td>
<td>–</td>
</tr>
<tr>
<td>Combination</td>
<td>–</td>
</tr>
<tr>
<td>Smooth High</td>
<td>–</td>
</tr>
<tr>
<td>Smooth Low</td>
<td>–</td>
</tr>
<tr>
<td>True Cinema</td>
<td>–</td>
</tr>
</tbody>
</table>

### Storage Conditions of Adjustable/Setting Items

Each adjustable/setting item is individually stored for each input connector. For further details, see the tables below.

#### Preset memory numbers for each input signal

<table>
<thead>
<tr>
<th>Input</th>
<th>Preset memory numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDMI 1 (2D)</td>
<td>5 to 8, 10 to 14, 26, 32, 37, 45, 47, 50, 55, 74 to 79, 93 to 96</td>
</tr>
<tr>
<td>HDMI 2 (2D)</td>
<td>–</td>
</tr>
<tr>
<td>HDMI 1 (3D)</td>
<td>7, 8, 10 to 14, 18 to 20, 71, 72</td>
</tr>
<tr>
<td>HDMI 2 (3D)</td>
<td>–</td>
</tr>
</tbody>
</table>
### Picture menu

<table>
<thead>
<tr>
<th>Item</th>
<th>Storage conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calib. Preset</td>
<td>For each input connector</td>
</tr>
<tr>
<td>Reset</td>
<td>For each input connector and Calib. Preset</td>
</tr>
<tr>
<td>Reality Creation</td>
<td></td>
</tr>
<tr>
<td>Advanced Iris</td>
<td></td>
</tr>
<tr>
<td>Contrast Enhancer</td>
<td></td>
</tr>
<tr>
<td>Lamp Control</td>
<td></td>
</tr>
<tr>
<td>Motionflow</td>
<td></td>
</tr>
<tr>
<td>Contrast</td>
<td></td>
</tr>
<tr>
<td>Brightness</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td></td>
</tr>
<tr>
<td>Hue</td>
<td></td>
</tr>
<tr>
<td>Color Temp.</td>
<td></td>
</tr>
<tr>
<td>D93-D55</td>
<td></td>
</tr>
<tr>
<td>Custom 1-5</td>
<td></td>
</tr>
<tr>
<td>Gain R</td>
<td>For each Color Temp., D93-D55 and Custom 1-5</td>
</tr>
<tr>
<td>Gain G</td>
<td></td>
</tr>
<tr>
<td>Gain B</td>
<td></td>
</tr>
<tr>
<td>Bias R</td>
<td></td>
</tr>
<tr>
<td>Bias G</td>
<td></td>
</tr>
<tr>
<td>Bias B</td>
<td></td>
</tr>
<tr>
<td>Sharpness</td>
<td>For each input connector and Calib. Preset</td>
</tr>
<tr>
<td>NR</td>
<td></td>
</tr>
<tr>
<td>MPEG NR</td>
<td></td>
</tr>
<tr>
<td>Smooth Gradation</td>
<td></td>
</tr>
<tr>
<td>Film Mode</td>
<td></td>
</tr>
<tr>
<td>Gamma Correction</td>
<td></td>
</tr>
<tr>
<td>Color Correction</td>
<td></td>
</tr>
<tr>
<td>Clear White</td>
<td></td>
</tr>
<tr>
<td>x.v.Color</td>
<td></td>
</tr>
<tr>
<td>HDR</td>
<td></td>
</tr>
<tr>
<td>Color Space</td>
<td></td>
</tr>
</tbody>
</table>

### Screen menu

<table>
<thead>
<tr>
<th>Item</th>
<th>Storage conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspect</td>
<td>For Picture Position 1.85:1, 2.35:1, or Custom 1-3</td>
</tr>
<tr>
<td>Blanking</td>
<td></td>
</tr>
</tbody>
</table>
Projection Distance and Lens Shift Range

The projection distance refers to the distance between the front of the lens and the projected surface.

