4-695-877-**13** (1)

SONY

Data Projector

Operating Instructions

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

VPL-PHZ10/PWZ10

Not all models are available in all countries and area. Please check with your local Sony Authorized Dealer.

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Table of Contents

Overview

Location and Function of Controls 4
- Main Unit 4
- Terminals 5
- Remote Commander and Control Panel Keys 6

Preparation

Connecting the Projector 9
- Connecting a Computer 9
- Connecting a Video equipment 12
- Connecting a HDBaseT™ equipment 13
- Connecting Audio Equipment 16

Projecting/Adjusting an Image

Projecting an Image 17
- Adjusting the Focus, Size, and Position of the Projected Image 18
- Turning Off the Power 23

Adjustments and Settings Using a Menu

Using a MENU 24
The Picture Menu 26
The Screen Menu 28
The Function Menu 31
The Operation Menu 33
The Connection/Power Menu ...34
The Installation Menu 38
The Information Menu 40

Network

Using Network Features 41
- Displaying the Control Window of the Projector with a Web Browser 42
- Confirming the Information regarding the Projector 43
- Operating the Projector from a Computer 43
- Using the e-mail report Function 43
- Setting the LAN Network of the projector 45
- Setting the WLAN Network of the projector 45
- Setting the Custom Labels for the Input Terminals of the Projector 48
- Setting the Control Protocol of the Projector 49

Presentation Function via Network

Using Presentation Function via Network 54
- Installing Projector Station for Network Presentation 55
- Starting Projector Station for Network Presentation 55
- Projecting an Image 55
- Connection Settings 57
- Using the Controller 57
- One-Click projecting function 58
- Option format 59

Use Projector Station for Network Presentation without installing it to the computer. 60
Error code list of Projector Station for Projector Station for Network Presentation ...62

Playing Video and Audio using USB Connection

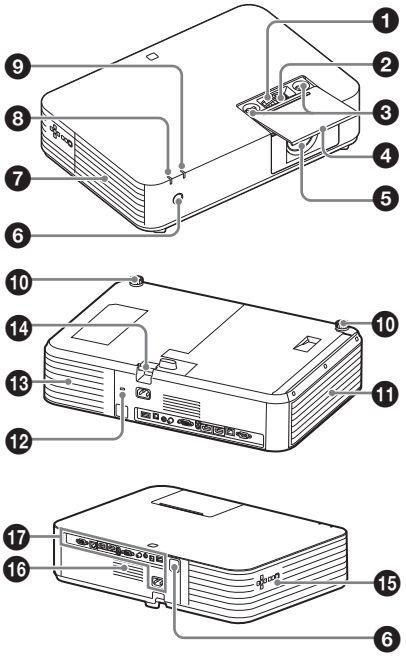
Playing Video and Audio using USB Connection 64
Starting USB Display 64
Playing Video and Audio 65
Using the Controller 65

Others

Indicators 66
Messages List 68
Troubleshooting 70
Cleaning the Air Filter 73
Specifications 75
Projection Distance and Lens Shift Range 81
Dimensions 84
About Trademarks 86
END USER LICENSE AGREEMENT 87
Index 92

Location and Function of Controls

Main Unit



❶ **Zoom lever (page 18)**

❷ **Focus lever (page 18)**

❸ **Lens shift dial (page 18)**

❹ **Lens Adjustment Cover (page 19)**
Slide open to adjust lens shift.

❺ **Projection lens**

❻ **Remote control Receiver**

❼ **Ventilation holes (exhaust)**

Caution
Do not place anything near the ventilation holes as this may cause internal heat buildup. Do not place your hand or deformable items (plastic, etc.) near the ventilation holes or around the projector, as it may cause damage or personal injury.

❽ **ON/STANDBY indicator (page 66)**

❾ **WARNING indicator (page 66)**

❿ **Front feet (adjustable) (page 19)**

⓫ **Side cover/Ventilation holes (intake) (page 73)**

⓬ **Security lock**
Connects to an optional security cable manufactured by Kensington.
For details, visit Kensington's web site.
http://www.kensington.com/

⓭ **Ventilation holes (intake) (page 73)**

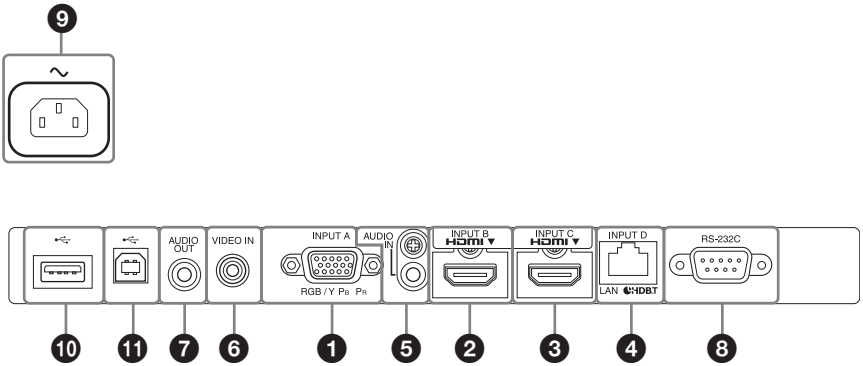
⓮ **Security bar**
Connects to a commercially available security chain or wire.

⓯ **Control panel (page 6)**

⓰ **Speaker**

⓱ **Terminals (page 5)**

Terminals



Input (pages 9, 12)

❶ **INPUT A**
Video: RGB/YPBPR input terminal (RGB/YPBPR)

❷ **INPUT B**
Video: HDMI input terminal (HDMI)
Audio: HDMI input terminal (HDMI)

❸ **INPUT C**
Video: HDMI input terminal (HDMI)
Audio: HDMI input terminal (HDMI)

❹ **INPUT D**
HDBaseT terminal/LAN terminal (page 42)
Use a straight CAT5e or CAT6 shielded LAN cable (not supplied).

❺ **AUDIO (AUDIO IN)**
Audio: Audio input terminal

❻ **VIDEO (VIDEO IN)**
Video: Video input terminal

Output (page 16)

❼ **AUDIO (AUDIO OUT)**
Audio: Audio output terminal

Note

When the speaker setting is set to "Always On" and the light is turned off, INPUT A is enabled.

Others

❽ **RS-232C terminal (RS-232C)**
RS-232C compatible control terminal. Connects the computer's RS-232C terminal and the RS-232C cross cables.

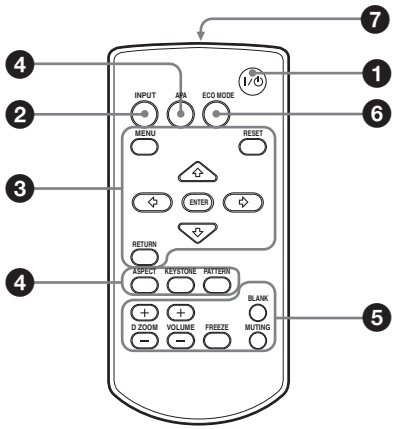
❾ **AC IN (~) socket**
Connects the supplied AC power cord.

❿ **USB terminal (Type A) ( ) (page 11)**

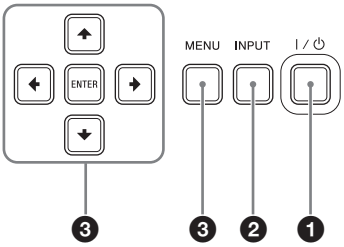
⓫ **USB terminal (Type B) ( ) (page 64)**

Remote Commander and Control Panel Keys

Remote Commander



Control Panel Keys



❶ Turning on the power/Going to standby mode

I/⏻ (On/Standby) key

❷ Selecting an input signal (page 17)

INPUT key

❸ Operating a menu (page 24)

MENU key

RESET key

ENTER /↑/↓/←/→ (arrow) keys

RETURN key

❹ Adjusting the image (page 18)

ASPECT key (page 28)

KEYSTONE key (page 20)

PATTERN key (page 23)

APA (Auto Pixel Alignment) key*1 (page 23)

Note

*1: Use this key when inputting a computer signal via the RGB input terminal (INPUT A).

❺ Using various functions during projecting

D ZOOM (Digital Zoom) +/– key*1 *2

Enlarges a portion of the image while projecting.

1 Press the D ZOOM + key to display the digital zoom icon on the projected image.

2 Press the ↑/↓/←/→ keys to move the digital zoom icon to the point on the image you want to enlarge.

3 Press the D ZOOM + key or the D ZOOM – key repeatedly to change the enlargement ratio. The image can be enlarged up to 4 times.

Press the RESET key to restore the previous image.

BLANK key

Cuts off the projected image temporarily. Press again to restore the previous image.

MUTING key

Mutes the audio output temporarily. Press again to restore the previous volume.

VOLUME +/– key

Adjusts the volume output.

FREEZE key*2
Pauses a projected image. Press again to restore the image.

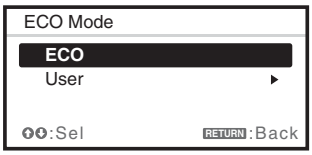
Notes

*1: Use this key when inputting a computer signal. But it may not be used depending on the resolution of the input signal.
*2: Use this key when inputting a computer signal. You cannot use this key when "Type B USB" or "Network" is selected as the input.

❻ Setting the energy–saving mode easily

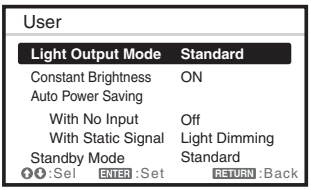
ECO MODE key
Energy-saving mode can be set easily. Energy-saving mode consists of "Light Output Mode," "With No Input," "With Static Signal" and "Standby Mode."

1 Press the ECO MODE key to display the ECO Mode menu.



2 Press the ↑/↓ key or ECO MODE key to select "ECO" or "User" mode.
ECO:
Sets each mode to the optimum energy-saving value.
Light Output Mode: Low
With No Input: Standby
With Static Signal: Light Dimming
Standby Mode: Low
Speaker Setting: Sync with Power
User:
Sets each item of the ECO Mode menu as you desire (go to step 3).

3 Select "User" then press the → key.
The setting items appear.



4 Press the ↑/↓ key to select the item then press the ENTER key.

5 Press the ↑/↓ key to select the setting value.

6 Press the ENTER key.
The screen returns to the User screen.
For details on each setting, see "Speaker Setting" in the Function menu (page 31), "Light Output Mode," "Constant Brightness," "With No Input," "With Static Signal," and "Standby Mode" in the Connection/Power menu (page 34).

Note

If you set "ECO Mode" to "ECO," or "Standby Mode"(in "User") to "Low," the network control function will be disabled in standby mode. If the external control is being performed by using the network or network control function, do not select "ECO," or do not set "Standby Mode" (in "User") to "Low."

❼ Infrared transmitter

About remote commander operation

- Direct the remote commander toward the remote control receiver.
- The shorter the distance between the remote commander and the projector is, the wider the angle within which the remote

commander can control the projector becomes.

- Make sure that nothing obstructs the infrared beam between the remote commander and the remote control receiver on the projector.

Connecting the Projector

Notes

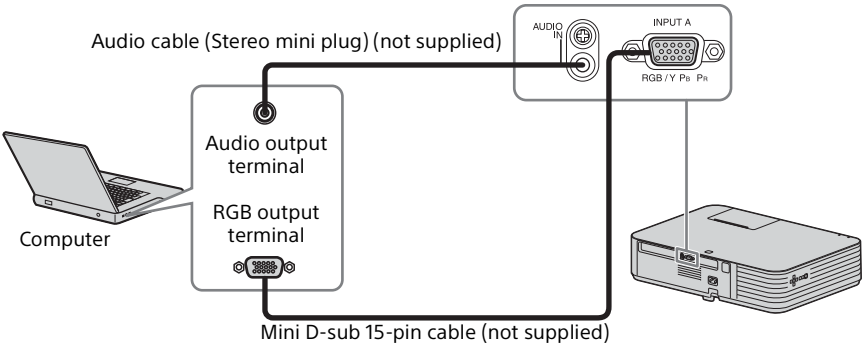
- Make sure all the equipment is powered off when connecting the projector.
- Use the proper cables for each connection.
- Insert the cable plugs firmly. Loose connections may reduce performance of picture signals or cause a malfunction. When pulling out a cable, be sure to grip it by the plug, not the cable itself.
- For more information, refer also to the instruction manuals of the equipment you are connecting.
- Use a no-resistance audio cable.

Connecting a Computer

Connection with a computer is explained for each input signal.

INPUT A

For connecting a computer with an RGB output terminal.



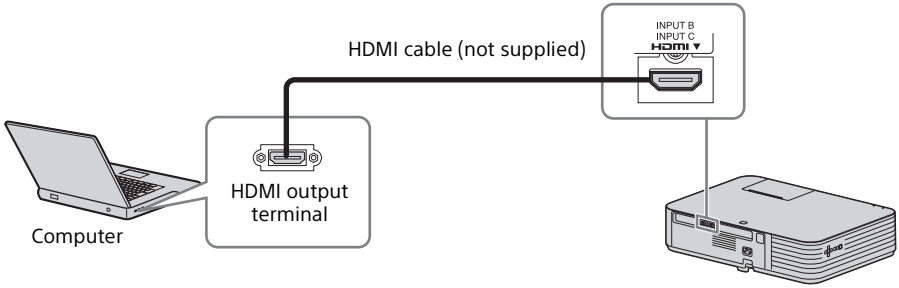
Note

In screen setting of your computer, it is recommended that you set the resolution of an external monitor as below;

- VPL-PHZ10: 1,920 × 1,200 pixels
- VPL-PWZ10: 1,280 × 800 pixels

INPUT B/INPUT C

For connecting a computer with an HDMI output terminal.

