SONY®

4-743-476-**01** (1)

Video Projector

Operating Instructions

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

VPL-VW570ES

4K SXRD Silicon X-tal Reflective Display HDMI

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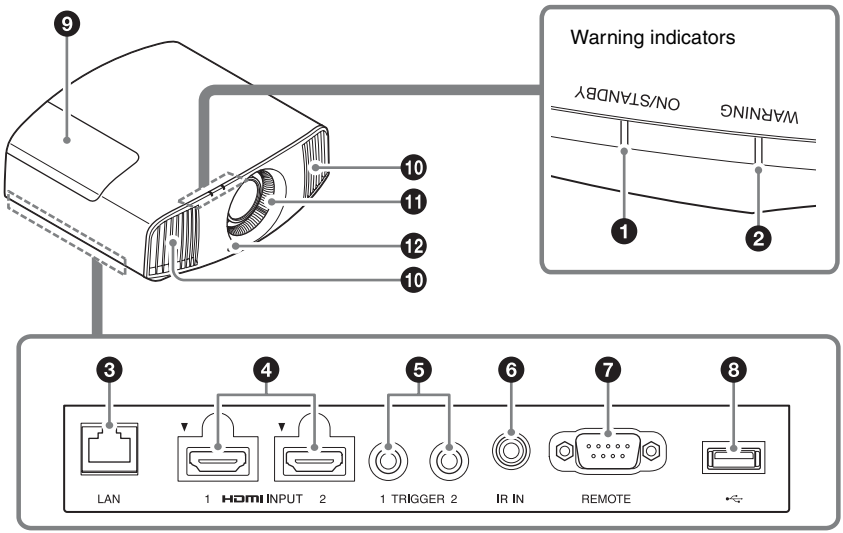
Location of Controls

Front/Right Side



Warning indicators

❶ **ON/STANDBY indicator (page 48)**

❷ **WARNING indicator (page 48)**

Connectors

❸ **LAN connector (page 42)**

❹ **HDMI 1/HDMI 2 connector (page 12)**

❺ **TRIGGER 1/TRIGGER 2 connector (page 38)**

❻ **IR IN connector**
Inputs signals to control the unit.

❼ **REMOTE connector**
Connects to a computer, etc. for remote control.

❽ **USB connector (page 50)**

Others

❾ **Lamp cover (page 51)**

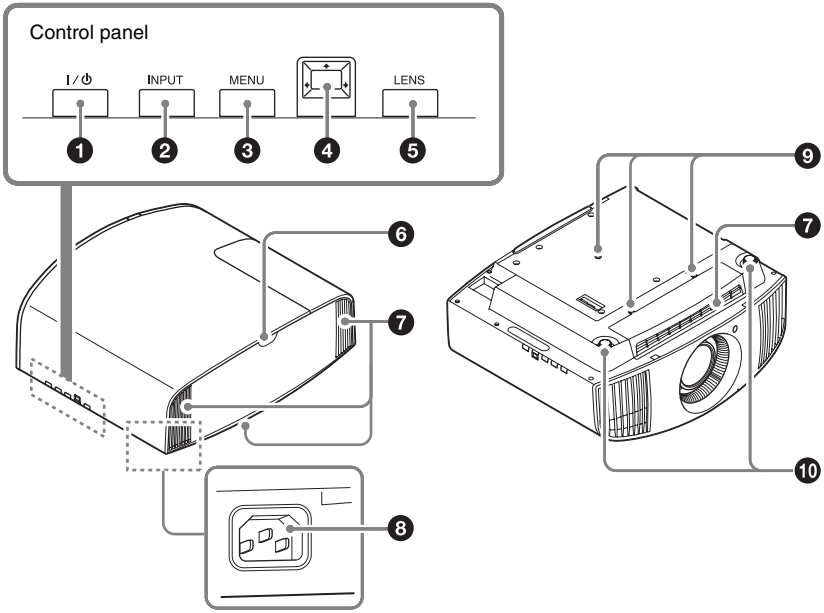
❿ **Ventilation holes (exhaust)**

⓫ **Ventilation holes (intake) (page 53)**

⓬ **Remote control detector (page 7)**

Rear/Left Side/Bottom

The buttons on the control panel have the same names as those on the remote control.



Control panel

❶ **I/⏻ (ON/STANDBY) button (page 7)**

❷ **INPUT button (page 14)**

❸ **MENU button (page 22)**

❹ **↑/↓/←/→ (arrow)/ □ (enter) button (page 22)**

❺ **LENS button (page 7)**

Others

❻ **Remote control detector (page 7)**

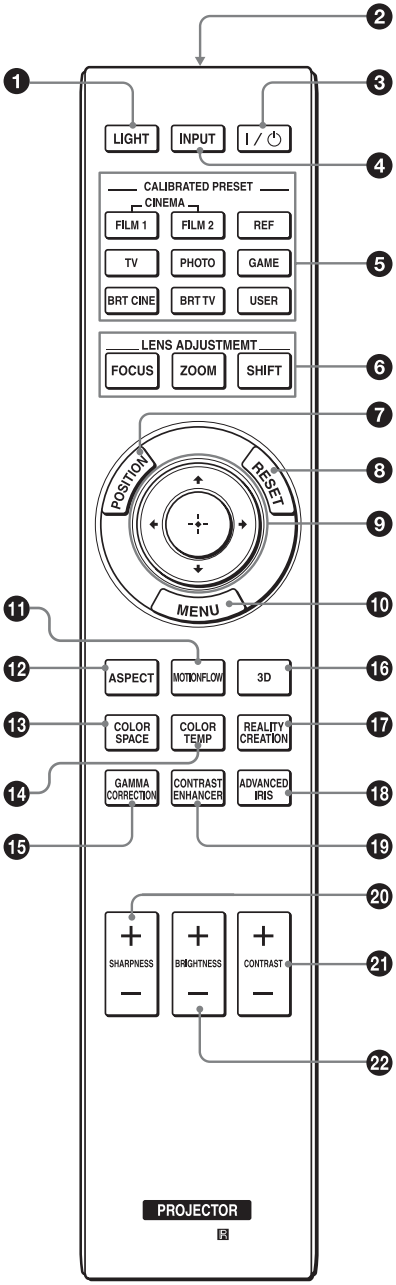
❼ **Ventilation holes (intake) (page 53)**

❽ **AC IN socket (page 7)**

❾ **Projector suspension support attaching hole (page 69)**

❿ **Front feet (adjustable) (page 10)**

Remote Control



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

❷ **Infrared transmitter**

❸ **I/⏻ (ON/STANDBY) button (page 7)**

❹ **INPUT button (page 14)**

❺ **CALIBRATED PRESET buttons (page 21)**

❻ **LENS ADJUSTMENT buttons (page 8)**

❼ **POSITION button (page 16)**

❽ **RESET button (page 23)**

❾ **↑/↓/←/→ (arrow)/ ⊕ (enter) buttons (page 22)**

❿ **MENU button (page 22)**

⓫ **MOTIONFLOW button (page 26)**

⓬ **ASPECT button (page 18)**

⓭ **COLOR SPACE button (page 29)**

⓮ **COLOR TEMP button (page 27)**

⓯ **GAMMA CORRECTION button (page 28)**

⓰ **3D button (page 15)**

⓱ **REALITY CREATION button (page 25)**

⓲ **ADVANCED IRIS button (page 25)**

⓳ **CONTRAST ENHANCER button (page 25)**

⓴ **SHARPNESS +/– button (page 27)**

㉑ **CONTRAST +/– button (page 26)**

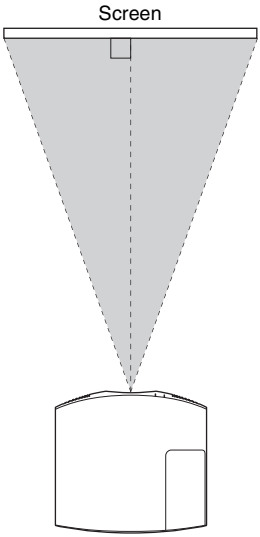
㉒ **BRIGHTNESS +/– button (page 26)**

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 64).

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

Top view



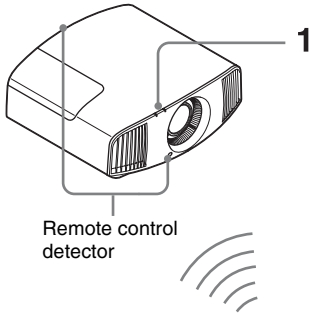
2 Project an image on the screen and adjust the picture so that it fits the screen (page 7).

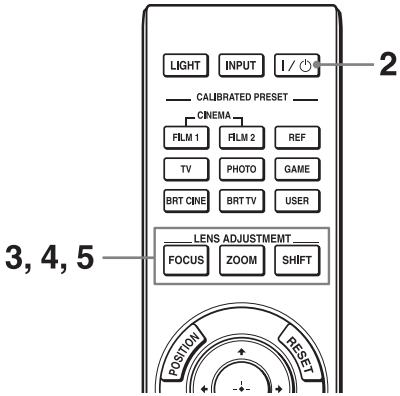
Note

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

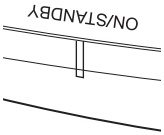
- The I/⏻ (ON/STANDBY), INPUT, MENU, and ↑/↓/←/→/□ (joystick) buttons on the side panel of the unit function the same as those on the remote control. The LENS button functions in the same way as the LENS ADJUSTMENT (FOCUS, ZOOM, SHIFT) buttons of the remote control.
- When adjusting the lens, each time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

FOCUS → ZOOM → SHIFT

Note

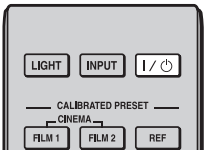
Depending on the installation location of the unit, you may not be able to control it with the remote control. In this case, point the remote control at the remote control detector of the unit or the screen.

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.

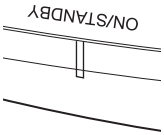


Lights in red.

2 Press the I/⏻ (ON/STANDBY) button to turn on the unit.



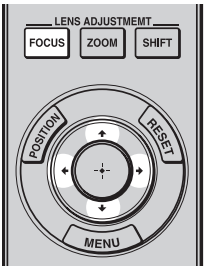
The ON/STANDBY indicator flashes in green, and then lights in green.

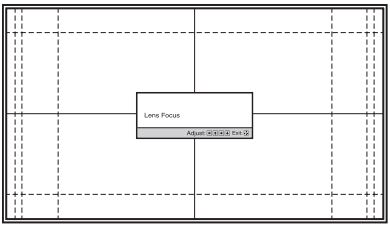


Flashes in green for tens of seconds and then lights in green.

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.