The lens shift range represents the distance in percent (%) by which the lens can be shifted from the center of the projected image. The lens shift range is regarded as 0% when the point A in the illustration (point where a line drawn from the center of the lens and the projected image cross at right angles) is aligned with the center of the projected image and full width or full height of the projected image is regarded as 100%.

VS +: Vertical lens shift range (up) [%]
VS -: Vertical lens shift range (down) [%]
HS +: Horizontal lens shift range (right) [%]
HS -: Horizontal lens shift range (left) [%]
When projecting in 1.90:1 (Native Full Display 17:9) format

Projection distance

Unit: m (inches)

<table>
<thead>
<tr>
<th>Projection image size</th>
<th>Projection distance L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagonal</td>
<td>Width × Height</td>
</tr>
<tr>
<td>80&quot; (2.03 m)</td>
<td>1.80 × 0.95 (71 × 37)</td>
</tr>
<tr>
<td>100&quot; (2.54 m)</td>
<td>2.25 × 1.18 (88 × 47)</td>
</tr>
<tr>
<td>120&quot; (3.05 m)</td>
<td>2.70 × 1.42 (106 × 56)</td>
</tr>
<tr>
<td>150&quot; (3.81 m)</td>
<td>3.37 × 1.78 (133 × 70)</td>
</tr>
<tr>
<td>200&quot; (5.08 m)</td>
<td>4.49 × 2.37 (177 × 93)</td>
</tr>
</tbody>
</table>

Projection distance formula

D: Projected image size (Diagonal)

Unit: m (inches)

<table>
<thead>
<tr>
<th>Projection distance L (minimal length)</th>
<th>Projection distance L (maximal length)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L = 0.029432 × D – 0.0434</td>
<td>L = 0.060197 × D – 0.0420</td>
</tr>
<tr>
<td>(L = 1.158727 × D – 1.7084)</td>
<td>(L = 2.369978 × D – 1.6545)</td>
</tr>
</tbody>
</table>

Lens shift range

VS + = 85 – 2.742 × (HS + or HS –) [%]
VS – = 80 – 2.742 × (HS + or HS –) [%]
HS + = HS – = 31 – 0.365 × (VS + or VS –) [%]
When projecting in 1.78:1 (16:9) format

Projection distance

Projection image size

<table>
<thead>
<tr>
<th>Diagonal</th>
<th>Width x Height</th>
<th>Projection distance L</th>
</tr>
</thead>
<tbody>
<tr>
<td>80&quot; (2.03 m)</td>
<td>1.77 x 1.00 (70 x 39)</td>
<td>2.44 – 5.01 (96 – 197)</td>
</tr>
<tr>
<td>100&quot; (2.54 m)</td>
<td>2.21 x 1.25 (87 x 49)</td>
<td>3.05 – 6.28 (121 – 247)</td>
</tr>
<tr>
<td>120&quot; (3.05 m)</td>
<td>2.66 x 1.49 (105 x 59)</td>
<td>3.67 – 7.55 (145 – 297)</td>
</tr>
<tr>
<td>150&quot; (3.81 m)</td>
<td>3.32 x 1.87 (131 x 74)</td>
<td>4.60 – 9.44 (181 – 371)</td>
</tr>
<tr>
<td>200&quot; (5.08 m)</td>
<td>4.43 x 2.49 (174 x 98)</td>
<td>6.15 – 12.61 (242 – 496)</td>
</tr>
</tbody>
</table>

Projection distance formula

D: Projected image size (Diagonal)

<table>
<thead>
<tr>
<th>Projection distance L (minimal length)</th>
<th>Projection distance L (maximal length)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L = 0.030934 x D – 0.0434</td>
<td>L = 0.063269 x D – 0.0420</td>
</tr>
<tr>
<td>(L = 1.217856 x D – 1.7084)</td>
<td>(L = 2.490916 x D – 1.6545)</td>
</tr>
</tbody>
</table>