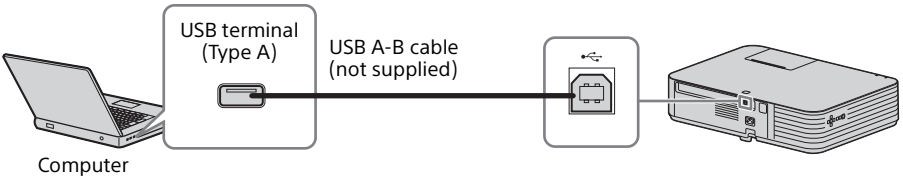


Notes

- Use HDMI-compatible equipment which has the HDMI Logo.
- Use a high speed HDMI cable(s) on which the cable type logo is specified. (Sony products are recommended.)
- The HDMI terminal of this projector is not compatible with DSD (Direct Stream Digital) Signal or CEC (Consumer Electronics Control) Signal.

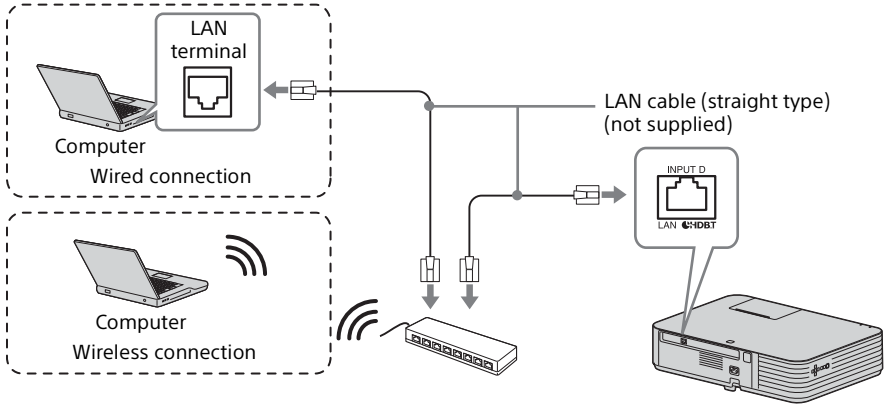
USB terminal (Type B) ( )

For connecting to a computer with a USB terminal (“Playing Video and Audio using USB Connection” (page 64)).



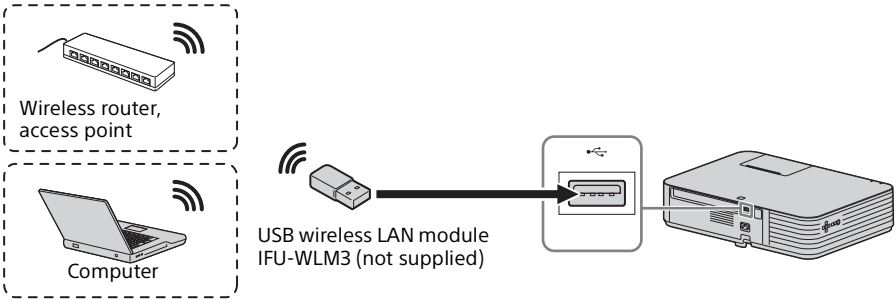
LAN terminal

For connecting to a computer via a hub or router (“Presentation Function via Network” (page 54)).



USB terminal (Type A) ( )

For connecting a USB wireless LAN module IFU-WLM3 (not supplied) (“Presentation Function via Network” (page 54)).



Notes

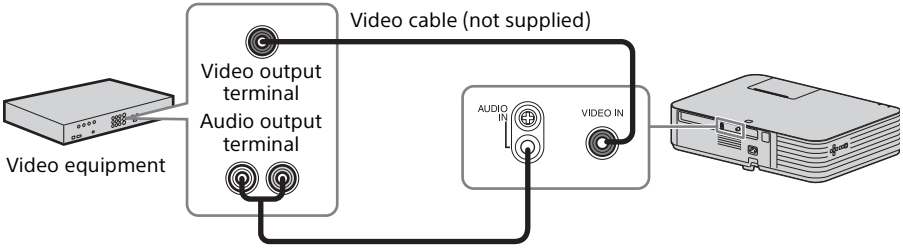
- Undesignated USB wireless LAN modules do not work.
- When connecting/disconnecting the USB wireless LAN module, make sure that the projector is in Standby mode (Standby Mode: “Low”), or the AC power cord is unplugged from the wall outlet.
- For connecting to the access point, access to the Web browser, and input the settings for the access point to connect. For details, see “Setting the WLAN Network of the projector” (page 45).

Connecting a Video equipment

Connections with a VHS video deck, DVD player, or BD player are explained for each input signal.

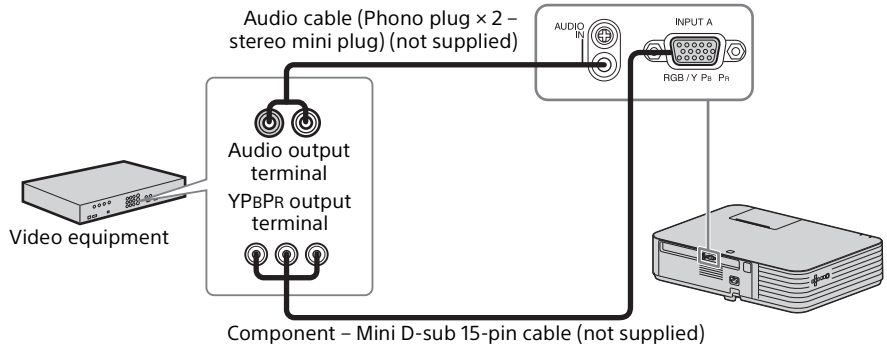
VIDEO IN

For connecting video equipment with a video output terminal.



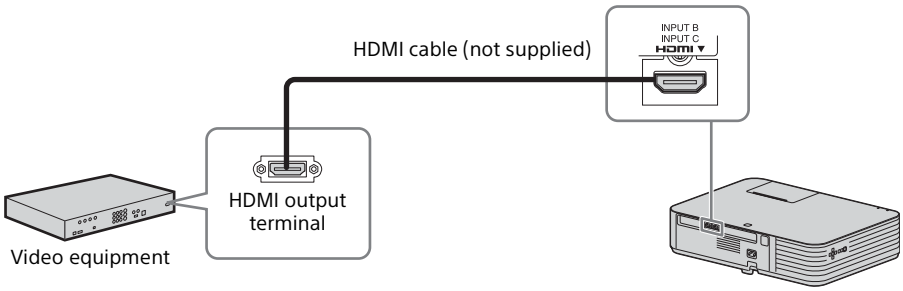
INPUT A

For connecting video equipment with a YPBPR output terminal.



INPUT B/INPUT C

For connecting video equipment with an HDMI output terminal.



Notes

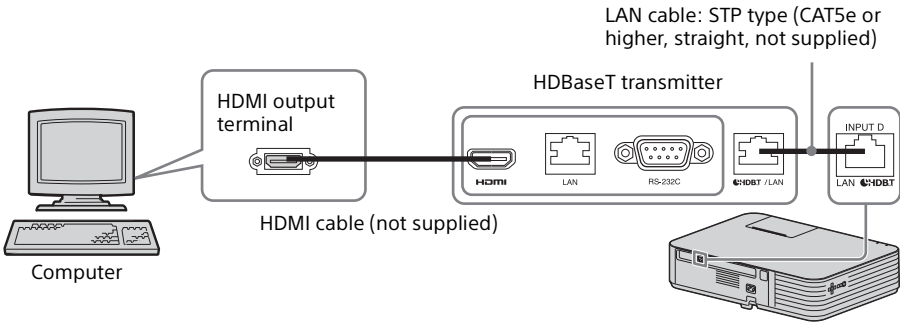
- Use HDMI-compatible equipment which has the HDMI Logo.
- Use a high speed HDMI cable(s) on which the cable type logo is specified. (Sony products are recommended.)
- The HDMI terminal of this projector is not compatible with DSD (Direct Stream Digital) Signal or CEC (Consumer Electronics Control) Signal.

Connecting a HDBaseT™ equipment

For connecting the computer, video equipment, and network equipment via the HDBaseT transmitter.

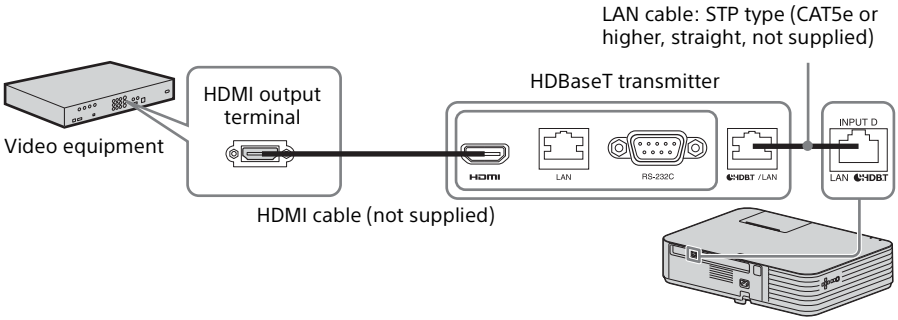
Connecting to the computer

INPUT D



Connecting to the video equipment

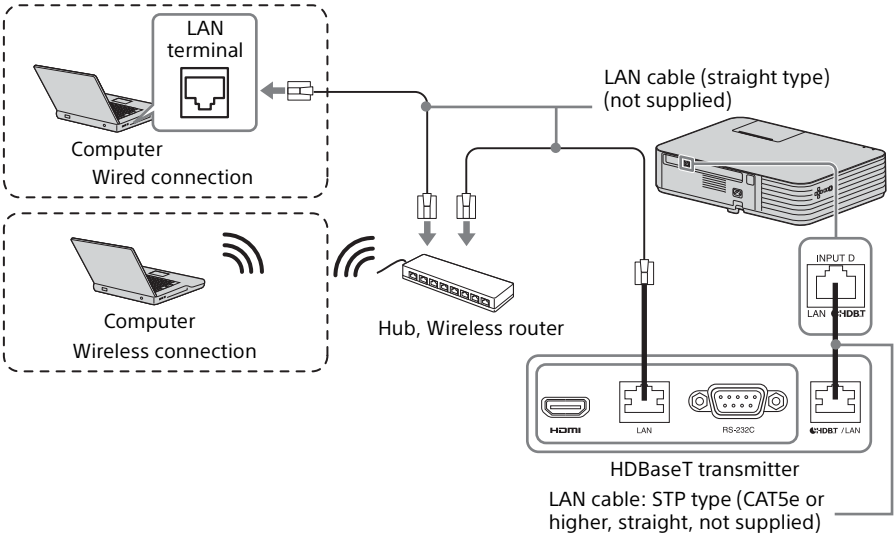
INPUT D



Notes for connecting this unit and the HDBaseT transmitter

- Ask a professional or Sony dealer to perform wiring. If wiring is not correct, the transmission characteristics of the cable will not be achieved, and image or sound may break up or you may experience unstable performance.
- Connect the cable directly to the HDBaseT transmitter without going through a hub or router.
- Use cables that meet the following conditions.
  - CAT5e or higher
  - Shielded type (covering connectors)
  - Straight wire connection
  - Single wire
- When installing the cables, use a cable tester, cable analyzer, or similar device to check if the cables meet the CAT5e or higher requirement. If there is a transit connector between this unit and the HDBaseT transmitter, include it when measuring.
- To reduce the affect of noise, install and use the cable in a manner where it is not rolled up and it is as straight as possible.
- Install the cable away from the other cables (especially the power cable).
- When installing multiple cables, do not bind them and keep the running parallel distance as short as possible.
- The transmittable distance of the cable is 100 m (approx. 328 feet) maximum. If it exceeds 100 m (approx. 328 feet), it may cause the image or the sound to break up, or cause a multifunction in LAN communication. Do not use the HDBaseT transmitter beyond the transmittable distance.
- Inquire about operation or function problems caused by other manufacturer's devices with the relevant manufacturer.

Connecting to the network equipment

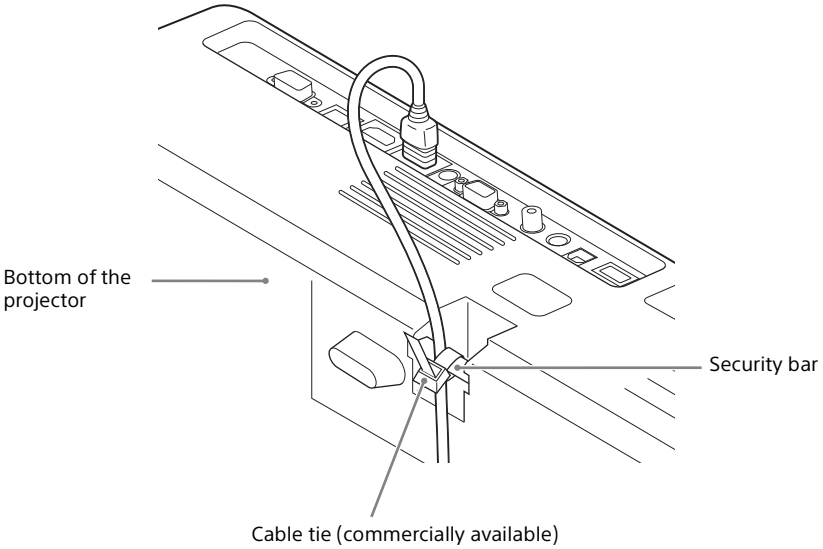


Notes

- If you are using a network, make sure “HDBaseT/LAN Port” is set to “HDBaseT” (page 34).
- Connect this unit and the HDBaseT transmitter without a hub or router between them.

To attach the HDMI cable

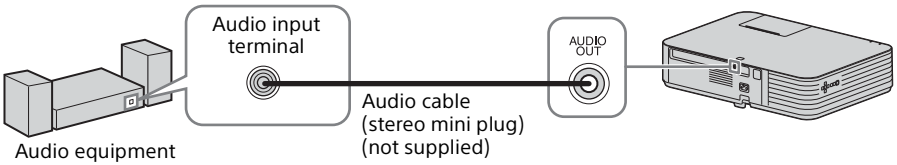
Fix the cable to the security bar at the bottom of the projector using a commercially-available cable tie, as in the illustration.



Connecting Audio Equipment

OUTPUT

Input audio can be output to audio equipment such as speakers with a built-in amplifier.