Tips

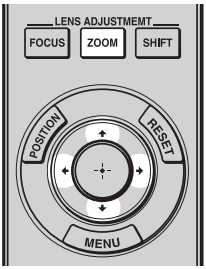
- When "Lens Control" is set to "Off" on the Installation menu, you cannot adjust the focus, the picture size or the proper position by pressing the FOCUS, ZOOM or SHIFT buttons (page 38).
- When "Test Pattern" is set to "Off" on the Function menu, the test pattern is not displayed (page 36).

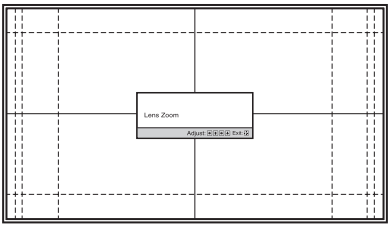
Note

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.

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.

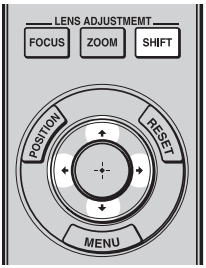


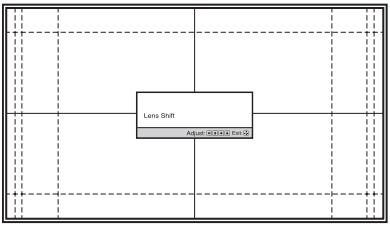


To make the picture larger, press ↑/→. To make the picture smaller, press ↓/←.

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

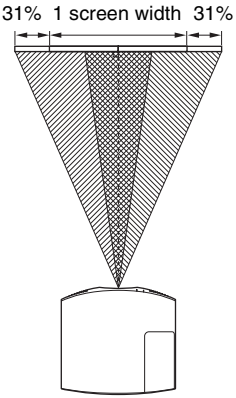
When adjusting the window position, do not touch the lens unit, otherwise your fingers may be pinched by the moving parts.

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



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

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

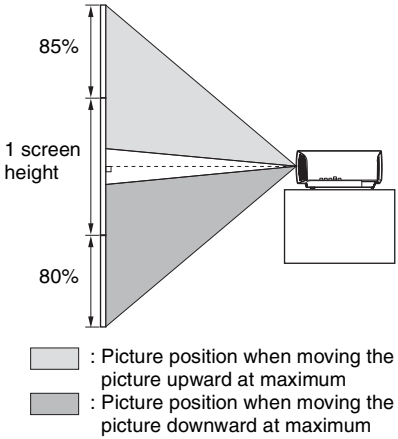
Press the RESET button on the remote control while the Lens Shift adjustment window is displayed, the horizontal position returns to the center of the lens (factory default position). The zoom and focus are not changed.

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.

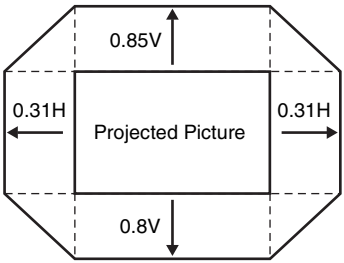
Side view



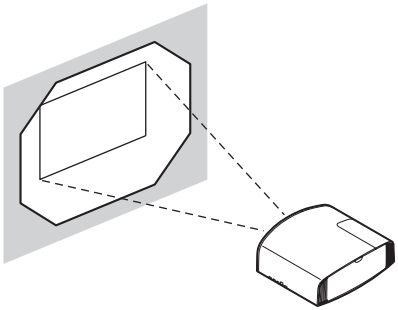
Note

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 64).

Range of movement of the projected picture

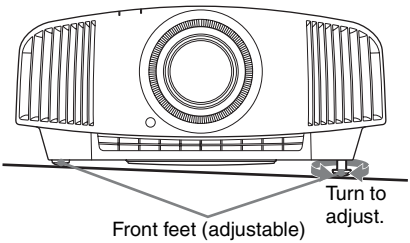


H: Width of the projected picture
V: Height of the projected picture



To adjust the tilt of the installation surface

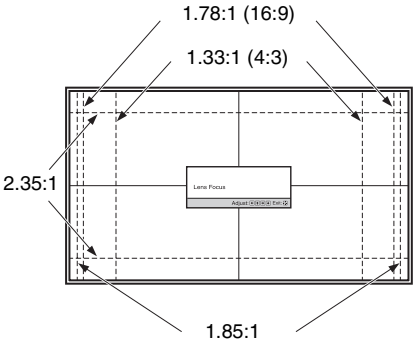
If the unit is installed on an uneven surface, use the front feet (adjustable) to keep the unit level.



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)



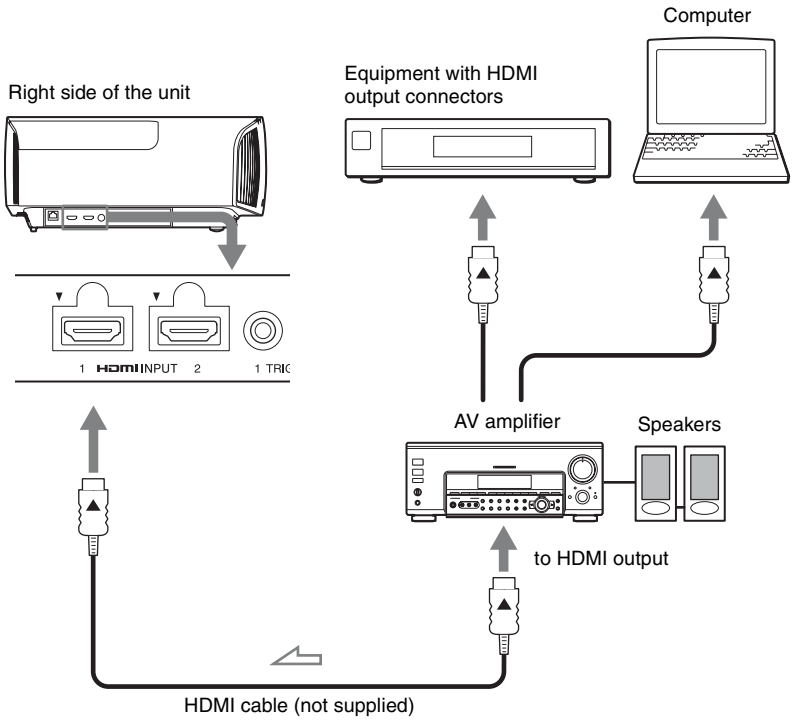
The dashed lines show the screen sizes of each aspect ratio.

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.



: Video signal flow

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

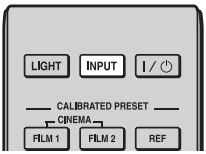
Notes

- Use a Premium High Speed HDMI cable. If you use other types of cables, 4K video may not be displayed appropriately.
- 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.

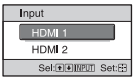
Projecting the Picture

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 ↑/↓/⊕ (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 14).

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 15).

Tip

The factory default setting for "2D-3D Display Sel." is "Auto" to allow projecting 3D video images automatically when the unit detects 3D signals.

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 35).
- Use the 3D glasses within the communication range (page 15).
- 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 35).

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

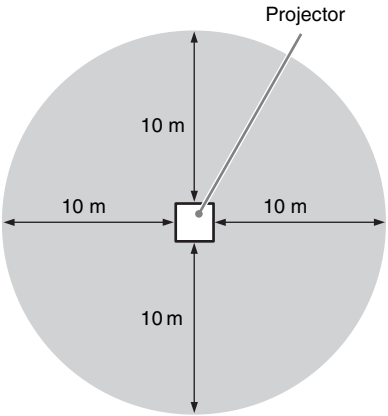
Misoperation may occur if:

- 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.

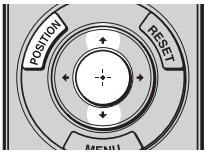
Top or side view



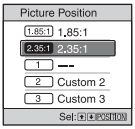
Using the Picture Position

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.



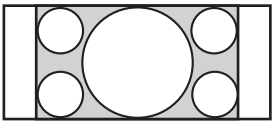
The Picture Position selecting palette is displayed.



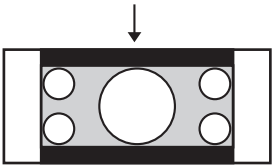
2 Press POSITION repeatedly, or press ↑/↓/⊕ to select the position.
The settings of the position selected is recalled.
Store or delete lens settings, aspect ratio, and blanking in the "Picture Position" of the Screen menu (page 31).
The position where the lens settings, aspect ratio, and blanking are 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.

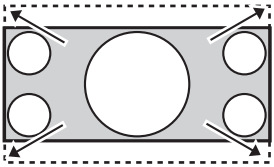


When a 1.78:1 (16:9) image is input



When a 2.35:1 image is input

Press the POSITION button.



The 2.35:1 image expands to fill the screen.

Notes

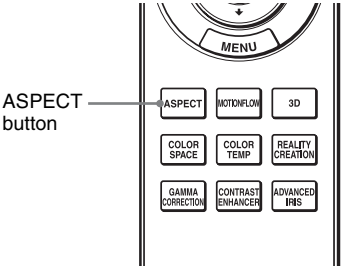
- After you have selected and confirmed the lens position, the lens starts to move. Do not touch, or place anything near, the lens, otherwise it may cause injury or a malfunction.
- If you press any button on the remote control or the unit while the lens is moving, the lens stops. In this case, select 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 65). With some setting positions, the range of lens shift may be restricted, even though the unit is installed within the specified parameters.

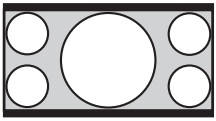
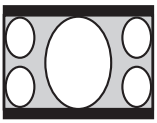
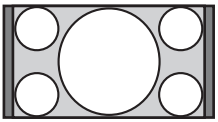
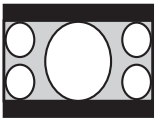
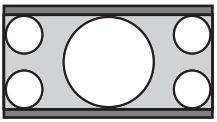
Selecting the Aspect Ratio According to the Video Signal

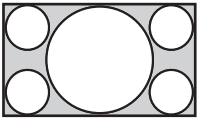
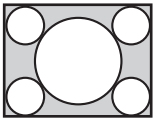
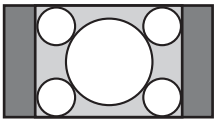
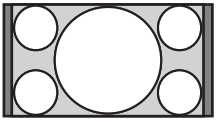
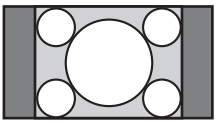
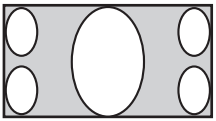
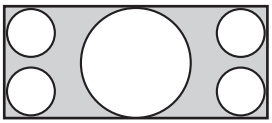
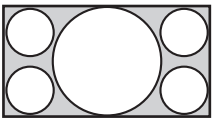
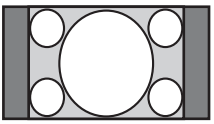
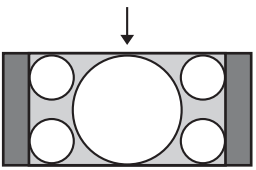
You can select an aspect ratio best suited for the video signal received.