Lens shift range

\[
\begin{align*}
VS + &= 85 - 2.576 \times (HS + or HS -) \% \\
VS - &= 80 - 2.576 \times (HS + or HS -) \% \\
HS + &= HS - = 33 - 0.388 \times (VS + or VS -) \%
\end{align*}
\]
When projecting in 2.35:1 format

Projection distance

Projection image size

<table>
<thead>
<tr>
<th>Diagonal</th>
<th>Width x Height</th>
<th>Projection distance L</th>
</tr>
</thead>
<tbody>
<tr>
<td>80&quot; (2.03 m)</td>
<td>1.87 x 0.80 (74 x 31)</td>
<td>2.41 – 4.96 (95 – 195)</td>
</tr>
<tr>
<td>100&quot; (2.54 m)</td>
<td>2.34 x 0.99 (92 x 39)</td>
<td>3.02 – 6.22 (119 – 244)</td>
</tr>
<tr>
<td>120&quot; (3.05 m)</td>
<td>2.80 x 1.19 (110 x 47)</td>
<td>3.64 – 7.47 (143 – 294)</td>
</tr>
<tr>
<td>150&quot; (3.81 m)</td>
<td>3.51 x 1.49 (138 x 59)</td>
<td>4.55 – 9.35 (180 – 368)</td>
</tr>
<tr>
<td>200&quot; (5.08 m)</td>
<td>4.67 x 1.99 (184 x 78)</td>
<td>6.08 – 12.48 (240 – 491)</td>
</tr>
</tbody>
</table>

Projection distance formula

D: Projected image size (Diagonal)

<table>
<thead>
<tr>
<th>Projection distance L (minimal length)</th>
<th>Projection distance L (maximal length)</th>
</tr>
</thead>
<tbody>
<tr>
<td>( L = 0.030617 \times D – 0.0434 )</td>
<td>( L = 0.062621 \times D – 0.0420 )</td>
</tr>
<tr>
<td>( (L = 1.205377 \times D – 1.7084) )</td>
<td>( (L = 2.465393 \times D – 1.6545) )</td>
</tr>
</tbody>
</table>

Lens shift range

VS + = 105 – 3.387x (HS + or HS –) [%]
VS – = 99 – 3.387 x (HS + or HS –) [%]
HS + = HS – = 31 – 0.295 x (VS + or VS –) [%]
Dimensions

Front

Unit: mm (inches)

Bottom

Unit: mm (inches)
The distance between the front of the lens and the front of the cabinet

Unit: mm (inches)

36.8 (1 7/16)
Front of the lens
Front of the cabinet

Attaching the PSS-H10 projector suspension support

Front view

Unit: mm (inches)

150 (5 29/32)
Center of the supporting pole

Ceiling

The bottom surface of the mount bracket

175 (6 7/8)
Center of the lens

8 (7/8)
(9/16)
Side view

Unit: mm (inches)

Top view

Unit: mm (inches)

Front of the cabinet

Center of the supporting pole (The center of the supporting pole is different from that of the unit.)
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The following GPL executables and LGPL libraries are used in this product and are subject to the GPL/LGPL License Agreements included as part of this documentation:

Package list:

- linux-kernel
- alsa-lib
- busybox
- crypto
- directfb
- dosfstools
- e2fsprogs
- exceptionmonitor
- fuse
- gdisk
- glib
- glibc
- iptables
- libmicrohttpd
- libnuma (in numactl)
- procps
- pump-autoip
- XZ
- utils

Source code for these executables and libraries, as well as other executables and libraries, can be obtained using the following link:
http://oss.sony.net/Products/Linux/

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b) Accompany it with a written offer, valid for at least 
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corresponding source code, to be distributed under 
the terms of Sections 1 and 2 above on a medium 
customarily used for software interchange; or,
c) Accompany it with the information you received as 
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of the work for making modifications to it. For an 
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associated interface definition files, plus the scripts 
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and so on) of the operating system on which the 
executable 
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