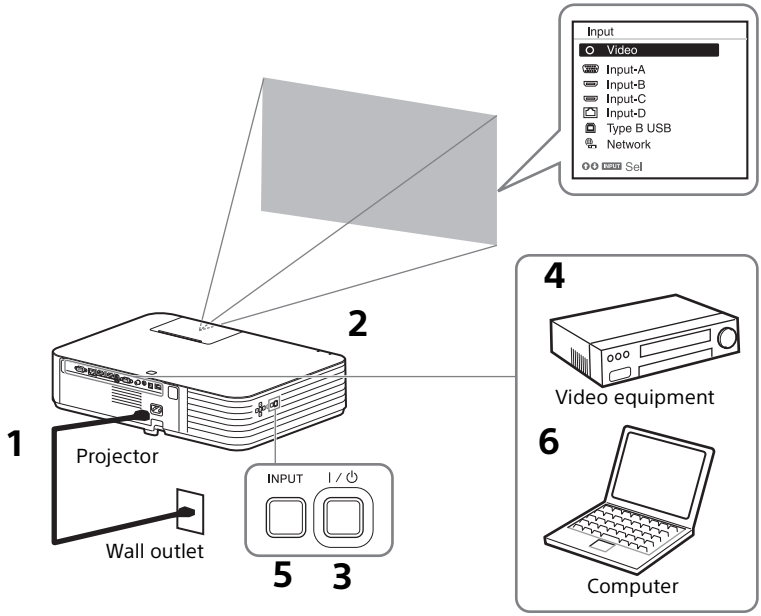


Note

When the speaker setting is set to “Always On” and the light is turned off, INPUT A is enabled.

Projecting an Image

The size of a projected image depends on the distance between the projector and screen. Install the projector so that the projected image fits the screen size. For details on projection distances and projected image sizes, see “Projection Distance and Lens Shift Range” (page 81).



1 Plug the AC power cord into the wall outlet.

2 Connect all equipment to the projector (page 9).

3 Press the **I**/⏻ key to turn on the unit.

4 Turn on the connected equipment.

5 Select the input source.

Press the INPUT key on the projector to display the menu for switching input signal on the screen. Press the INPUT key repeatedly, or press the ↑/↓ key to select an image to be projected.

6 When projecting a computer image, switch your computer's output to external display.
The method to switch the output varies depending on the type of computer.

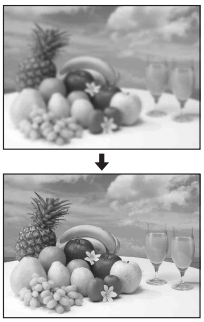
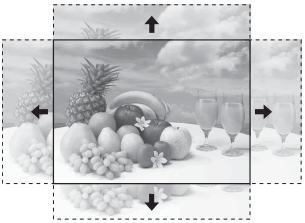
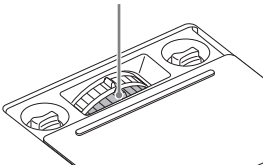
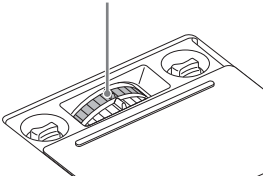
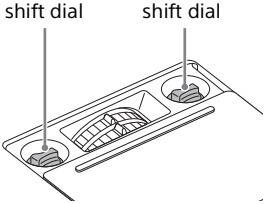
(Example)

Fn + F7

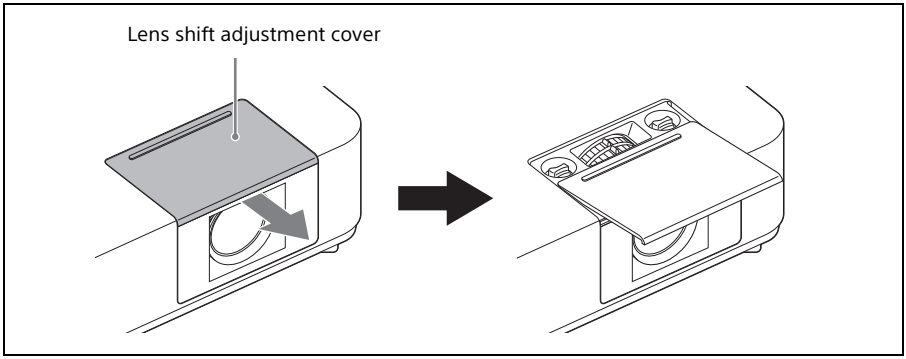
To play video and audio using USB Connection, see "Playing Video and Audio using USB Connection" (page 64). To use Presentation Function via Network, see "Presentation Function via Network" (page 54).

7 Adjust the focus, size and position of the projected image (page 18).

Adjusting the Focus, Size, and Position of the Projected Image

Focus	Size (Zoom)	Position (Lens shift)
		
		

Slide the lens shift adjustment cover as below.

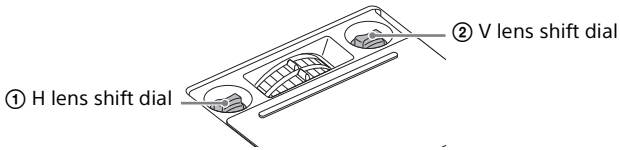


Adjusting the tilt of the projector by using lens shift

You can adjust the position of the projected image by turning the lens shift dials (H lens shift dial, V lens shift dial).

1 Slide the lens shift adjustment cover to open.
For details, see page 19.

2 Turn the ① H lens shift dial (for adjusting right and left), ② V lens shift dial (for adjusting up and down) to adjust lens shift.



If you keep turning the lens shift dials, the lens shift positions are restored to the original positions. Keep turning to find the best positions. For details on the adjustment range, see the “Lens shift range” (page 83).

Notes

- While adjusting the lens shift, be careful not to look into the lens.
- When turning the H lens shift dial, the lens shift may move up or down. (When turning the V shift dial, the lens shift may move right or left.) In that case, adjust the lens shift with each dial again.

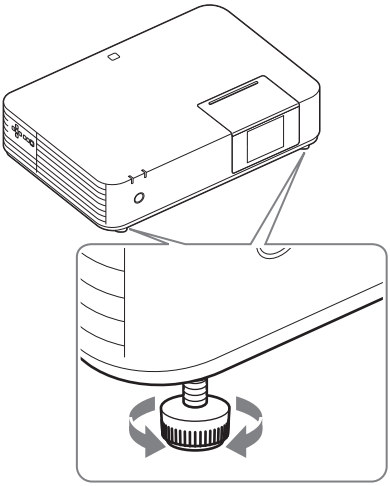
3 Slide the lens shift adjustment cover to close.

Adjusting the tilt of the projector with the front feet (adjustable)

By changing the slope of the projector with front feet (adjustable), you can adjust the position of the projected image.

How to alter the angle

When the projector is installed on an uneven surface, you can adjust using the front feet (adjustable).



Notes

- Be careful not to let the projector down on your fingers.
- Do not push hard on the top of the projector with the front feet (adjustable) extended. It may cause malfunction.

Changing the aspect ratio of the projected image

Press the ASPECT key on the remote commander to change the aspect ratio of the projected image. You can also change the setting in Aspect of the Screen menu (page 28, 30).

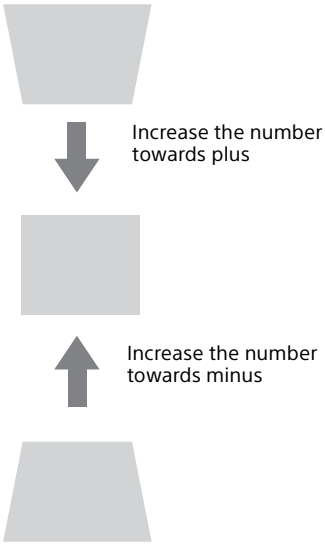
Correcting trapezoidal distortion of the projected image (Keystone feature)

If the image becomes trapezoidal, set the keystone manually.

When the projected image is a trapezoid, tapering to the top or bottom

1 Press the KEYSTONE key on the remote commander once or select “V Keystone” in the Installation menu.

2 Use the ↑/↓/←/→ keys to set the value. The higher the setting, the narrower the top of the projected image. The lower the setting, the narrower the bottom.

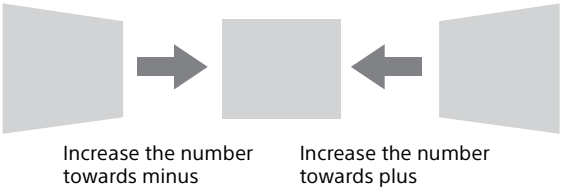


Press the RESET key to restore the Projected image before adjustment.

When the projected image is a trapezoid, tapering to the right or left

1 Press the KEYSTONE key on the remote commander twice or select “H Keystone” in the Installation menu.

2 Use the ↑/↓/←/→ keys to set the value. The higher the setting, the narrower the right part of the projected image. The lower the setting, the narrower the left part.



Press the RESET key to restore the projected image before adjustment.

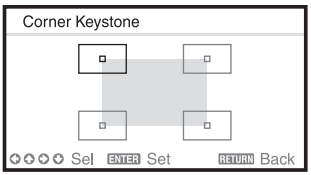
Notes

- Since the Keystone adjustment is an electronic correction, the image may be deteriorated.
- Depending on the position adjusted with the lens shift feature, the aspect ratio of the image may change from the original or projected image may be distorted with Keystone adjustment.

- If adjusting upwards or downwards (V keystone adjustment) and to the right or left (H keystone adjustment) at the same time, the values of the adjustment menu may not reach the maximum value.
- If you press the KEYSTONE key on the remote control to switch the keystone adjustment and corner key stone adjustment, the value of the adjustment menu and the status of the image may not match before the adjustment is performed.

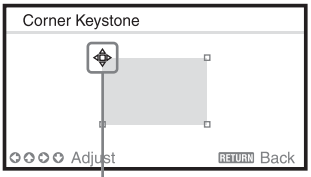
Correcting the image twist (Corner Keystone feature)

You can correct the image twist by the corner keystone feature.
Press the KEYSTONE key on the remote commander three times, or select “Corner Keystone” in the Installation menu, and select “Adjust.” The guide is displayed.

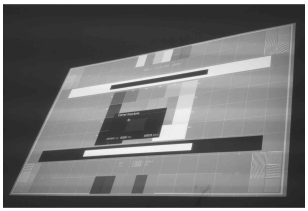


The corners of the image to be corrected

1 Move the ☐ by using the ↑/↓/←/→ keys to select the corner you want to correct.
If you press the ENTER key, you will go back to the cursor display.



Adjust using this cursor.



Example of cursor display:


You can adjust in all directions.


You can adjust only to the left/ right or downwards.

2 Adjust the position of the corner you want to correct by using the ↑/↓/←/→ keys. The cursor will disappear if the adjustment range limit is reached.

Press the RESET key to restore the projected image before adjustment.

Displaying a pattern

You can display a pattern for adjusting the projected image or a grid pattern with the PATTERN key on the remote commander. Press the PATTERN key again to restore the previous image. You can use a grid pattern as a guide to write text or to draw lines and shapes on the whiteboard or blackboard without using a computer.

Note

You cannot use this key when "Type B USB" or "Network" is selected as the input.

Automatically adjusts Phase, Pitch and Shift of projected image while a signal is input from a computer (APA (Auto Pixel Alignment))

Press the APA key on the remote commander. Press again to cancel adjusting during the setting.
You can also set APA in the Screen Menu (page 28). If Smart APA in the Function menu is set to "On", executes APA automatically when a signal is input (page 31).

Turning Off the Power

1 Press the I/⏻ key on the unit or the remote commander.
The projector starts shutdown and turns off.

2 Unplug the AC power cord from the wall outlet.

Using a MENU

Note

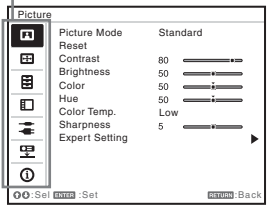
The menu displays used for the explanation below may be different depending on the model you are using.

1 Press the MENU key to display the menu.

2 Select the setting menu.

Use the ↑/↓ key to select the setting menu then press the → key or ENTER key.

Setting menu

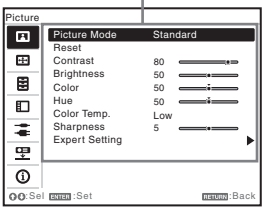


3 Select the setting item.

Use the ↑/↓ key to select the setting menu then press the → key or ENTER key.

To return to the selection screen of the setting menu, press the ← or RETURN key.

Setting items



4 Make the setting or adjustment for the selected item.

The setting method varies, depending on the setting item.

If the next menu window is displayed, select the item according to the operations in step **3** and then press the ENTER key to register the setting.

To return to the selection screen of the setting items, press the ← or RETURN key. You can press the RESET key to reset an item to its factory setting value to aid setting.

Using a pop-up menu

Press the ↑/↓/←/→ key to select an item.

Selected items take effect immediately, except “Language,” “Speaker Setting,” and “Input-A Signal Sel.”, which take effect after you press the ENTER key.



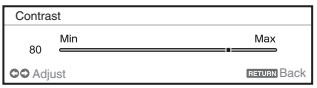
Using the setting menu

Press the ↑/↓ key to select the item.

Press the ENTER key to register the setting and return to the previous screen.

Using the adjustment menu

To increase the value, press the ↑/→ key and to decrease the number, press the ↓/← key. Press the ENTER key to register the setting and return to the previous screen.



5 Press the MENU key to clear the menu.

The menu disappears automatically if no operation is performed.

The Picture Menu

The Picture menu is used to adjust the picture for each input signal.