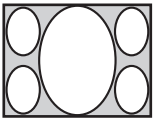
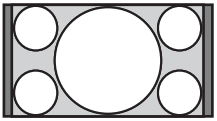
Press ASPECT.

Each time you press the button, you can select the “Aspect” setting.You can also select it using the menu (page 32).



Original image	Recommended setting and resultant images
 1.85:1  Squeezed 1.85:1	1.85:1 Zoom 
2.35:1  Squeezed 2.35:1	2.35:1 Zoom 

Original image	Recommended setting and resultant images
 1.78:1 (16:9)  1.33:1 (4:3)  1.33:1 (4:3) with side panels	Normal  
 2.35:1	V Stretch   When using an anamorphic lens
 16:9	Squeeze   When using an anamorphic lens

Original image	Recommended setting and resultant images
 Squeezed	Stretch 

Notes

- Selectable aspect modes vary depending on the input signal (page 61).
- The aspect modes cannot be selected when a computer signal is input.

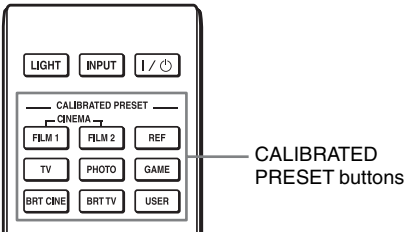
Notes on switching the “Aspect” setting

- 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.



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

Note

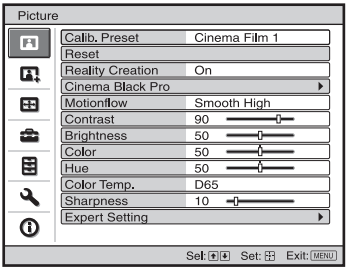
The menu displays used for the explanation may be different from the actual menu display.

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.

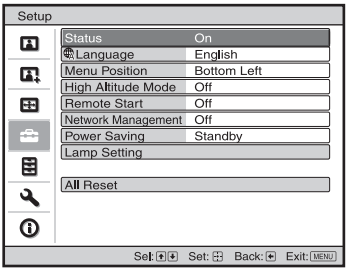
1 Press MENU.

The menu window appears.



2 Press ↑/↓ to select a menu item, and press → or ⊕.

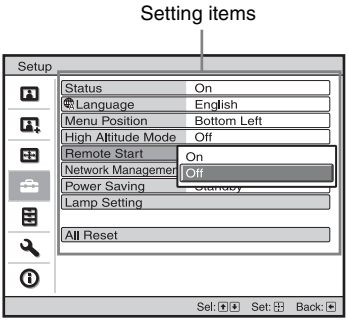
The items that can be set or adjusted with the selected menu appear. The item presently selected is shown in white.



3 Press ↑/↓ to select an item you want to set or adjust and press → or ⊕.

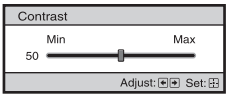
The setting items are displayed in a pop-up menu, in a setting menu, in an adjustment menu or in the next menu window.

Pop-up menu

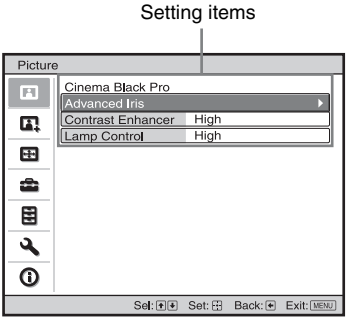


Setting menu

Adjustment menu



Next menu window



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

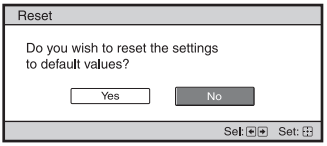
Press ↑/↓ to change the setting.
Press ⊕ to restore the original screen.
You can restore the original screen using ← depending on the selected item.

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:
"Reality Creation," "Cinema Black Pro," "Motionflow," "Contrast," "Brightness," "Color," "Hue," "Color Temp.," "Sharpness," and "Expert Setting" on the Picture menu

To reset the items that have been adjusted

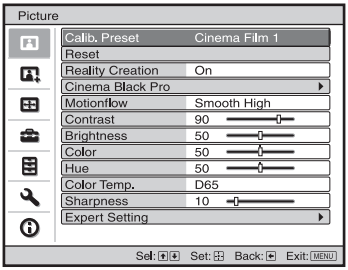
Select an item in the menu screen, and display the pop-up menu, the setting menu, or the adjustment menu.
Press RESET on the remote control to reset only the selected settings to its factory preset value.

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.



Note

These items may not be adjustable or configurable, depending on the type of input signal. For details, see “Input Signals and Adjustable/Setting Items” (page 58).

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

Setting items	Description
Calib. Preset [CALIBRATED PRESET]	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. **Cinema Film 1:** Picture quality suited to reproducing the highly dynamic and clear images typical of master positive film. **Cinema Film 2:** Picture quality suited to reproducing the rich tone and color typical of a movie theater, based on the Cinema Film 1. **Reference:** A picture quality setup suitable for when you want to reproduce faithfully the original image quality, or for enjoying image quality, without any adjustment. **TV:** Picture quality suited for watching TV programs, sports, concerts, and other video images. **Photo:** Ideal for projecting still images taken with a digital camera. **Game:** Picture quality suited to gaming, with well-modulated colors and fast response. **Bright Cinema:** Picture quality suited for watching movies in a bright environment, such as a living room. **Bright TV:** Picture quality suited for watching TV programs, sports, concerts, and other video images in a bright environment, such as a living room. **User:** You can adjust the picture quality to suit your taste, and save the setting. The factory default setting is the same as “Reference.” **Tip** Any adjustments to picture quality settings are saved for each input.
Reset	Resets all currently selected Calib. Preset mode settings to their default values (page 23). **Tip** Reset does not affect settings saved for items of “Color Temp.”

Setting items	Description
Reality Creation [REALITY CREATION]	Adjusts the detail and noise processing of images. (Super-resolution function) **On:** Adjusts the settings of “Reality Creation.” **Database:** Select “Normal” or “Mastered in 4K.” “Mastered in 4K” provides image quality suitable for Blu-ray Disc™ “Mastered in 4K” releasing from Sony Pictures Home Entertainment. **Resolution:** When you increase the setting value, the texture and detail of the picture become sharper. **Noise Filtering:** When you increase the setting value, the noise (picture roughness) becomes less prominent. **Test: On/Off:** Changes “On” and “Off” at a certain frequency to check the effect of “Reality Creation.” **Tip** The display position of status during the test works together with the “Menu Position” setting (page 33). **Off:** The “Reality Creation” function is not applied.
Cinema Black Pro	
Advanced Iris [ADVANCED IRIS]	**Dynamic Control:** Adjusts the range of movement of the iris (aperture). **Full:** 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. **Limited:** Provides a slower movement of the iris (aperture) and lower brightness than “Full,” making the picture quality suitable for viewing in a dark room. **Off:** The “Dynamic Control” function is not applied. **Brightness:** The higher the setting, the brighter the picture. The lower the setting, the darker the picture. **Tip** After adjusting “Brightness,” set “Dynamic Control” according to the brightness of the room and the picture itself.
Contrast Enhancer [CONTRAST ENHANCER]	Corrects the level of bright and dark parts automatically to optimize contrast according to a scene. Increases image sharpness and makes image dynamic. **High/Middle/Low:** You can adjust the contrast enhancer. **Off:** The contrast enhancer function is not applied.
Lamp Control	Switches the lamp output. **High:** Increases the brightness, and projects brighter images. **Low:** Decreases the brightness, and enhances blacks by minimizing brightness. **Tip** Setting “Low” reduces fan noise, while also reducing energy consumption for longer lamp life.

Setting items	Description
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 “HDR10,” “HDR Reference,” “HLG,” 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.

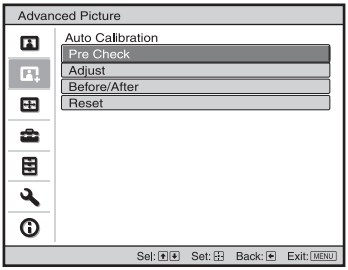
Setting items	Description
Color Temp. [COLOR TEMP]	Adjusts the color temperature. **D93:** Equivalent to 9,300 K color temperature normally used in TVs. Gives white colors a blue tint. **D75:** Equivalent to 7,500 K color temperature used as an ancillary standard illuminant. Gives a neutral tint between “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]	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	
NR (Noise Reduction)	Reduces the roughness or noise of the picture. **Auto:** Detects the noise level to reduce the roughness or noise of the picture automatically. **High/Middle/Low:** Select a setting according to the roughness or noise of the input signal source. **Off:** The NR (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.”
MPEG NR (MPEG Noise Reduction)	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	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.

Setting items	Description
Film Mode	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]	Adjusts the response characteristics of the tone of the picture. Select a favorite tone from 10 options. **1.8:** Bright Produces a brighter picture overall. **2.0** **2.1** **2.2** **2.4** **2.6:** Dark Produces a darker picture overall. **Gamma 7:** Produces a sharper picture by emphasizing darker parts. **Gamma 8:** Produces a brighter picture than Gamma 7. 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.
Color Correction	**On:** 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." Color Correction Color Select: ← Red → Hue: 0 Saturation: 0 Brightness: 0 Sel: ↑↓ Set: ⊞ ② Press ↑/↓ to select "Hue," "Saturation" or "Brightness," then adjust them to suit your taste using ←/→ while watching the projected picture. **Off:** The "Color Correction" effect is not applied.
Clear White	Emphasizes vivid whites. **High/Low:** You can adjust the "Clear White" effect. **Off:** The "Clear White" effect is not applied.
x.v.Color	Set this item when connecting the unit with equipment that supports x.v.Color and playing back an x.v.Color video signal. **On:** You can play back an x.v.Color video signal. **Off:** The "x.v.Color" function is not applied. **Tip** Setting x.v.Color to "On" disables gamma adjustment.