Setting items	Item descriptions
Picture Mode	**Dynamic:** Emphasizes the contrast to produce a dynamic and vivid picture. **Standard:** Provides an image which is natural and well balanced. **Presentation:** Provides a bright image, suitable for presentations.
Reset[*1]	Resets the factory setting.
Contrast	The higher the value, the greater the contrast. The lower the value, the lower the contrast.
Brightness	The higher the value, the brighter the picture. The lower the value, the darker the picture.
Color[*2] [*3]	The higher the value, the greater the intensity. The lower the value, the lower the intensity.
Hue[*2] [*3] [*4]	The higher the value, the more greenish the picture becomes. The lower the value, the more reddish the picture becomes.
Color Temp.[*5]	**High/Middle/Low:** The higher the value, the more bluish the picture. The lower the value, the more reddish the picture.
Sharpness	The higher the value, the sharper the picture. The lower the value, the softer the picture.
Expert Setting	
Reality Creation	Adjusts the detail and noise processing of images. (Super-resolution function) **On:** Adjusts the settings of “Reality Creation.” **Resolution:** When you increase the setting value, the texture and detail of the image become sharper. **Noise Filtering:** When you increase the setting value, the noise (picture roughness) becomes less prominent. **Test: On/Off:** Switches “On” and “Off” at a certain frequency to check the effect of “Reality Creation.” [*6] **Off:** The “Reality Creation” function is not applied.
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.

Setting items	Item descriptions
Gamma Mode	**2.2:** Equivalent to a 2.2 gamma curve. **2.4:** Equivalent to a 2.4 gamma curve. **Gamma 3:** Applies a gamma curve that prioritizes the brightness to suit use in a relatively bright environment. **Gamma 4:** Enhances black and white contrast to suit use in a relatively dark environment. **DICOM GSDF Sim.*7:** Gamma setting is in accordance with the Grayscale Standard Display Function (GSDF) of the Digital Imaging and Communications in Medicine (DICOM) standards.
Color Space	Converts the color space. **Custom 1:** Produces images with vivid colors. **Custom 2:** Produces images with muted colors. **Custom 3:** Reproduces image colors true to the original image source. You can select R/G/B for the selected color space and adjust the R/G/B chromaticity points in the x and y directions in the CIExy chromaticity diagram respectively. **Color Select:** Select the color to adjust from "Red," "Green," and "Blue." **Cyan - Red (x):** Adjusts the chromaticity point of the selected color toward cyan-red (x). **Magenta - Green (y):** Adjusts the chromaticity point of the selected color toward magenta-green (y).

Notes

*1: The settings in the Picture menu return to their factory defaults, except for Picture Mode.
*2: When a video signal is input, this option is available.
*3: When the signal without color burst signal is input after selecting "Video", this option is unavailable.
*4: When an analog TV signal is input, this option may not be available, depending on the color system.
*5: When "Picture Mode" is set to the item other than "Presentation," this option is available.
*6: The display position of the status during the test works together with the "Menu Position" setting (page 33).
*7: Available when a computer signal is input from the HDMI input terminal (INPUT B, C) or HDBaseT (INPUT D). This projector is not to be used as a device for medical diagnosis.

The Screen Menu

The Screen menu is used to adjust the size, position and aspect ratio of the projected image for each input signal.

Setting items		Item descriptions
Aspect[*1]		Changes the aspect ratio of the projected image (page 30).
	When the computer signal is input	**4:3:** Displays the image to fit the maximum projected image size with an aspect ratio fixed to 4:3. **16:9:** Displays the image to fit the maximum projected image size with an aspect ratio fixed to 16:9. **Full 1:** Displays the image to fit the maximum projected image size without changing the aspect ratio of the input signal. **Full 2:** Displays the image to fit the maximum projected image size changing the aspect ratio of the input signal. **Full 3:** Displays the image to fit the maximum width or height, up to 1280 × 720 pixels, without changing the aspect ratio of the input signal. **Normal:** Displays the image on the center position of the projected screen without changing the resolution of the input signal or enlarging the image.
	When the video signal is input	**4:3:** Displays the image to fit the maximum projected image size with an aspect ratio fixed to 4:3. **16:9:** Displays the image to fit the maximum projected image size with an aspect ratio fixed to 16:9. **Full:** Displays the image to fit the maximum projected image size changing the aspect ratio of the input signal. **Zoom:** Zooms the center area of a projected image.
Adjust Signal		Adjusts the image of computer signal. Use this item if the edge of the image is cut and reception is bad.
	APA[*2 *3]	Automatically adjusts the projected image to an optimum quality when you press the ENTER key (page 6).
	Phase[*2]	Adjusts the dot phase of the display pixel and the input signal. Set to the value where looks clearest.
	Pitch[*2 *5]	The higher the value, the wider the horizontal image elements (pitch). The lower the value, the narrower the horizontal image elements (pitch).
	Shift[*4]	**H:** The higher the value, the farther right the image is projected on the screen. The lower the value, the image farther left. **V:** The higher the value, the farther up the image is projected on the screen. The lower the value, the image farther down.

Notes

*1:
- Note that if the projector is used for profit or for public viewing, modifying the original picture by switching to the aspect mode may constitute an infringement of the rights of authors or producers, which are legally protected.
- Depending on the input signal, setting items for aspect ratio or some other setting items cannot be set in some cases, or changing the aspect ratio setting may have no effect.
- A part of the image may be displayed in black, depending on the setting item.

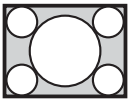
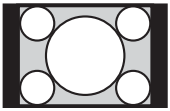
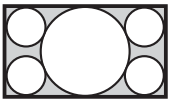
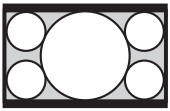
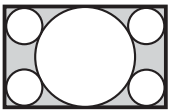
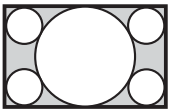
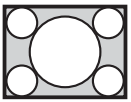
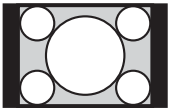
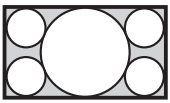
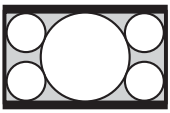
*2: Available when a computer signal is input from the RGB input terminal (INPUT A).

*3: If the projected image includes large amount of black portion around it, the APA function will not work properly and a part of the image may not be displayed on the screen and also optimum image cannot be obtained, depending on the type of input signal. In this case, adjust the “Phase,” “Pitch,” and “Shift” items manually.

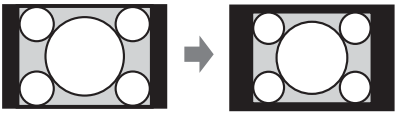
*4: Available when a computer or a video signal is input from the RGB/YPBPR input terminal (INPUT A).

*5: When “APA” (page 28) or “Smart APA” (page 31) is performed, the adjusted value for “Pitch” will return to its factory default. If you want to continue using the adjusted value, set “Smart APA” to “Off.”

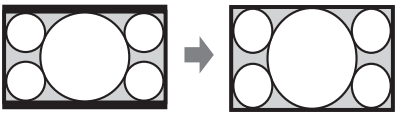
Aspect

	Input signal	Recommended setting value and projected image
Computer signal	4:3 	Full1*1 *2 *3 
	16:9 	Full1*1 *2 *3 
	16:10 	Full1*3 
Video signal	4:3 	4:3*4 *5 
	16:9 	16:9 

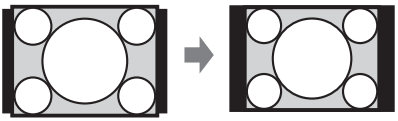
*1: If you select “Normal,” the image is projected in the same resolution as the input signal without changing the aspect ratio of the original image.



*2: If you select “Full2,” the image is projected to fit the projected image size, regardless of the aspect ratio of the image.



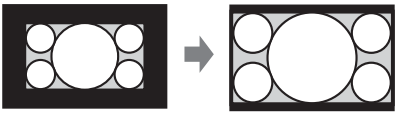
*3: If you adjust the projected image position using an image with 16:9 aspect ratio and then switch the input source to 4:3 image, the top and bottom edge of the image may be hidden. In this a case, select “Full3.”



*4: Depending on the input signal, the projected image may be projected as illustrated below. In this a case, select “16:9.”



*5: Depending on the input signal, the image may be projected as illustrated below. In this a case, select “Zoom.”



The Function Menu

The Function menu is used for setting various functions of the projector.

Setting items	Item descriptions
Volume	The higher the value, the louder an audio volume and the lower the value, the lower the audio volume.
Speaker	**On/Off:** When set to “On,” speaker outputs sound. To not output sound from the speaker, select “Off.”
Speaker Setting	**Sync with Power/Always On:** When set to “Always On,” the speaker is available even in Light Cutoff.*1
Smart APA	**On/Off:** When set to “On,” APA functions automatically when a signal is input.*2
CC Display	**CC1/CC2/CC3/CC4/Text1/Text2/Text3/Text4:** Select the closed caption service (captions or text). **Off:** Closed caption does not appear.
Start Up Image	**On/Off:** When set to “On,” the Start Up Image is displayed on the screen when the projector is powered on.
Color Calibration *3*4	Corrects the color drifts of the entire screen that occurred overtime. **Auto** If you select “On”, it corrects the color drifts of the entire screen automatically when turning off the projector after certain time of use. **Start** If 20 minutes have passed after the light turning on, it immediately corrects the color drifts of the entire screen. **Return** *5 Restores the color to that before performing the previous color calibration. **Reset** Restores the factory setting.
All Reset	Resets all settings to their factory defaults.

Notes

*1: When the speaker setting is set to “Always On” and the light is turned off, INPUT A is enabled.
If “Always On” is selected, “ECO Mode” will be set to “User,” “Standby Mode” will be set to “Standard” in conjunction.

*2: APA functions when a computer signal is input via the RGB input terminal (INPUT A).

*3: The pattern for the color calibration is displayed while performing this mode.
If you press the I/⏻ button on the projector or remote control, the pattern also turns off. At the same time, this mode also ends.

*4: Color drifts may not be able to be corrected correctly because of environmental factors, such as temperature and dust, or the extent of changes that occurred overtime.

*5: Cannot be selected if you have not performed the color calibration.

The Operation Menu

The Operation menu is used for setting for the operations by using the menu or the remote commander.

Setting items	Item descriptions
Language	Selects the language used in the menu and on-screen displays.
Menu Position	**Bottom Left/Center:** For selecting the position of the menu displayed on the projected image.
Status	**On:** All on-screen statuses are enabled. **Off:** Displays only the menus, the message when turning off the power, and warning messages.
IR Receiver	**Front & Rear/Front/Rear:** Selects the remote control receiver (IR Receiver) on the front and rear of the projector.
Security Lock*1	**On/Off:** This function enables restriction of the projector to authorized users by password. The setting procedures for security locking are as follows: **1** Select "On" and press the ENTER key to display the setting menu. **2** Input the password with the MENU, ↑/↓/←/→ and ENTER keys. (The default setting password is "ENTER, ENTER, ENTER, ENTER.") **3** Input a new password with the MENU, ↑/↓/←/→ and ENTER keys. **4** Enter the password again to confirm. Enter the password when you turn on the projector after disconnecting and reconnecting the AC power cord. When it is set to "Off," you can cancel the security lock. You are required to input the password again. If you fail to enter the correct password after three consecutive times, the projector cannot be used. In this case, press the I/⏻ key to go Standby mode then turn on the power again.
Control Key Lock	**On/Off:** When set to "On," locks all the control panel keys of the projector. However, you can operate the following when set to "On": • Press and hold the I/⏻ key for approximately 10 seconds during Standby mode. → The projector turns on. • Press and hold the MENU key for approximately 10 seconds during power on. → "Control Key Lock" is set to "Off" and enables operation of all keys on the projector.

Note

*1: You will not be able to use the projector if you forget your password. If you call qualified Sony personnel because you have forgotten the password, you will be asked to verify the projector's serial number and your identity. (This process may differ in other countries/regions.) Once your identity has been confirmed, we will provide you with the password.

The Connection/Power Menu

The Connection/Power menu is used for setting for the connections and power.

Setting items			Item descriptions
LAN Settings			
	IP Address Setup[*1]		**Auto (DHCP):** The IP address is assigned automatically from the DHCP server such as a router. **Manual:** To specify the IP Address manually.
WLAN Settings			
	WLAN Connection[*2]		**On/Off:** Set the wireless output of the USB wireless LAN module (not supplied) to On/Off.
	WLAN Network[*3]		**Access Point/Client** [*4]: Changes modes for WLAN. [*5]
HDBaseT setting			Sets the function of the HDBaseT/LAN Port.
	HDBaseT/LAN Port		**HDBaseT:** Connecting the HDBaseT transmitter and the LAN cable enables transmitting the signal of the Video, Audio, Ethernet, and RS-232C. **LAN:** Connecting the LAN cable for Ethernet directly enables connecting to the network. (Use when connecting the cable directly without the HDBaseT transmitter.)
	RS-232C setting		**Via HDBaseT:** You can connect this unit to the RS-232C terminal via the HDBaseT transmitter. (Baud rate: 9600bps) **RS-232C:** Use when connecting to the RS-232C terminal of this unit directly.
Network Presentation			
	Connection CODE		**On/Off:** This is the presentation function via the network. It controls the connection using the displayed number (CODE) on the right bottom of the screen. During the image transmission, using the ENTER key on the remote commander makes Connection CODE display again.
	Display Setting		
		LAN Mode	Displays the LAN settings of the projector or the settings of the USB wireless LAN module that operates as a client at the bottom right of the screen. **Wired:** Displays the IP address of LAN preferentially. **Wireless:** Displays the IP address of the USB wireless LAN module preferentially.
		AP Mode	Displays the SSID of the USB wireless LAN module that operates as an access point at the bottom right of the screen.

Setting items	Item descriptions
Dynamic Range[*6]	Sets the image input level of the INPUT B/C/D terminal. **Auto:** Distinguishes the image input level automatically. **Limited:** Set when the image input level is 16-235. **Full:** Set when the image input level is 0-255.
Input-A Signal Sel.	**Auto/Computer/Video GBR/Component:** When set to "Auto", selects the type of video signal input automatically when "Input-A" is selected. [*7]
ECO	
Light Output Mode	**Standard/Middle/Low/Auto**[*8] [*9]**:** When set to "Standard," the image becomes brighter, and power consumption becomes higher. When set to "Low," power consumption is minimized; however, the image will be darker. If you select "Middle", the brightness of the image and power consumption change to the middle of "Standard" and "Low." When set to "Auto," brightness is adjusted automatically according to image content. Dark images are projected with brightness adjusted, leading to energy-saving. Bright images are projected brightly, without adjusting brightness.
Constant Brightness[*10]	**On/Off:** Available when Light Output Mode is set to "Standard" or "Middle." Brightness is constant at about 90% of light output of each mode.
Auto Power Saving	
With No Input	**Light Cutoff:** The light turns off automatically and power consumption is reduced if no signal is input for approx. 2 minutes. The light lights again when a signal is input or any key is pressed. In Light Cutoff, the ON/STANDBY indicator lights in orange. (page 66) **Standby**[*11]**:** If no signal is input to the unit for approx. 2 minutes, the power turns off automatically, and the unit enters standby mode. **Off:** You can deactivate the With No Input.

Setting items		Item descriptions	
		With Static Signal	**Light Dimming**[*8] [*12] [*13]**:** If an image does not change for about 10 seconds, light output is gradually reduced (approximately 10% to 15%[*14]) from that set in the Light Output Mode. Automatically the light slowly darkens to approximately 5% of its light output according to the selected time (with no change to input signal) “5 min.”, “10 min.”, “15 min.”, “20 min.” or “Demo.”, While dimming the light, the message “Light Dimming” appears. If you select “Demo.,” the image will start to darken about 40 seconds later. When any change in signal is detected, or an operation (remote control or control panel) is performed, normal brightness is restored. **Off:** You can deactivate the With Static Signal.
	Standby Mode[*15]	**Standard/Low:** When set to “Standard,” power consumption becomes higher in Standby mode. For details, see “Power consumption (networked standby mode)” in “Specifications” (page 77).	
Direct Power On		**On/Off:** When set to “On”, you can turn the power on without going to Standby mode when the AC power cord is connected to a wall outlet. With the projector turned off, you can also unplug the AC power cord without going to Standby mode, regardless of the Direct Power On setting.	

Notes

*1: To set the IP address manually, select “Manual”, press “Apply”, then enter the IP address.
*2: Reflecting changes in WLAN settings may take a few moments.
*3: If the projector cannot connect wirelessly, click [Apply] once again to make sure the connection is established. For details, see “Setting the WLAN Network of the projector” (page 45).
*4: The factory default settings for “Access Point” are as follows.
SSID: VPL + MAC address for LAN
Security Method: WEP(64bit)
Wireless Password: sony1
To change the settings for “Access Point”, use a Web browser.
For details, see “Setting the WLAN Network of the projector” (page 45).
*5: For changing the settings for “Client,” use the Web browser for change. For details, see “Setting the WLAN Network of the projector” (page 45).
*6: If the image input setting of the HDMI connection equipment is not correct, the brighter part becomes too bright and the darker part becomes too dark.
*7: This may not be optimum depending on the input signal. In this case set manually according to the connected equipment.
*8: This mode does not work for about three minutes after the light lights. A change in signal may not be detected depending on the input image. The light may become

brighter at intervals during light dimming. However, this is not a malfunction. If With No Input is set, it takes priority.

*9: Does not function when “Type B USB” or “Network” is selected as the input. In this case, it becomes equivalent to “Middle.”

*10: Keeps brightness constant within a certain range. The projector may not be able to maintain the brightness in an environment with a lot of dust and dirt.

*11: Select “Off” to avoid entering standby mode when there is no input signal.

*12: As the light is dimmed gradually, you may not notice any change in brightness. You might only notice that the light has dimmed when its brightness is restored after there is a change in input signal.

*13: Does not function when “Type B USB” or “Network” is selected as the input.

*14: This varies depending on the “Light Output Mode” setting.

*15: When “Standby Mode” is set to “Low,” the network and network control function cannot be operated while the projector is in standby mode.

The Installation Menu

The Installation menu is used for installing the projector.

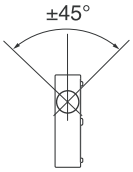
Setting items	Item descriptions
Screen Fitting	**HV Keystone/ Corner Keystone:** You can choose how to correct image twist.
V Keystone*1	This is displayed when “HV Keystone” is selected in “Screen Fitting.” The higher the setting, the narrower the top of the projected image. The lower the setting, the narrower the bottom of the projected image.
H Keystone*1	This is displayed when “HV Keystone” is selected in “Screen Fitting.” The higher the setting, the narrower the right side of the projected image. The lower the setting, the narrower the left side of the projected image.
Corner Keystone*1	This is displayed when “Corner Keystone” is selected in “Screen Fitting.” **Adjust:** Corrects image twist. **Reset:** Resets the adjusted values to their default values.
Image Flip	**HV/H/V/Off/Auto:** Flips the projected image horizontally and/or vertically according to the installation method.
High Altitude Mode	**On/Off:** Set to “On” when using the projector at an altitude of 1,500 m or higher. Continuing to use the wrong setting may affect component reliability.
Filter Cleaning	Turns off the projector and cleans the air filter. *2
Digital Shrink *3*4*5	Shrinks or adjusts the size of the projected image. **Digital Shrink**: Adjusts the size of the projected image. If you set the value to “0”, the image is set to the original size. The shrinking rate is 100% to 90%. **Shift**: Adjusts the position of the projected image. The adjustable range varies from the shrinking rate.

Setting items	Item descriptions
Panel Alignment*6	This feature allows you to adjust the gaps in the color of characters or the picture. When set to “On,” “Adjust Color” and “Pattern Color” can be assigned and adjusted. **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 ↑/↓/←/→ keys. **Reset:** The panel alignment settings are initialized to their factory preset values.
Color Matching*7	**Adjust/Reset:** For correcting the brightness and color of the whole projected image manually from the signal level in six steps.

Notes

*1: Since the HV Keystone/Corner Keystone adjustment is an electronic correction, the image may deteriorate.

*2: Normally, filter cleaning is performed automatically. However, it is not performed when the projector is installed at an angel within the range illustrated below.



*3: Since Digital Shrink uses electronic correction, the image may deteriorate.

*4: If you press the ENTER button while adjusting with Digital Shrink, the projector switches to the shift adjustment.

*5: For VPL-PHZ10, the function is available when “Aspect” is set to an item other than “4:3”.

*6: Depending on the adjustment value of “Panel Alignment,” the color and resolution may be changed.

*7: The brightness and color of the projected image may not match completely, even after you adjust “Brightness” and “Color.”

ⓘ The Information Menu

The Information menu is used to check projector status, such as total usage time of the light.

Setting items	Item descriptions
Model Name	Displays the model name.
Serial No.	Displays the serial number.
fH/fV*1	Displays the horizontal/vertical frequency of the current input signal.
Signal Type	Displays the type of the current input signal.
Light Timer	Indicates the total usage time of a light.

Note

*1: These items may not be displayed depending on the input signal.

Using Network Features

Connection to the network allows you to operate the following features:

- Checking the current status of the projector via a Web browser.
- Remotely controlling the projector via a Web browser.
- Receiving the e-mail report via the projector.
- Making the network settings for the projector.
- Displaying messages on the projected image using an application.
- Supports network monitoring, control protocol (Advertisement, ADCP, PJ Talk, PJ Link, AMX DDDP [Dynamic Device Discovery Protocol], Crestron RoomView).

Notes

- When connecting this projector with the network, consult with the network administrator. The network must be secured.
- The content communicated via a wireless LAN communication may be intercepted due to the use of radio waves. To protect the communication content, implement security measures properly according to the connection environment (page 45).
- 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 42). 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 in English.
- If the browser of your computer is set to [Use a proxy server] when you access to the projector from your computer, click the check mark to set accessing without using a proxy server.
- To display messages, specific application Projector Station for Network Control (Version 1.1 or later) is necessary. For download or detailed method of using Projector Station for Network Control, please access the following URL.
  http://pro.sony.com/bbsc/ssr/cat-projectors/resource.downloads
  Contact your local Sony dealer for detailed information of Projector Station for Network Control.

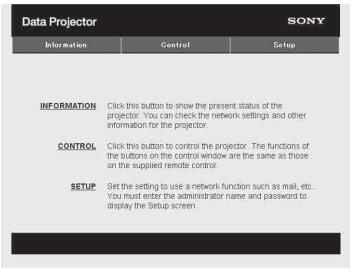
Displaying the Control Window of the Projector with a Web Browser

1 Connect the LAN cable (page 11).

2 Set the network settings for the projector using “LAN Settings” on the Connection/Power menu (page 34).

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 projector)
You can confirm the IP address of the projector in the “LAN Settings” on the Connection/Power menu (page 34).

The following window appears in the Web browser:

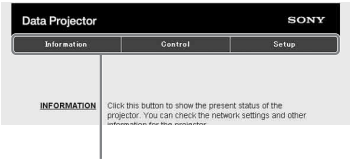


Once you make the network settings, you can open the Control window only by performing step 3 of this procedure.

How to operate the Control window

Switching the page

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



Page Switching buttons

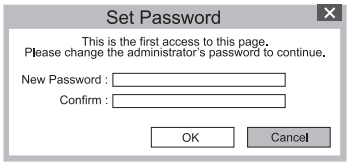
Setting the access limitation

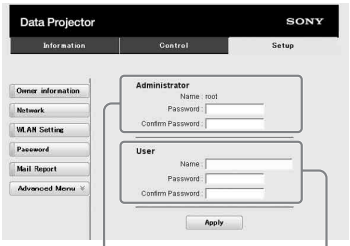
You can limit a user for accessing any particular page.

Administrator: Allowed access to all pages

User: Allowed access to all pages except the Setup page

Set the access limitation from [Password] of the Setup page.
When you access the Setup page for the first time, enter “root” in the Name box and enter “Projector” in the Password box of User.
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 box of the Administrator is preset to “root.”





Entry area for [Administrator]

Entry area for [User]

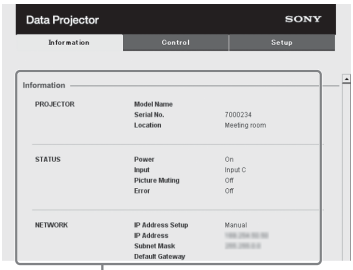
When you change the password, input a new password after deleting the password (*****) that was set.
The password of the administrator and user should be 8 to 16 characters that includes both alphabet and numeric characters.
Alphabet is case-sensitive.
The default password “Projector” cannot be set as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

Note

If you forget your password, consult with qualified Sony personnel.
The password will be reset with your permission.

Confirming the Information regarding the Projector

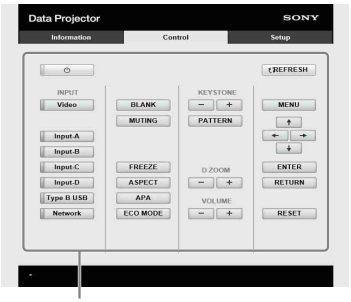
You can confirm the current settings for the projector on the Information page.



Information area

Operating the Projector from a Computer

You can control the projector from the computer on the Control page.



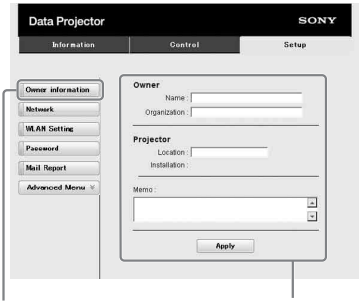
Operation area

The functions of the buttons shown in the operation area are the same as the keys on the remote commander.

Using the e-mail report Function

Set the e-mail report function on the Setup page.
Entered values will not be applied unless you click on [Apply].

1 Click on [Owner information] to enter the owner information recorded in the e-mail report.



Owner information button

2 Set the timing of the e-mail report.

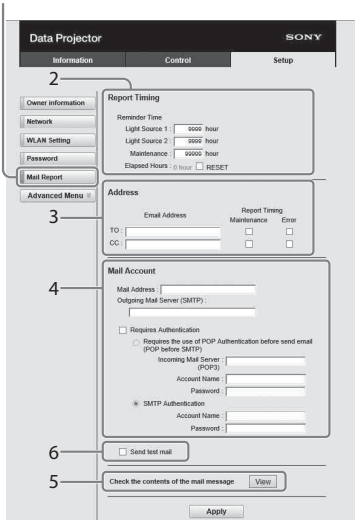
Click on [Mail Report] to open the Mail Report page.

Light Source 1:
Set an arbitrary timing of the email report for using the light.

Light Source 2:
This unit is not supported.

Maintenance:
Set the timing of the email report for maintenance. To reset Maintenance Reminder, check the RESET check box and then click on [Apply].

Mail Report button



3 Enter the outgoing e-mail address in the Email Address box then check the Report Timing check box of the e-mail report to be sent.

4 Set the mail account for sending e-mail reports.

Mail Address:
Enter the e-mail address.

Outgoing Mail Server (SMTP):
Enter the address of outgoing mail server (SMTP).

Required Authentication:
Check this check box if authentication is required for sending e-mail.

Requires the use of POP Authentication before sending email (POP before SMTP):
Check this check box to arrange for POP authentication to be performed before sending e-mail.

Incoming Mail Server (POP3):
Enter the address of the incoming-mail server (POP3) to be used for POP authentication.

Account Name:
Enter the mail account name.

Password:
Enter the password.

SMTP Authentication:
Check this check box to arrange for SMTP authentication to be performed before sending e-mail.

Account Name:
Enter the mail account name.

Password:
Enter the password.

5 Confirm the contents of the e-mail report.

When you click on [View], the contents of the e-mail report are displayed.

6 Send the test mail.

Check on the Send test mail check box then click on [Apply] to send your test mail to the e-mail address you set.

Notes

- The email report function will not work if the network uses Outbound

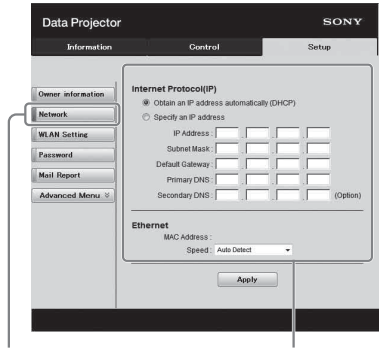
Port25 blocking, which prevents access to the SMTP server.