Setting items	Description
HDR	Sets how to play back HDR content. **Auto:** 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.) **HDR10:** Set when playing back HDR10-compatible content. **HDR Reference:** This mode is suitable for playing back HDR10-compatible content with a maximum brightness of 1,000 nit. **HLG:** Set when playing back HLG-compatible content. **Off:** Set when playing back content other than HDR content. All of the modes of “Color Space” are selectable when “HDR10,” “HDR Reference,” “HLG,” or “Off” is selected. **Notes** • 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. • When setting “HDR10” or “HDR Reference,” compare the picture quality in both modes, and select the one that optimally displays the average brightness and tone of the bright parts.
Color Space [COLOR SPACE]	Converts the color space. **BT.709:** 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. **BT.2020:** The color space is wider than BT.709. Use this setting when playing back HDR content. **Color Space 1:** The color space suited for watching TV programs and video images, such as sport, concerts, etc. **Color Space 2:** The color space suited for watching TV programs, sport, concerts, and other video images in a bright environment, such as a living room. **Color Space 3:** The color space suited for watching movies in a bright environment, such as a living room. **Custom:** You can adjust the color space setting. **Note** When “HDR” is set to “Auto,” the selectable mode changes according to the signal type (page 29).
Input Lag Reduction	Reduces the delay of the display for a video. **On:** Shortens the time to display the input video image; effective for increasing the performance of the display reaction speed when using an external controller, etc. **Off:** Turns the Input Lag Reduction function off. **Tip** When “Input Lag Reduction” is set to “On,” “Motionflow” (settings other than “Impulse”), “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.



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.

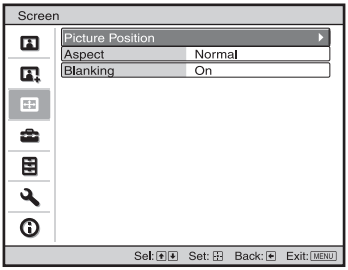
Tips

- 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.

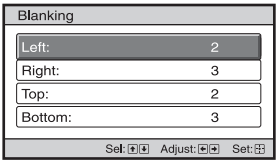


Note

These items may not be available, depending on the type of input signal. For details, see “Input Signals and Adjustable/Setting Items” (page 58).

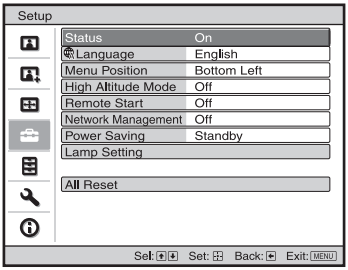
Item names in brackets represent those printed on the remote control.

Setting items	Description
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 16). • The Picture Position function is not guaranteed to reproduce the lens settings precisely.

Setting items	Description
Aspect [ASPECT]	You can set the aspect ratio of the picture to be displayed for the current input signal (page 18). You can set the function only when a video signal 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 38). **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 38). **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 61). • The aspect cannot be selected for an input signal from a computer, or an input signal with a resolution of 4096 × 2160 (pages 56, 57, 61).
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.

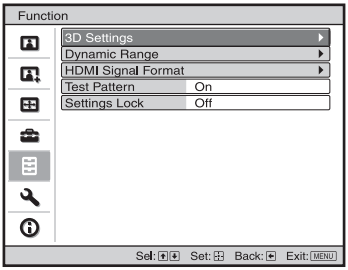


Setting items	Description
Status	Sets whether or not the on-screen display is displayed. Set to “Off” to turn off the on-screen displays except for certain menus, message when turning off the power, and warning messages.
Language	Selects the language used in the menu and on-screen displays.
Menu Position	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.
Remote Start	Sets the Remote Start settings. **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 40). • 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. **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.

Setting items	Description
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” when the unit is not continuously connected to the network. 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 51).
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.



Setting items	Description
3D Settings	You can change the settings of the 3D function.
2D-3D Display Sel.	For Switching the video images to “2D” or “3D.” **Auto:** Displays 3D video images when HDMI signals with 3D information* are input. Displays 2D video images when other signals are input. **3D:** 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. * The 3D information is additional information to discriminate 3D. Some HDMI signals have additional information to discriminate 3D and some HDMI signals have none. **3D Format:** Set the 3D system when the input HDMI signals do not include 3D information. **Simulated 3D:** Converts 2D video images to 3D video images. The setting can be made only for input the HD signals. The simulated 3D feature may have limited effect, depending on the video source. There are differences in perception of 3D video images among individuals. **Side-by-Side:** Select this to display 3D images as two similar images, side-by-side. **Over-Under:** Select this to display 3D images as two similar images, one above the other. **Tips** • “2D-3D Display Sel.” cannot be set to “3D” for some video sources. For available 3D signals, see “Compatible 3D Signals” (page 59). • The simulated 3D feature may have limited effect, depending on the screen size (100 to 120 inches recommended) and the video source. • The menu display has a ghost while a 3D video image is displayed and is best viewed with the 3D glasses.

Setting items	Description
3D Depth Adjust	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. Depth **– 2** **– 1** **0** **+ 1** **+ 2** Front ← Normal → Depth We recommend that “3D Depth Adjust” be set to “0.” The 3D video images may be difficult to perceive, depending on the setting of “3D Depth Adjust.”
Simulated 3D Effect	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.” **Tip** There are differences in perception of 3D video images converted by the simulated 3D function among individuals.
Dynamic Range	Sets the video input level for HDMI 1 and HDMI 2 connectors. **Auto:** Sets the video input level automatically. **Limited:** The video input level is set for signals that are equivalent to 16-235. **Full:** The video input level is set for signals that are equivalent to 0-255. **Note** 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.
HDMI Signal Format	Switches the video signal formats for 4K. **Standard Format:** Displays a picture in the standard HDMI format. **Enhanced Format:** Displays a picture in a more detailed HDMI format. **Tips** • A picture or sound may not be output normally when “Enhanced Format” is selected. In this case, set to “Standard Format.” • It may take time to display a picture after switching the video signal formats.
Test Pattern	Displays a test pattern according to the setting. **On:** A test pattern appears on the screen to be used when adjusting the lens with “Lens Focus,” “Lens Zoom,” and “Lens Shift.” **Off:** A test pattern does not appear. **Tip** While the test pattern is displayed, it is only displayed in green to allow you to adjust the focus easily.
Settings Lock	Locks menu item settings to prevent operational error (page 37). **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

Group 1

Picture menu

- Reset
- Reality Creation
- Advanced Iris
- Contrast Enhancer
- Lamp Control
- Motionflow
- Contrast
- Brightness
- Color
- Hue
- Color Temp.
- Sharpness
- NR
- MPEG NR
- Smooth Gradation
- Film Mode
- Gamma Correction
- Color Correction
- Clear White
- x.v.Color
- HDR
- Color Space
- Input Lag Reduction

Advanced Picture menu

- Auto Calibration

Group 2

Setup menu

- Status
- Language
- Menu Position
- High Altitude Mode
- Remote Start
- Network Management
- Power Saving
- Lamp Setting

Function menu

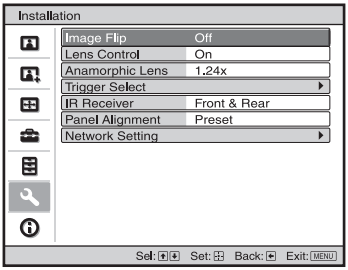
- Dynamic Range
- Test Pattern

Installation menu

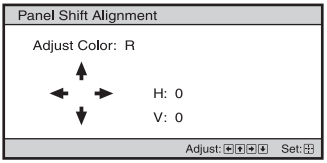
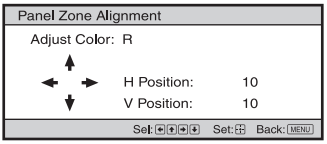
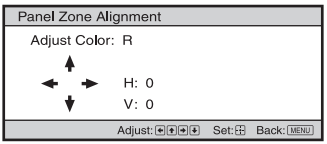
- Image Flip
- Lens Control
- Anamorphic Lens
- Trigger Select
- IR Receiver
- Panel Alignment
- Network Setting

Installation Menu

The Installation menu is used for changing the installation settings.



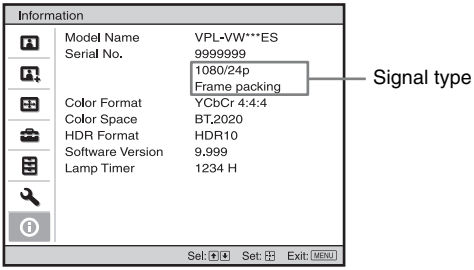
Setting items	Description
Image Flip	Flips the picture on the screen horizontally and/or vertically. **HV:** Flips the picture horizontally and vertically. **H:** Flips the picture horizontally. **V:** Flips the picture vertically. **Off:** The picture does not flip. Use this item for installation for the backside projection or ceiling installation.
Lens Control	Avoids any operation of the lens such as “Lens Focus,” “Lens Zoom,” and “Lens Shift,” by mistake. **On:** Enables adjustment of the lens. **Off:** Prevents any adjustment of the lens.
Anamorphic Lens	Select a setting to match the anamorphic lens conversion ratio. **1.24x:** Select this when you use an anamorphic lens with a horizontal rate of 1.24×. **1.32x:** Select this when you use an anamorphic lens with a horizontal rate of 1.32×.
Trigger Select	Switches the output function of the TRIGGER 1/TRIGGER 2 connector. **Off:** Turns off the TRIGGER connector function. **Power:** Outputs 12 V signals from the TRIGGER 1/TRIGGER 2 connectors when the unit is on. The TRIGGER 1/TRIGGER 2 connectors do not output any signals when the unit is in standby. **V Stretch:** Works with the “Aspect” setting’s “V Stretch” (page 32) and outputs a 12 V signal from the TRIGGER 1 or TRIGGER 2 connector. **2.35:1 Zoom:** Works with the “Aspect” setting’s “2.35:1 Zoom” (page 32) and outputs a 12 V signal from the TRIGGER 1 or TRIGGER 2 connector.
IR Receiver	Selects the remote control detectors (IR Receiver) on the front and rear of the unit. **Front & Rear:** Activates both the front and rear detectors. **Front:** Activates the front detector only. **Rear:** Activates the rear detector only.

Setting items	Description
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.  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 ⊕.  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 ⊕.  **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.

Setting items	Description
Network Setting	Perform internet protocol settings.
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 42).

Information Menu

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



Items	Description
Model Name	Displays the model name
Serial No.	Displays the serial number.
Signal type	Displays the resolution of the input signal which you are selecting. When input signals with 3D information are input, the type of input signals and the 3D format are displayed.
Color Format	Displays the color format of the input signal which you are selecting.
Color Space	Displays the color space of the input signal which you are selecting (“BT.601,” “BT.709,” or “BT.2020”).
HDR Format	When the input signal is compatible with HDR, “HDR10” or “HLG” is displayed according to the input signal.
Software Version	Displays the software version.
Lamp Timer	Indicates how long the lamp has been turned on (total usage).