- You cannot use the following characters to enter the characters in the text box: “ ' ”, “ “ ”, “ \ ”, “ & ”, “ < ”, “ > ”

Setting the LAN Network of the projector

Set the LAN network function on the Setup page.
Entered values will not be applied unless you click on [Apply].

1 Click on [Network] to open the Network page.



2 Set the items for internet protocol.

Obtain an IP address automatically:
Automatically provides the network settings by a DHCP server function, such as the router. The IP Address, Subnet Mask, Default Gateway, Primary DNS, and Secondary DNS display the values provided by a DHCP server.

Specify an IP address:
Set the network manually.

-IP Address:
Input the IP address of the projector.

-Subnet Mask:
Input the subnet mask of the projector.

-Default Gateway:
Input the default gateway of the projector.

-Primary DNS:
Input the primary DNS server of the projector.

-Secondary DNS:
Input the secondary DNS server of the projector.

3 Set the items for Ethenet.

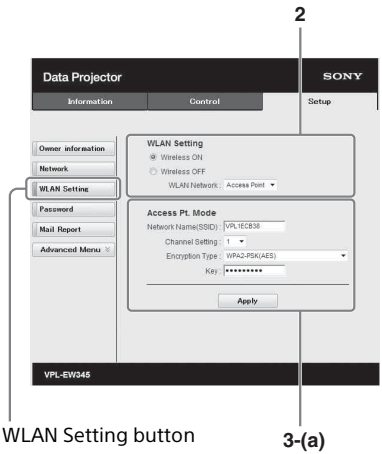
MAC Address:
Displays the MAC address of the projector.

Speed:
Select the network speed of the projector.

Setting the WLAN Network of the projector

Set the WLAN network function on the Setup page.
Entered values will not be applied unless you click on [Apply].
To use the wireless LAN network, a USB wireless LAN module IFU-WLM3 (not supplied) is necessary.

1 Click the [WLAN Setting] to open the WLAN Setting page.



2 Enable or disable the radio wave output of USB wireless LAN module.

Wireless ON:
Enables radio wave output of USB wireless LAN module.

Wireless OFF:
Disables radio wave output of USB wireless LAN module.

WLAN Network:
Set the modes for USB wireless LAN module.

Items	Descriptions
Access Point	Activates USB wireless LAN module as an access point. Set the items for WLAN manually.
Client	Activates USB wireless LAN module as a client.

3 (a) Input the settings for Access Point Mode.

When the USB wireless LAN module is activated as an access point, set the items for the access point.

Network Name (SSID):
Input the SSID of the access point if "WLAN Network" is set to "Access Point" (page 46).
The factory setting is "VPL + the MAC address of the LAN."

Channel Setting:
Select the channel of the access point if "WLAN Network" is set to "Access Point" (page 46).

Encryption Type:
Select the security method of the access point from the followings if "WLAN Network" is set to "Access Point" (page 46).

Encyption Type	Descriptions
Open	Sets the security method of the access point to open system authentication.
WEP 64bit	Sets the security method of the access point to WEP (64bit).
WEP 128bit	Sets the security method of the access point to WEP (128bit).
MIX (WPA-PSK/WPA2-PSK (TKIP/AES))	Sets the security method of the access point to MIX. (corresponding to both WPA-PSK (TKIP/AES) and WPA2-PSK (AES) security methods).
WPA2-PSK(AES)	Sets the security method of the access point to WPA2-PSK (AES).

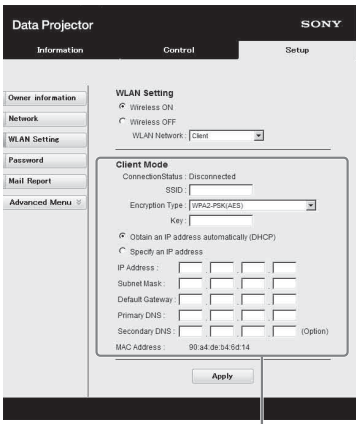
Key:
Input the password for security method of the access point according to the selected encryption type as below;

Encyption Type	Password
Open	The password cannot be input.
WEP 64bit	Input 5 ASCII characters for a password.
WEP 128bit	Input 13 ASCII characters for a password.
MIX (WPA-PSK/WPA2-PSK (TKIP/AES)) or WPA2-PSK (AES)	Input 8-63 ASCII characters for a password.

The factory setting of the security method and its password are set as follows.
Security method: WEP 64bit
Password: sony1

(b) Input the settings for Client Mode.

When the USB wireless LAN module is activated as a client, set the items for the client (set the items for the access point the projector tries to connect to).



Connection Status:
Displays the connecting status between the access point and projector.

SSID:
Input the SSID of access point the projector tries to connect to.

Encryption Type:
Select the security method of access point the projector tries to connect to from the following list.

Encyption Type	Descriptions
Open	Sets the security method of the access point to open system authentication.
WEP 64bit	Sets the security method of the access point to WEP (64bit).
WEP 128bit	Sets the security method of the access point to WEP (128bit).
MIX (WPA-PSK/WPA2-PSK (TKIP/AES))	Sets the security method of the access point to MIX. (corresponding to both WPA-PSK (TKIP/AES) and WPA2-PSK (AES) security methods).
WPA2-PSK (AES)	Sets the security method of the access point to WPA2-PSK (AES).

Key:
Input the password for security method of the access point according to the selected encryption type as below;

Encyption Type	Password
Open	The password cannot be input.

Encyption Type	Password
WEP 64bit	Input 5 ASCII characters for a password.
WEP 128bit	Input 13 ASCII characters for a password.
MIX (WPA-PSK/WPA2-PSK (TKIP/AES)) or WPA2-PSK (AES)	Input 8-63 ASCII characters for a password.

Obtain an IP address automatically:
Automatically provides the network settings by a DHCP server function, such as the router. The IP Address, Subnet Mask, Default Gateway, Primary DNS, and Secondary DNS display the values provided by a DHCP server.

Specify an IP address:
Set the network manually.

-IP Address:
Input the IP address of the projector.

-Subnet Mask:
Input the subnet mask of the projector.

-Default Gateway:
Input the default gateway of the projector.

-Primary DNS:
Input the primary DNS server of the projector.

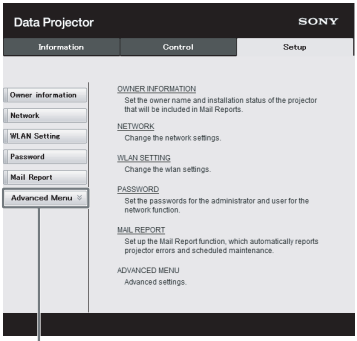
-Secondary DNS:
Input the secondary DNS server of the projector.

MAC Address:
Displays the MAC address for USB wireless LAN module.

Setting the Custom Labels for the Input Terminals of the Projector

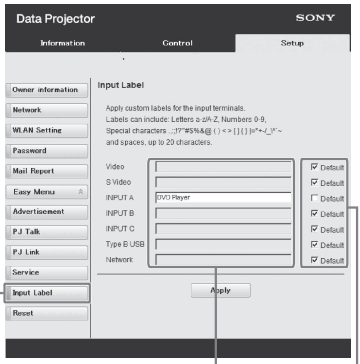
Change the label names for the input terminals that will be displayed on the projected screen on the Set up page. The entered label names will not be applied unless you click on [Apply].

1 Click on [Advanced Menu] to open the Setup page.



Advanced Menu button

2 Click on [Input Label] and open the Input label setting window.
Clear the check box for the label that you want to change and input the label name. You can input up to 20 of the following letters.
Alphabets: "a" to "z", "A" to "Z"
Numbers: "0" to "9"
Characters: ".", "@", "_"



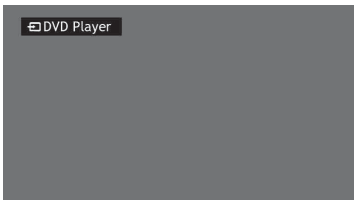
Input Label button

Label name for the input terminal

Use the factory default setting

3 Click on [Apply] to apply the set label names.

The label name will be reflected on the screen when the input of the projector is changed.

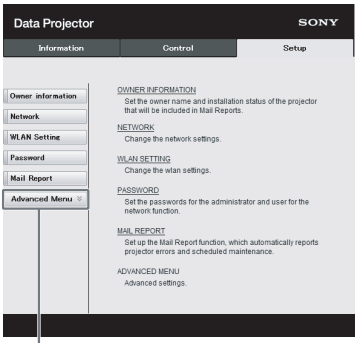


Input Terminal Label Display Screen

Setting the Control Protocol of the Projector

Change the settings for the control protocol on the Setup page. Entered values will not be applied unless you click on [Apply].

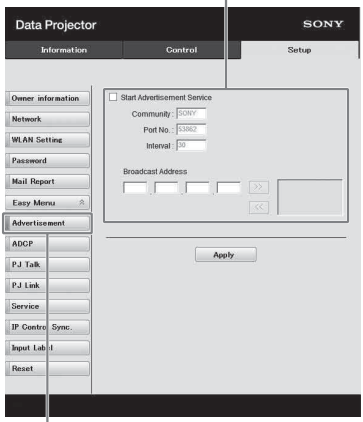
1 Click on [Advanced Menu] to display the buttons for more settings.



Advanced Menu button

2 (a) Set Advertisement.

Advertisement Service setting area



Advertisement button

Start Advertisement Service:
Set Advertisement to enabled or disabled. Items for Advertisement are enabled only when this function is enabled. The function is disabled at the factory default.

-Community:
Input the community name for Advertisement and PJ Talk. If the community name for Advertisement is changed, the one for PJ Talk will also be changed. Only four alphanumeric characters can be input. The factory default setting is “SONY.” It is recommended that the community name be changed from the factory setting to avoid unnecessary access to the projector from other computers.

-Port No.:
Input the transmit port of Advertisement. The factory default setting is “53862.”

-Interval:
Input the transmission interval (seconds) of Advertisement. The factory default setting is “30.”

-Broadcast Address:
Input the destination of data via Advertisement. If nothing is input, the data will be broadcast in the same subnetwork.

(b) Set ADCP.



Start ADCP Service:
Set ADCP to enabled or disabled. Items for ADCP are enabled only when this function is enabled. The function is enabled at the factory default.

-Requires Authentication:
Set the authentication for ADCP to enabled or disabled. The password is the same as that of the Web page administrator.

-Port No.:
Input the server port of ADCP. The factory default setting is “53595.”

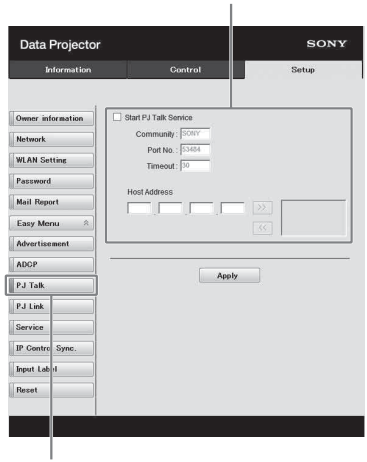
-Timeout:
Input the time (seconds) until ADCP communication is terminated in case it is disconnected. The factory default setting is “60.”

-Host Address:
Input the IP address that the ADCP server is allowed to receive. If no IP address is input, receiving commands will be allowed from any IP address. From the moment the IP address is input, access will be allowed

only from that input IP address. For security reasons, it is recommended to input an IP address to restrict access.

(c) Set PJ Talk.

PJ Talk Service setting area



PJ Talk button

Start PJ Talk Service:

Set PJ Talk to enabled or disabled. Items for PJ Talk are enabled only when this function is enabled. The function is disabled at the factory default.

-Community:

Input the community name of Advertisement and PJ Talk. If the community name for PJ Talk is changed, the one for Advertisement will also be changed. Only four alphanumeric characters can be input. The factory default setting is "SONY." It is recommended that the community name be changed from the factory setting to avoid unnecessary access to the projector from other computers.

-Port No.:

Input the server port of PJ Talk. The factory default setting is "53484."

-Timeout:

Input the time (seconds) until PJ Talk communication is terminated in the case that it is disconnected. The factory default setting is "30."

-Host Address:

Input the IP address that the PJ Talk server is allowed to receive. If no IP address is input, receiving commands will be allowed from any IP address. From the moment the IP address is input, access will be allowed only from that input IP address. For security reasons, it is recommended to input an IP address to restrict access.

(d) Set PJ Link.

PJ Link Service setting area



PJ Link button

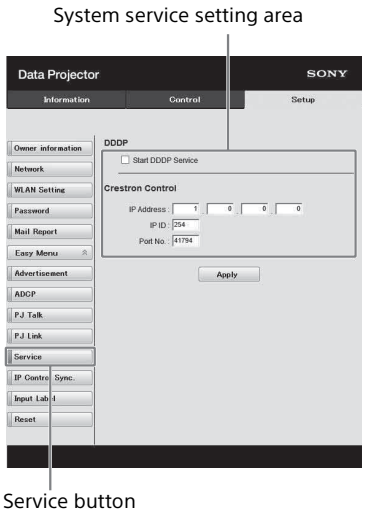
Start PJ Link Service:

Set PJ Link to enabled or disabled. Items for PJ Link are enabled only when this function is enabled. This function is disabled at the factory setting.

-Requires Authentication:
Set the authentication for PJ Link to enabled or disabled.

-Password:
Input the authentication password for PJ Link. For the factory default password, refer to the PJ Link specifications.

(e) Set the system service.



Start DDDP Service:
Set DDDP to enabled or disabled. For details, refer to the DDDP specifications in the reference from AMX Corporation. The function is disabled at the factory default.

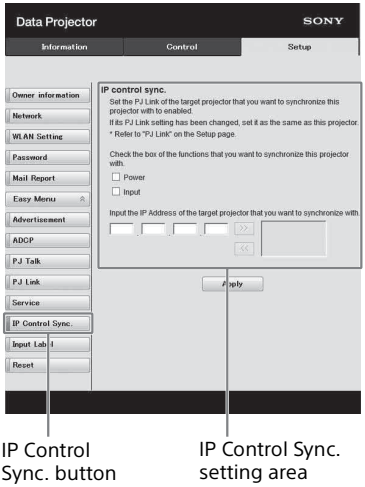
Crestron Control:
For details, refer to the specifications in product catalogues, etc., from Crestron Corporation.