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 56) (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:

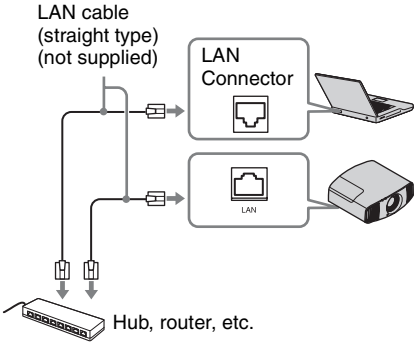
- Checking the current status of the unit via a Web browser.
- Making the network settings for the unit.
- Network monitoring and controlling with control protocol (Advertisement, ADCP, AMX DDDP (Dynamic Device Discovery Protocol), Crestron RoomView, Control4).

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 44). 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 40).

3 Start a Web browser on the computer, enter the following in the address field, then press the Enter key on your computer.

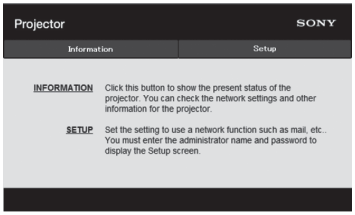
http://xxx.xxx.xxx.xxx
(xxx.xxx.xxx.xxx: IP address for the unit)

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:

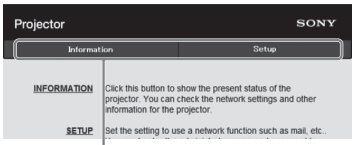


Once you make the network settings, you can open the Control window only by performing step **3** of this procedure.

Operating the Control Window

Switching the Page

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



Page Switching buttons

Setting the Access Limitation

You can limit a user for accessing any particular page.

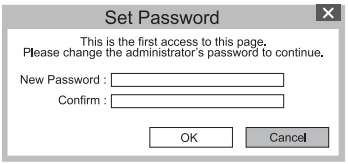
Administrator: Allowed access to all pages

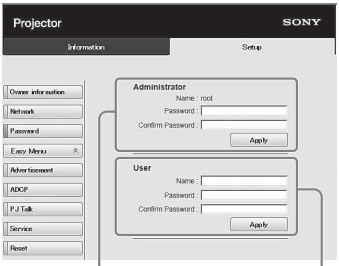
User: Allowed access to all pages except the Setup page

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.”





Entry area for [Administrator]

Entry area for [User]

The password can be changed in the Password page in the Setup page.
When you change the password, enter a new password.
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.
The password will be reset with your permission.

Confirming the Information Regarding the Unit

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

Information area

Error Handling

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

Symptom	Cause and Remedy	Page
The power is not turned on.	The power may not turn on if you turn the power off with I/⏻ (ON/STANDBY) button and turn it on again in a short time. After about 1 minute, turn the power on.	–
	Close the lamp cover securely, then tighten the screws securely.	52
	Check warning indicators.	48
The power is suddenly turned off.	Check that “Power Saving” in the Setup menu is set to “Standby.”	34
	Set “Power Saving” to “Off.”	34

Picture

Symptom	Cause and Remedy	Page
No picture.	Check that the connecting cable is connected to the external equipment properly.	12
	Select the input source correctly using the INPUT button.	14
	Check that the computer signal is set for output to an external monitor. 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.	–
The picture has ghosts.	Video images are displayed in 3D. Watch the 3D video images using the 3D glasses, and set “2D-3D Display Sel.” to “3D.”	15, 35
Bright or dark area of the video appears too bright or too dark.	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.	36
The picture is too dark.	Adjust “Contrast” or “Brightness” on the Picture menu properly.	26
The picture is not clear.	Adjust the focus.	8
	If the lens is clouded with dew condensation, leave the unit for about 2 hours with the power on.	–
The color of characters or the picture is not appropriate.	Select the desired color registration in “Panel Alignment” of the Installation menu.	39

Symptom	Cause and Remedy	Page
Image is left on the screen. (image retention)	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.	–
Pink or green coloring appears on parts of the picture about 1 to 3 minutes after startup.	This may be due to the usage environment. Wait for about 5 minutes with the power on. The color will disappear on its own.	–

On-screen display

Symptom	Cause and Remedy	Page
On-screen display does not appear.	Set “Status” on the Setup menu to “On.”	33
	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.	7
The model name does not disappear from the screen.	The display mode of the unit may be set at the time of purchase. Consult with your local dealer or qualified Sony personnel.	–

Remote control

Symptom	Cause and Remedy	Page
The remote control does not work.	Batteries could be weak. Replace them with new batteries.	–
	Insert the batteries with the correct polarities.	–
	If there is a fluorescent lamp near the remote control detector, the unit may work improperly or inadvertently.	–
	Confirm the position of the remote control detector on the unit.	3, 4
	Set “IR Receiver” to “Front & Rear” on the Installation menu.	38
	Make sure that the cable is not connected to the IR IN connector.	3

3D video images

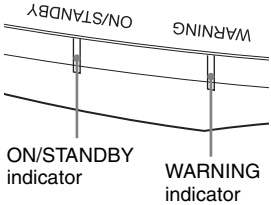
Symptom	Cause and Remedy	Page
The video image does not seem like 3D video images.	Check if the 3D glasses are turned on.	15
	Make sure that the battery in the 3D glasses could be weak or is sufficiently charged.	–
	Set “2D-3D Display Sel.” to “Auto” or “3D.”	35
	Check if the input signals are compatible 3D signals.	59
	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.	–
	When the viewing position is too far from the unit, the 3D glasses may not be able to display the images properly.	15
	The screen size is not appropriate. Set the zooming magnification to low or watch the image from farther away from the screen.	64
	For details, see “Precautions for use” of “Using the 3D Glasses.”	15

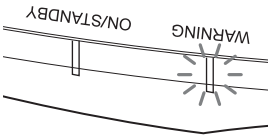
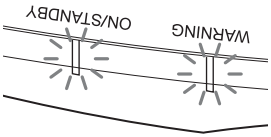
Others

Symptom	Cause and Remedy	Page
The fan is noisy.	Check the setting of “High Altitude Mode” on the Setup menu.	33
	Make sure that the room temperature is not too high.	–
	Check the installation requirements of the unit. 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).	–
The lens shift cannot be adjusted.	The lens shift cannot be adjusted over the range of movement. Adjust the lens shift within the range of movement.	10, 64

Warning Indicators

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



Flashing/Lighting indicators	The number of flashes	Cause and Remedy
 (Lights in red) (Flashes in red)	Twice	Close the lamp cover securely, then tighten the screws securely (page 52).
	Three times	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 51).
 (Flashes in red) (Flashes in red) Both indicators flash	Twice	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.
	Three times	The fan is broken. Consult with qualified Sony personnel.

Note

If the symptom persists even after carrying out the above methods, consult with qualified Sony personnel.
If the indicator starts flashing in a way of other than the above, turn off, and then turn on the power with the I/⏻ (On/Standby) button on the remote control or control panel of the unit.
If the symptom is shown again, consult with qualified Sony personnel.

Message Lists

Warning messages

Symptom	Cause and Remedy	Page
High temp.! Lamp off in 1 min.	Turn off the power.	–
	Check to ensure that nothing is blocking the ventilation holes.	3, 4
Frequency is out of range!	Frequency is out of range. Input a signal that is within the acceptable frequency range of the unit.	56
Please replace the Lamp.	It is time to replace the lamp. Replace the lamp. If this message appears again after you replace the lamp, the lamp replacement process is not complete. Check the lamp replacement process. **Note** To clear this message, press any button either on the remote control or the control panel of the unit once.	51
Projector temperature is high. High Altitude Mode should be “On” if projector is being used at high altitude.	Check to ensure that nothing is blocking the ventilation holes.	3, 4
	When using the unit at high altitude, set “High Altitude Mode” to “On.” **Note** When temperature inside the unit remains high, “High Altitude Mode” is switched to “On” in 1 minute, then the fan speed increases.	33
Power Saving Mode is set. Projector will automatically enter Standby Mode in 1 minute.	“Power Saving” is set to “Standby.” **Note** If no signal is input, the power turns off after 1 minute, and the projector goes into standby mode.	34

Caution messages

Symptom	Cause and Remedy	Page
x	No signal is input in the selected input. Check connections.	12
Not applicable!	Press the appropriate button. The operation to be activated by the button is currently prohibited.	–
Settings Lock enabled.	“Settings Lock” is set to “Level A” or “Level B.”	36

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:
http://www.pro.sony.eu/
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 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.

NOTICES AND LICENSES FOR SOFTWARE USED IN THIS PRODUCT

Refer to “Software License Information” supplied separately.

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 I/⏻ (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 use an LMP-H280 Projector Lamp for replacement. If you use lamps other than the LMP-H280, the unit may malfunction.
- 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.

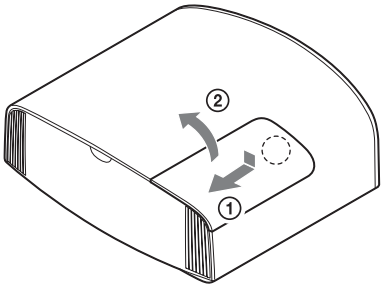
1 Turn off the unit and unplug the AC power cord.

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.

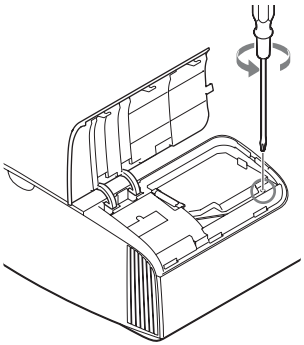
Note

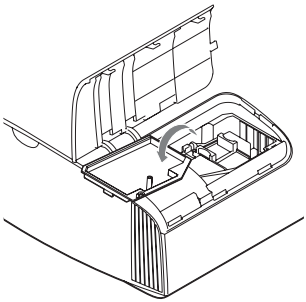
Be sure that the unit is placed on a stable surface.

3 While pressing the ◌ part indicated in the lamp cover illustration, slide ① and then open ② the lamp cover.

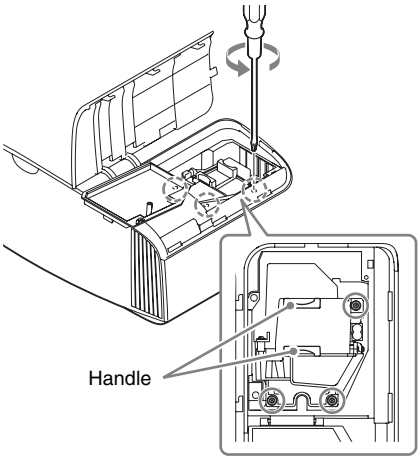


4 Loosen the lamp door (inner cover) screw with a Phillips screwdriver, and then open the lamp door.





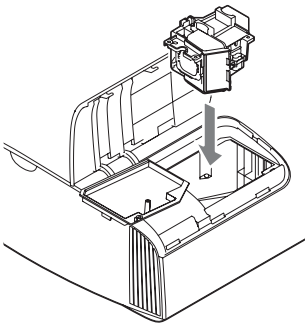
5 Loosen the 3 screws on the lamp with the Phillips screwdriver. Hold up the handle, then pull the lamp straight out.



Notes

- Do not loosen other screws except the 3 specified screws.
- Hold the lamp by the handle to remove and attach it.

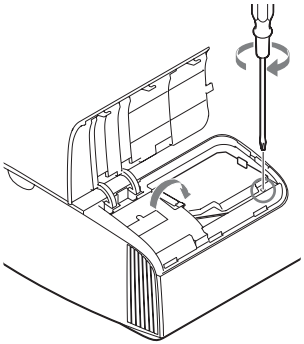
6 Push in the new lamp by the handle securely until it reaches the end, and then tighten the 3 screws.



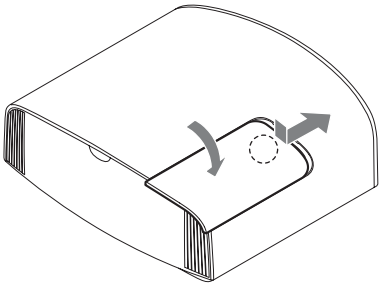
Note

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

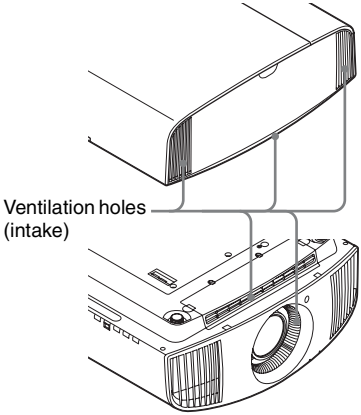
7 Close the lamp door (inner cover), and then tighten the screw.



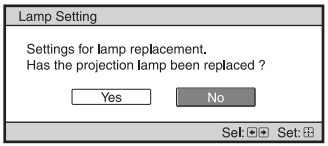
8 Close the lamp cover.



9 Wipe dust off the ventilation holes (intake) with a soft cloth.

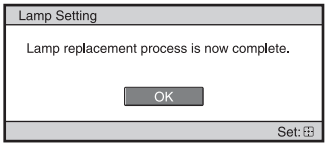


10 Turn on the unit, then select the lamp setting item on the Setup menu.
The menu screen below will be appeared.



Tip
If "Settings Lock" is set to "Level B," set to "Off" once.

11 Select "Yes."



Caution

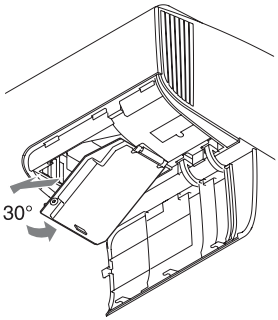
Do not put your hands into the lamp replacement slot, and do not allow any liquid or other objects into the slot to avoid electrical shock or fire.

Notes

- The unit will not turn on unless the lamp is securely installed in place.
- 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).



Note

The lamp contains mercury. The disposal rules for used fluorescent tubes depend on where you live. Follow the waste disposal policy in your area.

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

Item		Description
Display system		SXRD panel, projection system
Display device	Size of effective display area	0.74-inch (18.8 mm) SXRD
	Number of pixels	26,542,080 pixels (8,847,360 pixels × 3)
Projection lens		2.06 times zoom lens (motorized) f = 21.7 mm to 44.7 mm F3.0 to F4.0
Light source		Ultra High Pressure Lamp 280 W type
Screen size		60 inches to 300 inches (1,524 mm to 7,620 mm) (measured diagonally)
Accepted digital signals		See “Preset Signals” (page 56).
HDMI (2 inputs), HDCP compliant		RGB Y PB/CB PR/CR
Other inputs/ outputs	TRIGGER (2 connectors)	Minijack, DC 12 V Max. 100 mA
	REMOTE	RS-232C: D-sub 9-pin (male)
	LAN	RJ45, 10BASE-T/100BASE-TX
	IR IN	Minijack
	USB	DC 5 V, Max. 500 mA
Outside dimensions (w/h/d)		495.6 mm × 205.3 mm × 463.6 mm (19 $^{1}/_{2}$ × 8 $^{3}/_{32}$ × 18 $^{1}/_{4}$ inches) (without protrusions)
Mass		Approx. 14 kg (31 lb)
Power requirements		AC 100 V to 240 V, 4.6 A to 2.0 A, 50/60 Hz
Power consumption		460 W
Power consumption	Standby	0.4 W (when “Remote Start” is set to “Off”)
	Networked Standby	1.0 W (LAN) (when “Remote Start” is set to “On”) When a LAN terminal is not connected, it becomes a low power consumption mode (0.5 W).
Operating temperature		5°C to 35°C (41°F to 95°F)
Operating humidity		35% to 85% (no condensation)
Storage temperature		–20°C to +60°C (–4°F to +140°F)
Storage humidity		10% to 90%
Supplied accessories		See “Checking the Supplied Accessories” in the supplied Quick Reference Manual.
Optional accessories		**Projector Lamp:** LMP-H280 (for replacement) **Projector Suspension Support:** PSS-H10 **Active 3D Glasses:** TDG-BT500A

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 2018.

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.

Preset memory no.	Preset signal (resolution)		fH (kHz)	fV (Hz)	Sync
5	480/60p	480/60p (Progressive NTSC) (720 × 480p)	31.470	60.000	–
6	576/50p	576/50p (Progressive PAL) (720 × 576p)	31.250	50.000	–
7	1080/60i	1080/60i (1920 × 1080i)	33.750	60.000	–
8	1080/50i	1080/50i (1920 × 1080i)	28.130	50.000	–
10	720/60p	720/60p (1280 × 720p)	45.000	60.000	–
11	720/50p	720/50p (1280 × 720p)	37.500	50.000	–
12	1080/60p	1080/60p (1920 × 1080p)	67.500	60.000	–
13	1080/50p	1080/50p (1920 × 1080p)	56.260	50.000	–
14	1080/24p	1080/24p (1920 × 1080p)	26.973	23.976	–
18	720/60p (Frame packing)	720/60p (1280 × 720p)	90.000	60.000	–
19	720/50p (Frame packing)	720/50p (1280 × 720p)	75.000	50.000	–
20	1080/24p (Frame packing)	1080/24p (1920 × 1080p)	53.946	23.976	–
26	640 × 480	VESA 60	31.469	59.940	H-NEG, V-NEG
32	800 × 600	VESA 60	37.879	60.317	H-POS, V-POS
37	1024 × 768	VESA 60	48.363	60.004	H-NEG, V-NEG
45	1280 × 960	VESA 60	60.000	60.000	H-POS, V-POS
47	1280 × 1024	VESA 60	63.974	60.013	H-POS, V-POS
50	1400 × 1050	SXGA+	65.317	59.978	H-NEG, V-POS
55	1280 × 768	1280 × 768/60	47.776	59.870	H-NEG, V-POS
71	1920 × 1080/60i (Frame packing)	1080/60i (1920 × 1080i)	67.500	60.000	–

Preset memory no.	Preset signal (resolution)		fH (kHz)	fV (Hz)	Sync
72	1920 × 1080/50i (Frame packing)	1080/50i (1920 × 1080i)	56.250	50.000	–
74	3840 × 2160/60p	3840×2160/60p (3840 × 2160)	135.000	60.000	–
75	3840 × 2160/50p	3840 × 2160/50p (3840 × 2160)	112.500	50.000	–
76	4096 × 2160/60p	4096 × 2160/60p (4096 × 2160)	135.000	60.000	–
77	4096 × 2160/50p	4096 × 2160/50p (4096 × 2160)	112.500	50.000	–
78	4096 × 2160/30p	4096 × 2160/30p (4096 × 2160)	67.500	30.000	–
79	4096 × 2160/25p	4096 × 2160/25p (4096 × 2160)	56.250	25.000	–
93	3840 × 2160/24p	3840 × 2160/24p (3840 × 2160)	53.946	23.976	–
94	3840 × 2160/25p	3840 × 2160/25p (3840 × 2160)	56.250	25.000	–
95	3840 × 2160/30p	3840 × 2160/30p (3840 × 2160)	67.433	29.970	–
96	4096 × 2160/24p	4096×2160/24p (4096 × 2160)	54.000	24.000	–

Preset memory numbers for each input signal

Digital signal

Signal	Preset memory number
Component signal (HDMI 1, 2 connectors)	5 to 8, 10 to 14, 18 to 20, 71, 72, 74 to 79, 93 to 96
Video GBR signal (HDMI 1, 2 connectors)	5 to 8, 10 to 14, 18 to 20, 71, 72, 74 to 79, 93 to 96
Computer signal (HDMI 1, 2 connectors)	10*, 12*, 26, 32, 37, 45, 47, 50, 55

* Some digital signals input from computers may be displayed as preset memory number of Component or Video GBR signal.

Input Signals and Adjustable/Setting Items

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

Item	Input signal		
	Component signal	Video GBR signal	Computer signal
Reality Creation	●	●	–
Advanced Iris	●	●	●
Contrast Enhancer	●	●	–
Lamp Control	●	●	●
Motionflow*1	●	●	–
Contrast	●	●	●
Brightness	●	●	●
Color	●	●	–
Hue	●	●	–
Color Temp.	●	●	●
Sharpness	●	●	–
NR	● (excluding preset memory numbers 18 to 20, 71, and 72)	● (excluding preset memory numbers 18 to 20, 71, and 72)	–
MPEG NR	● (excluding preset memory numbers 18 to 20, 71, and 72)	● (excluding preset memory numbers 18 to 20, 71, and 72)	–
Smooth Gradation	● (excluding preset memory numbers 18 to 20, 71 and 72)	● (excluding preset memory numbers 18 to 20, 71 and 72)	–
Film Mode	● (excluding preset memory numbers 5, 6, 10 to 14, 18 to 20, 74 to 79, and 93 to 96)	● (excluding preset memory numbers 5, 6, 10 to 14, 18 to 20, 74 to 79, and 93 to 96)	–
Gamma Correction	●	●	●
Color Correction	●	●	●
Clear White	●	●	●
x.v.Color	●	–	–
HDR	● (preset memory numbers 74 to 79 and 93 to 96 only)	● (preset memory numbers 74 to 79 and 93 to 96 only)	–
Color Space	●	●	●

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

Screen menu

Item	Input signal		
	Component signal	Video GBR signal	Computer signal
Aspect*1	●	●	–

●: Adjustable/can be set
–: Not adjustable/cannot be set
*1: For further details, refer to the tables in “Aspect Mode” (page 61).

Note

When connecting a cable such as an HDMI cable, etc., check the type of the signal in the Information menu (page 41) and “Digital signal” (page 57), and check items that are adjustable/can be set.

Compatible 3D Signals

This unit accepts the following types of 3D signals.