-IP Address:
Input the Crestron system server.

-IP ID:
Input the IP ID for the CIP protocol.

-Port No.:
Input the port number for the CIP protocol server.

(f) Set the IP Control Sync. function*1



-Power:
Set to enabled to change the power status of the projector that the unit is trying to synchronize with to the same status on the unit when you turn/off the unit.

-Input:
Set to enabled to change the input connector of the projector that the unit is trying to synchronize with to the same one on the unit when you change the input connector on the unit.*2

-IP Address:
Input the IP address of the projector that the unit is trying to synchronize with.

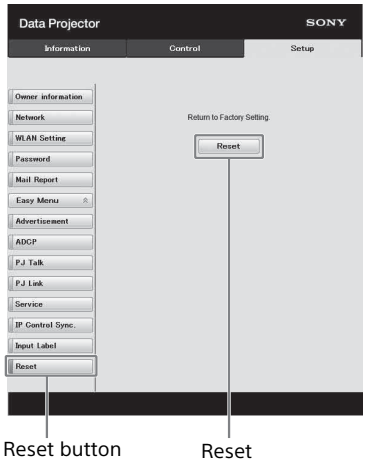
Notes

*1: Enable the PJ Link function of the projector the unit will synchronize with, and then set the authentication and password of PJ Link in the same way as on the unit.

*2: The input connectors may not be changed depending on the

projector the unit is trying to synchronize with.

(g) Reset the network settings.



Reset:

Reset all Web browser settings to their factory defaults.

Using Presentation Function via Network

The Presentation Function via Network enables you to do the following:

- Connect a maximum of eight computers to the projector.
- Project images from a maximum of four computers simultaneously.
- Connecting a USB wireless LAN module (not supplied) to the projector as an access point, allows the projector to connect to up to seven computers simultaneously.

Presentation Function via Network requires installation of Projector Station for Network Presentation. For information on getting and updates of Projector Station for Network Presentation, visit Sony's web site:
http://www.sony.co.uk/pro/product/projectors-installation/vpl-phz10/support/#support
System requirements for using the application are as follows.

OS

Windows XP: Home/Professional
Windows Vista: Home Premium/Business/Ultimate/Enterprise
Windows 7: Home Premium/Professional (Recommended)/Ultimate/Enterprise
Windows 8/8.1
Mac OS X: 10.6.x/10.7.x/10.8.x/10.9.x/10.10.x

CPU

Pentium4 2.8GHz or faster

Notes

- To install the application, administrative rights are required.
- If you do not have administrative rights, the application may not run properly.
- If firewall or security software is installed, the application may not run properly.
- Depending on the type of network adapter, the application may not run properly.
- Images may not be projected properly depending on the operating environment or the application.

Installing Projector Station for Network Presentation

1 Close all running applications.

2 Open the downloaded file.

For Windows

Double-click the .exe file. When the message “User Account Control” is displayed, click “Allow” or “Yes.”

For Mac

Double-click the .pkg file.

3 Follow the on-screen instructions to install the software.

Starting Projector Station for Network Presentation

1 Connect the projector to a network.

For a wired connection, connect the projector by a LAN cable, then make the network settings. For details, see “LAN Settings” (page 34) or “Setting the LAN Network of the projector” (page 45).

For a wireless connection, see “LAN terminal” (page 11) or “USB terminal (Type A) (⇐)” (page 11). Also check “WLAN Settings” (page 34).

2 Turn on the projector.

Select “Network” as the input source (page 17).

3 Start Projector Station for Network Presentation.

For Windows

Select [Start]-[All Programs]-[Projector Station for Network Presentation] on the computer.

For Mac

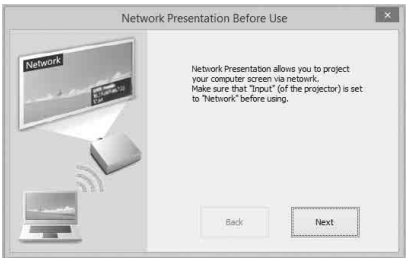
Double-click [Projector Station for Network Presentation] in Applications folder.

Projecting an Image

When you start Projector Station for Network Presentation for the first time after installing to your computer, the connection guidance window will be displayed. This window gives you the information for the necessary settings for connection. Be sure to read it thoroughly. When starting the application after the first time, the connection method selection window will be displayed first. You can check the connection guidance window anytime from the connection method selection window.

For Windows

Connection guidance window



1 Select the connection method.

Refer to the network information on the projected screen of the projector and select “LAN Mode” or “AP Mode.”

LAN Mode

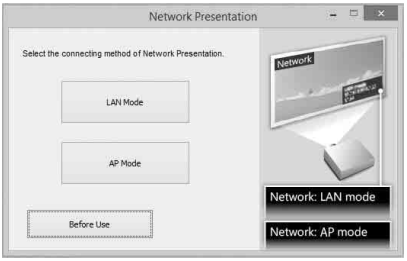
Select this mode if “Display Setting” in “Network Presentation” is set to “LAN Mode” on the projector’s menu. In this mode, the computer connects to the wired LAN of the projector or the USB wireless LAN module of the projector that operates as a client (“WLAN Network” page 34).

AP Mode

Select this mode if “Display Setting” in “Network Presentation” is set to “AP Mode” on the projector’s menu. In this mode, the computer connects to the USB wireless LAN module of the projector that operates as an access point (“WLAN Network” page 34).

For Windows

Connection method selection window



Note

The appearance of the application on the screen is subject to change without notice.

2 Set the projector an image will be projected to.

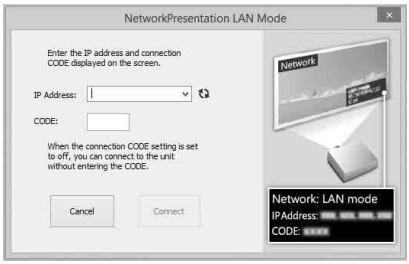
a) For LAN Mode

Refer to the network information on the projected screen of the projector that you want the computer connect to, and input the IP address and the Connection CODE. If “CODE” is “----”, “Connection CODE” (page 34) is set to “Off.” The computer can connect without inputting “CODE”.

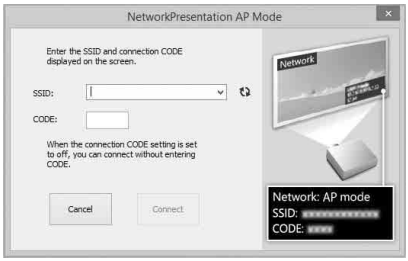
b) For AP Mode

Refer to the network information on the projected screen of the projector that you want the computer connect to, and input the SSID and the Connection CODE. If “CODE” is “----”, “Connection CODE” is set to “Off.” The computer can connect without inputting “CODE”. If the wireless password is set for the SSID (“Setting the WLAN Network of the projector” on page 45), the wireless password input window will be displayed while the computer is trying to connect. Input the password to connect. To prevent information leaks, the wireless password is not displayed on the projected screen.

Network Presentation LAN mode



Network Presentation AP mode



Wireless password input window



Notes

- When a projector is connected to a network via a wireless connection, if the "SSID" is changed from the factory default, it may not be found.
- When a projector is connected to a network via a wired connection, depending on the network environment, it may not be found.

3 Click "Connect".

When you click the "Connect" button, a controller will be displayed on the screen of the computer and the computer starts projecting an image (page 57). If another user is projecting an image, click ► to start projecting. If no users are projecting an image, the controller appears on the screen and starts projecting an image.

Notes

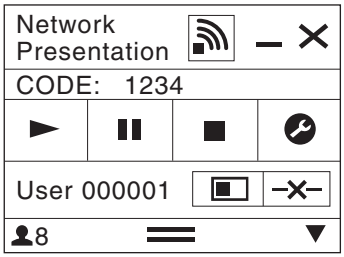
- Display related settings (such as your computer's resolution) change when the application is started.
- If "Input" is set to other than "Network" (page 17), the image will not start being projected even after you press the "Connect" button. If you want to project the image, select "Network" to change the display status.

Connection Settings

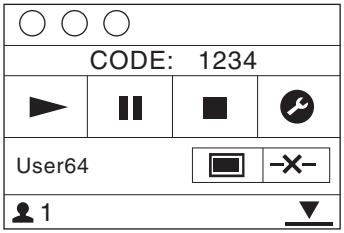
Item	Item descriptions
IP Address	Input the IP Address. List the IP addresses of the projectors on the network and IP addresses of projectors connected so far, as candidates.
SSID	Input SSID. List the peripheral SSIDs and SSIDs of projectors connected to the computer so far, as candidates.
Update button	Search the network again and update the candidate list of the projectors.
Wireless Password	Input the wireless password of the SSID. If open system authentication is used, input of the wireless password is unnecessary.
CODE	Input the Connection CODE displayed on the screen of the projector.
Connect	Connect to the projector that is set in the items above and start to project an image.

Using the Controller

For Windows



For Mac



Items		Functions
►		Start projecting an image.
❚❚		Pause projecting an image.
■		Stop projecting an image (screen turns black).
		Change the application settings.
		Disconnect from the projector.
		Select a projection method then start projecting an image.
Projection method		Not projecting an image.
		Project in full screen.
		Project in the left half of the screen.
		Project in the right half of the screen.
		Project in the upper left quadrant of the screen.
		Project in the upper right quadrant of the screen.
		Project in the lower left quadrant of the screen.
		Project in the lower right quadrant of the screen.

Items	Functions
	Display the strength of the wireless signal.
CODE	Display the Connection CODE of the projector that is connected to the computer.
	Display the number of users connected to the projector.
▼	Display the users' status.

One-Click projecting function

Projector Station for Network Presentation allows you to create a shortcut that registers the connection setting.
By starting the application with the shortcut, you can project the image to the registered projector.

1 Create a file.

For Windows

Create a shortcut to the NetworkPresentation.exe. Copy the shortcut to the Projector Station for Network Presentation, or right-click the NetworkPresentation.exe in the installed folder to select "Create shortcut" from the pop up menu.

For Mac

Create a text file with any name with a text editor. Set the format to "Plain Text."

2 Register the connection setting.

For Windows

Register the settings. Right-click the created shortcut and select "Properties" from the pop up menu.

Input the settings of the projector that you want the computer to connect to in “Target” from the “Shortcut” tab and save. For the format for the settings, refer to the command formats in the option format.

For Mac

Input the settings of the projector that you want the computer to connect to in the created text file and save.
Refer to the command format in the option format to input settings. Right-click the created text file and select “Get Info” from the context menu. Change the extension of the filename that is displayed on “Name & Extension” to “.npr”.

Option format

Command format

For LAN Mode

- connect [IP address]:[CODE]:[Display Setting]

For AP Mode

- wifi [SSID]:[Wireless password]:[CODE]:[Display Setting]

Item	Description
IP address	Assign the IP address of the projector that you want the computer to connect to.
SSID	Assign the SSID of the projector that you want the computer to connect to.
Wireless password	Assign the wireless password for the SSID. If the security method is Open System authentication, input “open.” If the USB LAN wireless module setting is set to “Access Point,” input “auto.”*1
CODE	Assign the settings of the Connection CODE of the projector. **on**: Displays the dialogues for inputting the Connection CODE when the computer is trying to connect to the projector. **off**: Does not display the dialogues for inputting the Connection CODE when the computer is trying to connect to the projector. If “Connection CODE” of the projector is set to “On”, an authentication error occurs.
Display setting	Sets the status for when the projector starts projecting an image. **0**:Does not display an image when the computer starts projecting an image. You need to start projecting an image with the controller. **1**:Displays an image when the computer starts pro- jecting an image.

*1: “Access Point” can be selected on the compatible models only. This model is not compatible for the settings of “Access Point.”

Command Examples

Example 1)
If the settings of the projector that you want the computer to connect to are set as below and you want to display an image when the computer starts connecting to it

Network:LAN Mode
IP address:192.168.1.187
Connection CODE: On

For Windows

```
C:\Program Files (x86)\Sony\Projector Station for Network Presentation\Network Presentation.exe -connect 192.168.1.187:on:1
```

For Mac

```
-connect 192.168.1.187:on:1
```

Example 2)
If the settings of the projector that you want the computer to connect to are set as below and you want to display an image when the computer starts connecting to it

Network: AP Mode
SSID: VPL012ABC
Wireless password: sony1
Connection CODE: Off

For Windows

```
C:\Program Files (x86)\Sony\Projector Station for Network Presentation\Network Presentation.exe -wifi VPL012ABC:sony1:off:1
```

For Mac

```
-wifi VPL012ABC:sony1:off:1
```

Use Projector Station for Network Presentation without installing it to the computer.

Projector Station for Network Presentation also has a portable version that can be used with external media, such as a USB mass storage device. Although some functions are limited, you can put and carry the Projector Station for Network Presentation in the external media, and use it on other computers.

1 Close all running applications.

2 Open the downloaded file.

For Windows
Double-click the "PJS_NetworkPresentationP_XXX.exe" file for portable. If the User Account Control window is displayed, click "Allow" or "Yes."

For Mac
Double-click the "PJS_NetworkPresentationP_XXX.pkg" file.

3 Follow the instructions in the wizards to install the application software.

4 Start the Projector Station for Network Presentation.

For Windows
Double-click the shortcut icon of Projector Station for Network Presentation that is created in the folder in which the application is installed.

For Mac
Double click "Projector Station for Network Presentation" in the folder in which the application is installed.

Notes

- You can use this application only on the OS that supports this application.
- Make sure Projector Station for Network Presentation is not operating before installing the application.
- Make sure the external media that the application will be installed to has access rights and all files in the external media are closed.