Resolution	3D signal format
720/60p, 720/50p	Side-by-Side format
	Over-Under format*
	Frame packing*
1080/60i, 1080/50i	Side-by-Side format*
	Frame packing
1080/24p	Side-by-Side format
	Over-Under format*
	Frame packing*
1080/60p, 1080/50p	Side-by-Side format
	Over-Under format

*: 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.

Item	3D signals			
	720/60p, 720/50p	1080/60i, 1080/50i	1080/24p	1080/60p, 1080/50p
Reality Creation	●	●	●	●
Advanced Iris	–	–	–	–
Lamp Control	●	●	●	●
Motionflow	●	●	●	●
NR	–	–	–	–
MPEG NR	–	–	–	–
Smooth Gradation	–	–	–	–

Item	3D signals			
	720/60p, 720/50p	1080/60i, 1080/50i	1080/24p	1080/60p, 1080/50p
Film Mode	–	●	–	–
x.v.Color	●	●	●	●
HDR	–	–	–	–
Aspect*1	●	●	●	●

●: Adjustable/can be set
–: Not adjustable/cannot be set
*1: For further details, refer to the tables in “Aspect Mode” (page 61).

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.

Item	3D signals		
	Over-Under	Side-by-Side	Simulated 3D
Reality Creation	●	●	●
Advanced Iris	–	–	–
Lamp Control	●	●	●
Motionflow	●	●	●
NR	–	–	●
MPEG NR	–	–	●
Smooth Gradation	●	●	●
Film Mode*1	–	●	●
x.v.Color	●	●	●
HDR	–	–	–
Aspect*2	●	●	●

●: Adjustable/can be set
–: Not adjustable/cannot be set
*1: This item is available only when the 1080/60i or 1080/50i signal is input.
*2: For further details, refer to the tables in “Aspect Mode” (page 61).

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

Acceptable signals	4096 × 2160	3840 × 2160	1920 × 1080 1280 × 720	720 × 480 720 × 576	Others
Preset memory number (page 56)	76 to 79, 96	74, 75, 93 to 95	7, 8, 10 to 14	5, 6	26, 32, 37, 45, 47, 50, 55
1.85:1 Zoom	–	●	●	●	–
2.35:1 Zoom	–	●	●	●	–
Normal	●	●	●	●	●*1
V Stretch	●	●	●	●	–
Squeeze	●	●	●	●	–
Stretch	–	–	–	●	–

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

3D

Acceptable signals	1920 × 1080, 1280 × 720			
3D format	Side-by-Side	Over-Under	Frame packing	Simulated 3D
Preset memory number (page 56)	7, 8, 10 to 14	10 to 14	18 to 20, 71, 72	7, 8, 10 to 14
1.85:1 Zoom	●	●	●	●
2.35:1 Zoom	●	●	●	●
Normal	●	●	●	●
V Stretch	●	●	●	●
Squeeze	●	●	●	●
Stretch	–	–	–	–

Motionflow

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

Acceptable signals	1920 × 1080 1280 × 720 720 × 480 720 × 576	3840 × 2160	4096 × 2160	Others
Preset memory number (page 56)	5 to 8, 10 to 14	74, 75, 93 to 95	76 to 79, 96	26, 32, 37, 45, 47, 50, 55
Impulse	●	●	●	–
Combination	●	●	–	–
Smooth High	●	●	–	–
Smooth Low	●	●	–	–
True Cinema	●	●	–	–

3D

Acceptable signals	1920 × 1080, 1280 × 720							
3D format	Frame packing			Over-Under			Side-by-Side	Simulated 3D
Preset memory number (page 56)	18	19	20, 71, 72	10, 12	11, 13	14	7, 8, 10 to 14	7, 8, 10 to 14
Impulse	–	–	–	–	–	–	–	–
Combination	–	–	–	–	–	–	–	–
Smooth High	–	–	●	–	–	●	●	●
Smooth Low	–	●	●	–	●	●	●	●
True Cinema	–	–	–	–	–	–	–	–

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

Input	Preset memory numbers
HDMI 1 (2D)	5 to 8, 10 to 14, 26, 32, 37, 45, 47, 50, 55, 74 to 79, 93 to 96
HDMI 2 (2D)	
HDMI 1 (3D)	7, 8, 10 to 14, 18 to 20, 71, 72
HDMI 2 (3D)	

Picture menu

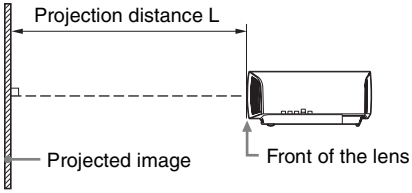
Item	Storage conditions
Calib. Preset	For each input connector
Reset	For each input connector and Calib. Preset
Reality Creation	
Advanced Iris	
Contrast Enhancer	
Lamp Control	
Motionflow	
Contrast	
Brightness	
Color	
Hue	
Color Temp.	
D93-D55	
Custom 1-5	
Gain R	For each Color Temp., D93-D55 and Custom 1-5
Gain G	
Gain B	
Bias R	
Bias G	
Bias B	
Sharpness	For each input connector and Calib. Preset
NR	
MPEG NR	
Smooth Gradation	
Film Mode	
Gamma Correction	
Color Correction	
Clear White	
x.v.Color	
HDR	
Color Space	
Cyan - Red	For each Color Space
Magenta - Green	
Input Lag Reduction	For each input connector and Calib. Preset

Screen menu

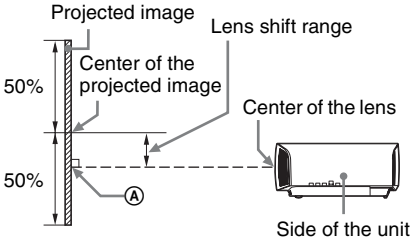
Item	Storage conditions
Aspect	For Picture Position 1.85:1, 2.35:1, or Custom 1-3
Blanking	

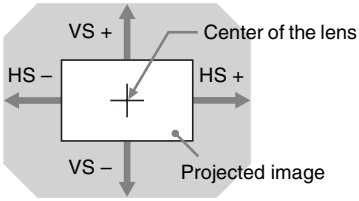
Projection Distance and Lens Shift Range

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

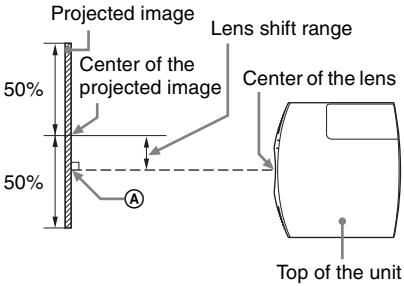


The lens shift range represents the distance in percent (%) by which the lens can be shifted from the center of the projected image. The lens shift range is regarded as 0% when the point Ⓐ in the illustration (point where a line drawn from the center of the lens and the projected image cross at right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



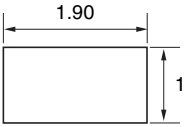


Shaded region: Lens shift range



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)

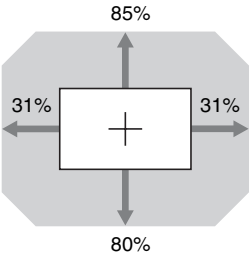
Projection image size		Projection distance L
Diagonal	Width × Height	
80" (2.03 m)	1.80 × 0.95 (71 × 37)	2.32 – 4.77 (91 – 187)
100" (2.54 m)	2.25 × 1.18 (88 × 47)	2.90 – 5.97 (115 – 235)
120" (3.05 m)	2.70 × 1.42 (106 × 56)	3.49 – 7.18 (138 – 282)
150" (3.81 m)	3.37 × 1.78 (133 × 70)	4.38 – 8.98 (173 – 353)
200" (5.08 m)	4.49 × 2.37 (177 × 93)	5.85 – 11.99 (231 – 472)

Projection distance formula

D: Projected image size (Diagonal) Unit: m (inches)

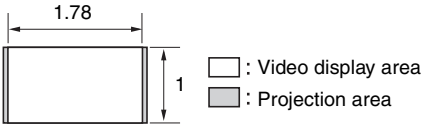
Projection distance L (minimal length)	Projection distance L (maximal length)
L = 0.029432 × D – 0.0434 (L = 1.158727 × D – 1.7084)	L = 0.060197 × D – 0.0420 (L = 2.369978 × D – 1.6545)

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

Unit: m (inches)

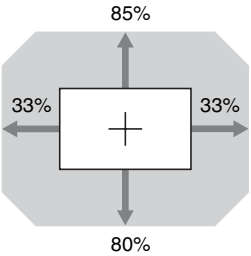
Projection image size		Projection distance L
Diagonal	Width × Height	
80" (2.03 m)	1.77 × 1.00 (70 × 39)	2.44 – 5.01 (96 – 197)
100" (2.54 m)	2.21 × 1.25 (87 × 49)	3.05 – 6.28 (121 – 247)
120" (3.05 m)	2.66 × 1.49 (105 × 59)	3.67 – 7.55 (145 – 297)
150" (3.81 m)	3.32 × 1.87 (131 × 74)	4.60 – 9.44 (181 – 371)
200" (5.08 m)	4.43 × 2.49 (174 × 98)	6.15 – 12.61 (242 – 496)

Projection distance formula

D: Projected image size (Diagonal) Unit: m (inches)

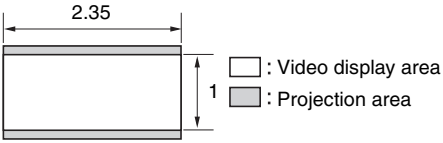
Projection distance L (minimal length)	Projection distance L (maximal length)
L = 0.030934 × D – 0.0434 (L = 1.217856 × D – 1.7084)	L = 0.063269 × D – 0.0420 (L = 2.490916 × D – 1.6545)

Lens shift range



VS + = 85 – 2.576 × (HS + or HS –) [%]
VS – = 80 – 2.576 × (HS + or HS –) [%]
HS + = HS – = 33 – 0.388 × (VS + or VS –) [%]

When projecting in 2.35:1 format



Projection distance

Unit: m (inches)

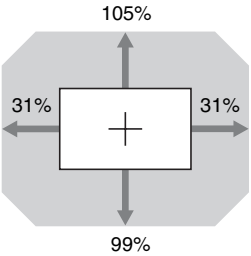
Projection image size		Projection distance L
Diagonal	Width × Height	
80" (2.03 m)	1.87 × 0.80 (74 × 31)	2.41 – 4.96 (95 – 195)
100" (2.54 m)	2.34 × 0.99 (92 × 39)	3.02 – 6.22 (119 – 244)
120" (3.05 m)	2.80 × 1.19 (110 × 47)	3.64 – 7.47 (143 – 294)
150" (3.81 m)	3.51 × 1.49 (138 × 59)	4.55 – 9.35 (180 – 368)
200" (5.08 m)	4.67 × 1.99 (184 × 78)	6.08 – 12.48 (240 – 491)

Projection distance formula

D: Projected image size (Diagonal) Unit: m (inches)

Projection distance L (minimal length)	Projection distance L (maximal length)
L = 0.030617 × D – 0.0434 (L = 1.205377 × D – 1.7084)	L = 0.062621 × D – 0.0420 (L = 2.465393 × D – 1.6545)

Lens shift range

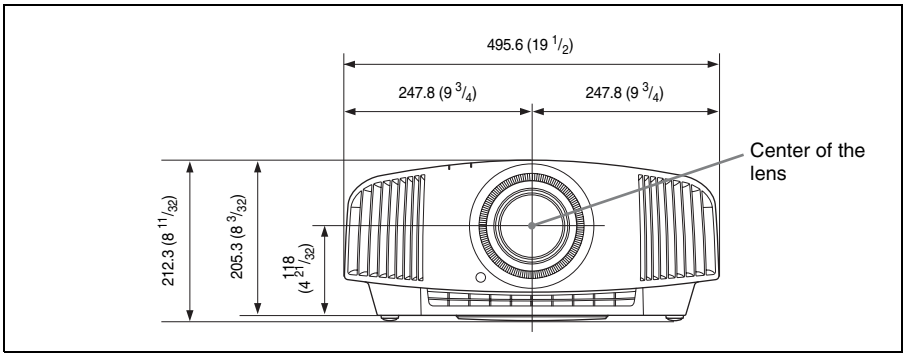


VS + = 105 – 3.387× (HS + or HS –) [%]
VS – = 99 – 3.387 × (HS + or HS –) [%]
HS + = HS – = 31 – 0.295 × (VS + or VS –) [%]

Dimensions

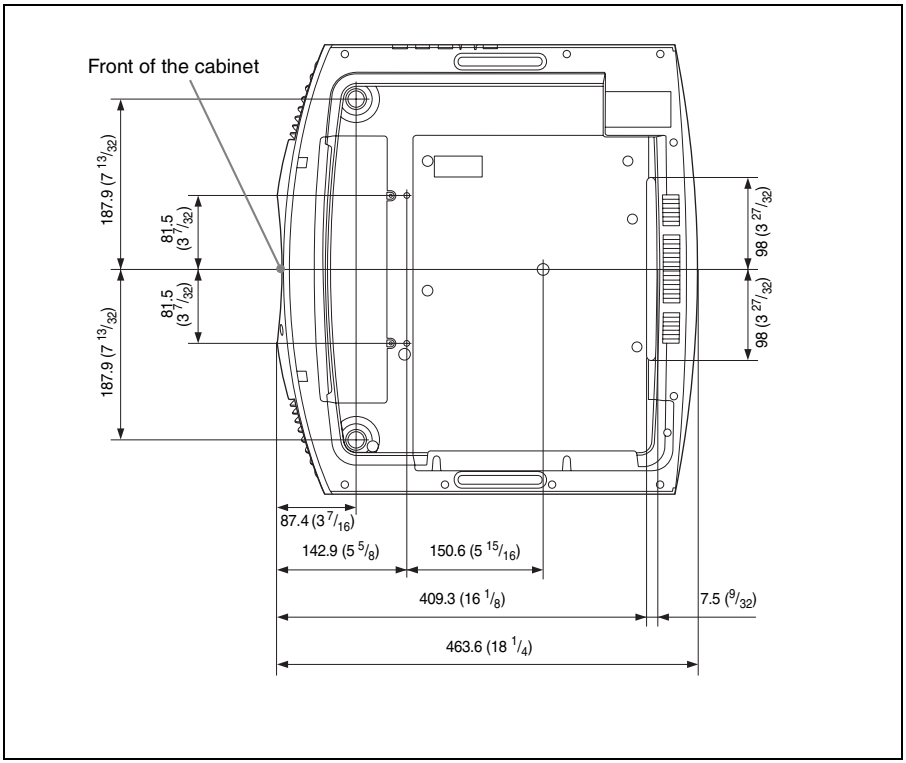
Front

Unit: mm (inches)



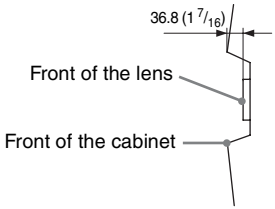
Bottom

Unit: mm (inches)



The distance between the front of the lens and the front of the cabinet

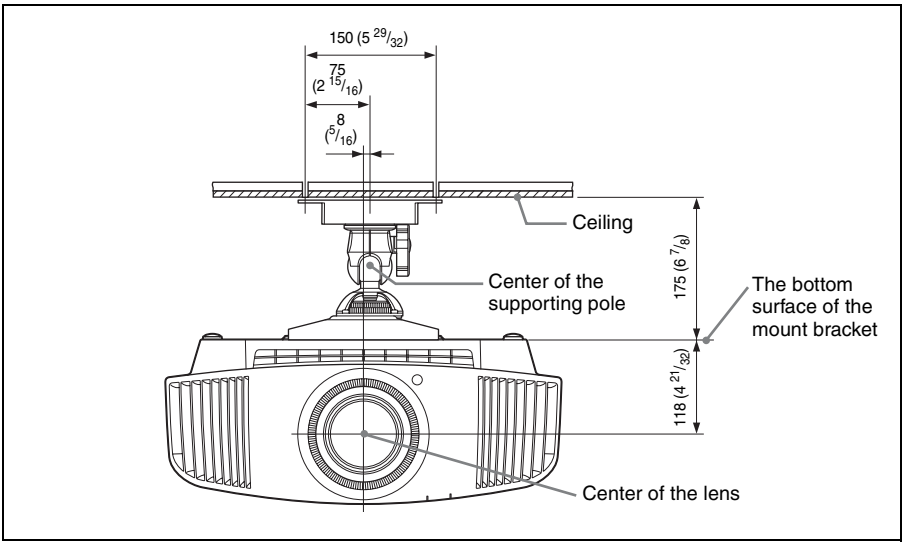
Unit: mm (inches)



Attaching the PSS-H10 projector suspension support

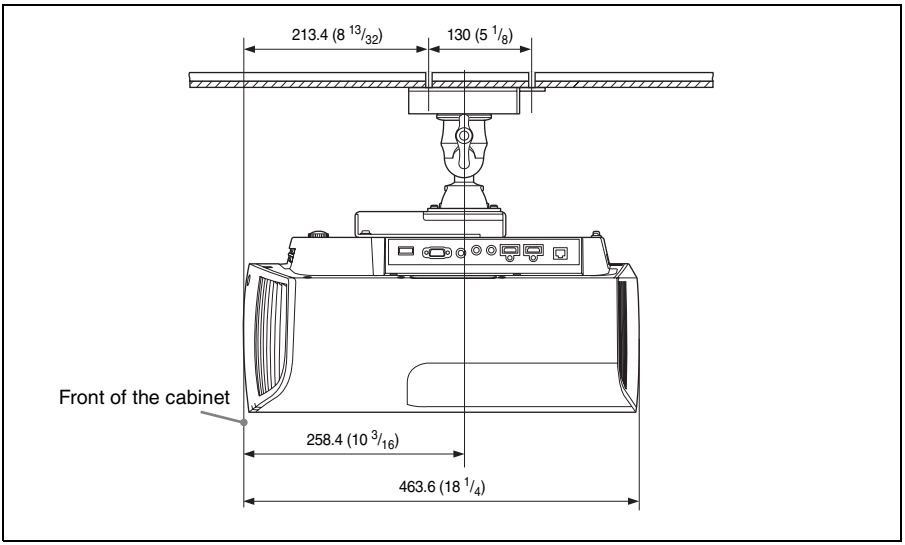
Front view

Unit: mm (inches)



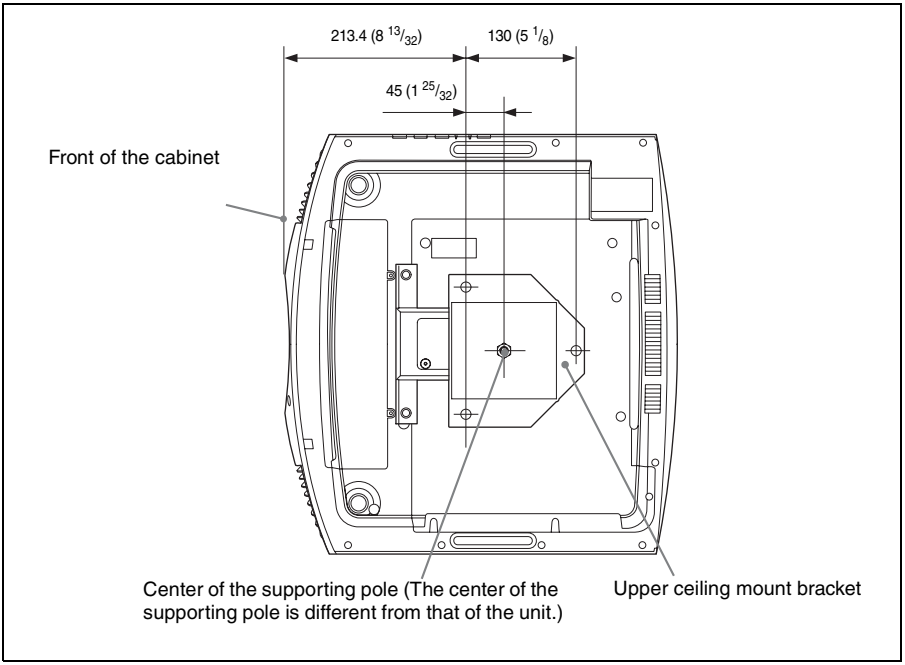
Side view

Unit: mm (inches)



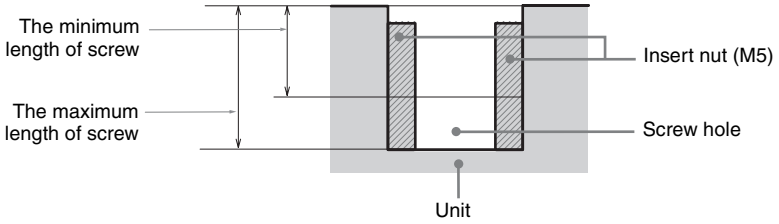
Top view

Unit: mm (inches)



Holes for the ceiling mount

Use the screws with a length of 5.3 mm ($^{7}/_{32}$ inches, minimum) to 7.6 mm ($^{5}/_{16}$ inches, maximum) for the ceiling mount.
Recommended tightening torque (tension when turning a screw towards the direction of rotation): 1.4 ± 0.2 N-m



Unit: mm (inches)

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This projector supports DeepColor, x.v.Color, LipSync, computer input signal, 3D signal and 4K signal of HDMI standards. It also supports HDCP.

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