Error code list of Projector Station for Projector Station for Network Presentation

Error code	Meaning/Measure	Page
NPR-E1701	Failed while opening the WLAN device of the computer. Check that the WLAN function of the computer operates normally.	45
NPR-E1702	Failed while scanning the access point. Check that the WLAN function of the computer operates normally.	45
NPR-E1703	Failed while getting information of the access point. Check the WLAN function of the computer, and if multiple WLAN networks exist.	11,45
NPR-E1704	Cannot find the access point. Check if devices are connected correctly, the input SSID is correct and the projector is turned on.	17,59
NPR-E1705	Tried but failed while connecting using WEP64 bit or WEP128 bit. Check that the security setting of the WLAN function of the projector is correct.	59
NPR-E1706	Tried but failed while connecting using MIX (WPAPSK/WPA2-PSK (TKIP/AES)), WPA2-PSK (AES). Check that the security setting of the WLAN function of the projector is correct.	59
NPR-E1707	A security setting other than WEP 64bit, WEP 128bit, MIX (WPAPSK/WPA2-PSK (TKIP/AES)), WPA2-PSK (AES) is applied. Check that the input SSID and the security setting of the WLAN function of the projector are correct.	11,59
NPR-E1708	Failed to acquire the network profile. Check if the WLAN function of the computer operates normally.	–
NPR-E1709	Succeeded in authenticating the access point, but failed while associating. Check if multiple WLAN networks exist, or if the status of the projector changed while the computer tried to connect to the projector.	–
NPR-E1802	Failed while getting the IP address after connecting to the access point. Check the input SSID, security password and the setting of the security software of the computer.	–
NPR-E1803	Succeed in connecting to the access point, but failed while getting the information. Check the setting of the security software of the computer.	–

Error code	Meaning/Measure	Page
NPR-E1804	Connected to a different SSID (access point) from the one you assigned. Start from the connection setting again.	57
NPR-E2101	Cannot receive a response from the projector.The response may be blocked or the network may have been disconnected from the projector while communicating. Check the setting of the security software of the computer, the power status and the network composition of the projector.	–

Playing Video and Audio using USB Connection

You can also play video and audio simply by connecting the projector and computer with a USB A-B cable (not supplied).
Playing video and audio using USB connection requires to start USB Display. System requirements for using the application are as follows.

OS

Windows XP: Home/Professional
Windows Vista: Home Premium/Business/Ultimate/Enterprise
Windows 7: Home Premium/Professional (Recommended)/Ultimate/Enterprise
Windows 8/8.1
Mac OS X: 10.6.x/10.7.x/10.8.x/10.9.x/10.10.x

CPU

Pentium4 2.8GHz or faster

Starting USB Display

1 Connecting the projector and your computer with a USB A-B cable (not supplied) (page 10).

2 Turn on the projector.
Select “Type B USB” as the input source (page 17). After a short time, the projector is recognized as a CD-ROM drive in the computer.

3 Open “USB Display” in the CD-ROM drive.

Notes

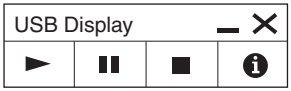
- The resolution of your computer changes when the application is started.
- Depending of the computer’s setting, the application may start automatically.
- When you are finished using the projector, you can simply disconnect the USB cable without using the Safely Remove Hardware option.
- Movie player (Media Player, etc.) images may not be projected properly.

Playing Video and Audio

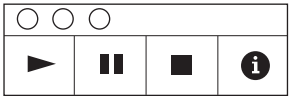
After starting USB Display, the controller appears on the screen, and projection playback starts automatically.

Using the Controller

For Windows



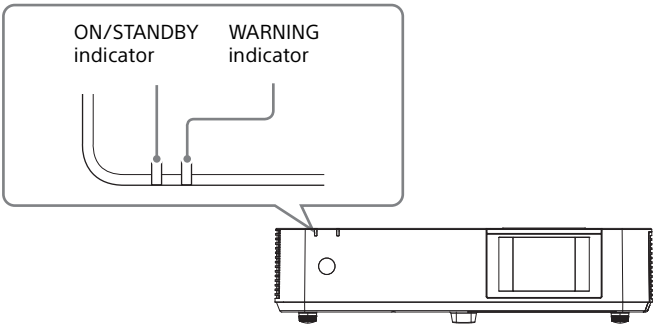
For Mac



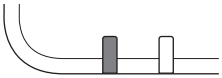
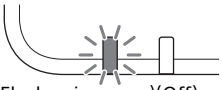
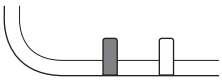
Items	Functions
►	Start audio/video playback.
❚❚	Pause audio/video playback.
■	Stop audio/video playback (the screen turns black).
ⓘ	Display information about USB Display.

Indicators

You can check the projector status or abnormality by checking the lighting/flashing status of the ON/STANDBY indicator and WARNING indicator on the front. If the indicators flash in red, address the problem in accordance with “Warning indicators and remedies” (page 67).



Operating status indication

Indicator status	Operating status	Meaning
 (Lights in red) (Off)	Standby	The power is supplied to the projector and the projector is in a standby mode according to the setting.
 (Flashes in green)(Off)	Warm-up	The projector is warming up after it is turned on.
 (Lights in green) (Off)	Power on	The projector is ready for projection.
 (Lights in orange)(Off)	Other standby status	The projector is in With No Input (Light Cutoff), Quick Reboot standby mode, or the Speaker Setting is set to “Always On.”

Warning indicators and remedies

Indicator status	The number of flashes	Meaning	Remedies
 (Lights in red) (Flashes in red)	Twice	The air filter is not installed securely.	Check how the air filter is attached and install securely.
	Three times	The light source does not light properly.	Unplug the AC power cord and make sure the ON/STANDBY indicator turns off, then plug the AC power cord into the wall outlet and turn on the projector.
	Six times	A strong shock to the projector is detected.	If there is no visible abnormality, unplug the AC power cord and make sure the ON/STANDBY indicator turns off, then plug the AC power cord into the wall outlet and turn on the projector.
 (Flashes in red) (Flashes in red) Both indicators flash	Twice	The temperature in the projector is abnormal.	• Check if the air filter is clogged, then clean or replace it (page 73). • Check if the ventilation holes (intake/exhaust) are not blocked by the wall or an object and secure a sufficient gap. • Check the ambient temperature and use the projector within the range of operating temperature.

If the indicators flash in a manner other than described above, unplug the AC power cord and make sure the ON/STANDBY indicator turns off, then plug the AC power cord into the wall outlet and turn on the projector.
If the problem still persists, consult with qualified Sony personnel.

Messages List

When any of the messages listed below appears on the projected image, address the problem in accordance with the table below.

Messages	Meaning/Remedy	Page
Clean the filter. Projector temperature is high. Switching to High Altitude Mode.	Temperature in the projector has increased. As a countermeasure against use at an altitude of 1,500 m or higher, set “High Altitude Mode” to “On.” If you are not using the projector at a high altitude, perform the remedies below and set “High Altitude Mode” to “Off.” • Check that the air filter is clogged, then clean or replace it. • Check that the ventilation holes (intake/exhaust) are not blocked by a wall or an object and secure a sufficient gap. • Check the ambient temperature and use the projector within the range of operating temperature.	4, 73
Clean the filter. Projector temperature is high. The light will turn off in 1 minute.	Temperature in the projector has increased. Perform the remedies below. • Check that the air filter is clogged, then clean or replace it. • Check that the ventilation holes (intake/exhaust) are not blocked by a wall or an object and secure a sufficient gap. • Check the ambient temperature and use the projector within the range of operating temperature. • “High Altitude Mode” on this projector is set to “On.” Set the setting that suits the operating environment.	4, 73
Frequency is out of range!	Change the output setting of the connected equipment to one for signals supported by the projector.	80
Please check Input-A Signal Sel.	Set “Input-A Signal Sel.” to “Auto” or select the input signal type to suit to the input signal.	35
Not applicable!	Invalid key was pressed.	6
The control keys are locked!	“Control Key Lock” is set to “On.”	33
Light Dimming	Reduces light output when “With Static Signal” is set. When any change in signal is detected, or an operation (remote control or control panel) is performed, normal brightness is restored.	36

Messages	Meaning/Remedy	Page
Filter cleaning will start.	The filter will be automatically cleaned after the projector is turned off.	38
Filter cleaning completed.	The filter was automatically cleaned when the projector was turned on.	38
Unsupported USB device.	Connect the designated USB device (USB wireless LAN module IFU-WLM3 (not supplied)).	11
Unsupported USB hub.	The projector does not support USB hubs. Connect the designated USB device (USB wireless LAN module IFU-WLM3 (not supplied)).	11
Please check HDBaseT Settings.	Set “HDBaseT/LAN Port” depending on the HDBaseT/LAN connection.	34

Troubleshooting

Before asking to have the projector repaired, try to diagnose the problem, following the instructions below.

Symptoms	Remedy	Page
The power is not turned on.	Check if the AC power cord is firmly connected.	–
	When the “Control Key Lock” is set to “On,” you cannot turn on the projector using the I/⏻ key on the projector.	33
	Check how the air filter is attached and install it securely.	73
No image.	Check if the connecting cable is connected to external equipment firmly.	9
	Check if the computer signal is set for output to an external monitor. If you set your computer, such as a notebook computer, to output the signal to both your computer’s display and an external monitor, the picture of the external monitor may not appear properly. Set your computer to output the signal to only an external monitor.	18
	Check if the application “USB Display” or “Projector Station for Network Presentation” is running.	54, 64
	Check if the input source is correctly selected.	17
	Check if the picture is muted by pressing the BLANK key.	6
The color of image has changed.	The color calibration may have been performed. To restore the color or factory setting, perform “Return” or “Reset” in “Color Calibration.”	31
Images that are not intended are output.	The color calibration may be being performed. During this mode, the pattern for color calibration is displayed automatically. Since the pattern turns off automatically after this mode ends, please wait for a while. If you press the I/⏻ button on the unit or remote control, the pattern also turns off. At the same time, this mode also ends.	6, 31
The application “USB Display” or “Projector Station for Network Presentation” does not start.	Check if the computer connected to the projector meets the system requirement for the applications.	54, 64
The computer cannot connect to the projector.	• Check “LAN Settings” of the projector. • Check the condition of the wireless connection.	34

Symptoms	Remedy	Page
On-screen display does not appear.	The on-screen display does not appear when “Status” in the Operation menu is set to “Off.”	33
The aspect ratio of the display is not right/the image is displayed smaller /a portion of image does not appear.	The image may not display correctly because the input signal cannot be judged correctly. In this case, set “Aspect” manually.	6, 28, 30
The image is a trapezoid.	The images become trapezoidal because of the projection angle. In this case, you can correct the trapezoidal distortion, using a Keystone feature.	6, 20, 38
Edges of the image are cut off or dark.	If you use the lens shift function with a setting outside the recommended range, edges of the image may be cut off or appear dark. Use a setting within the normal range for the lens shift function.	81
The image is distorted.	Warping is set. Disable the warp correction feature.	22, 38
The image is dark/ too bright.	The settings for “Brightness,” “Contrast,” and “Light Output Mode” affect brightness of the image. Check if the value is appropriate.	26, 35
	“With Static Signal” is set to “On.”	36
	When video signal is not input, the light is dimmed to reduce power consumption.	35
	When the temperature around the unit is high, the brightness will be reduced to protect the unit.	–
The image is not clear.	Check if the projector is in focus.	18
	The picture will not be clear if condensation has accumulated on the lens. In this case, let the projector sit for about two hours with the power on.	–
The image is noisy.	Check if the connecting cable is connected to the external equipment properly.	9
No sound.	Check that the connecting cables between the projector and external video or audio equipment are securely connected.	9
	Check if the external audio equipment is set properly.	–
	Audio is not output if “Speaker” is set to “Off.”	31
	Audio is not output if audio muting is activated.	6
	Check if the volume is not set to minimum.	6, 31

Symptoms	Remedy	Page
The remote commander does not work.	Check if the batteries are installed correctly.	–
	Check if the batteries are not exhausted.	–
	Check the setting for “IR Receiver.”	33
The fan is noisy.	The sound from the fan is often greater than normal to cool the light source in the following cases. • When “Light Output Mode” is set to “Standard”. • The projector is in at high altitude (“High Altitude Mode” is set to “On”) • Temperature is very high.	35, 38
	• Check that the air filter is clogged, then clean or replace it. • Check that the ventilation holes (intake/exhaust) are not blocked by a wall or an object and secure a sufficient gap.	4
The image is distorted by the HDBaseT connection.	Confirm whether the unit’s AC power cord is grounded. Use the STP (Shielded Twisted Pair) type LAN cable.	–
The image is not projected properly when the projector is connected via the HDBaseT terminal and the cables are inserted or removed from other terminals.	Change the input terminal to project the image properly.	–

Cleaning the Air Filter

When the message on cleaning the air filter is displayed on the projected image, clean the air filter (page 68). If the dust cannot be removed from the air filter even after cleaning, replace the air filter with a new one. For details on a new air filter, consult with qualified Sony personnel.

Caution

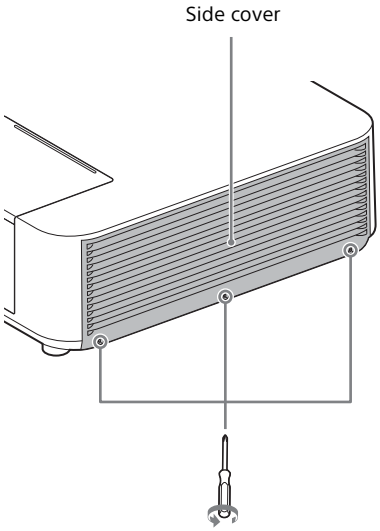
If you keep using the projector even after the message is displayed, dust may accumulate, clogging it. As a result, the temperature may rise inside the unit, leading to a possible malfunction or fire.

1 Turn off the projector, and disconnect the AC power cord from the AC outlet.

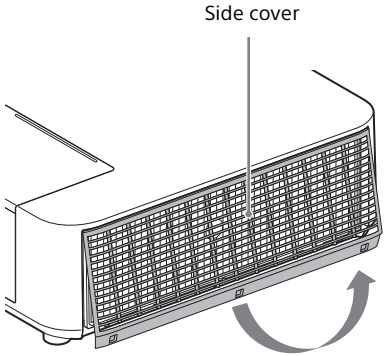
Note

If you remove the side cover while the AC power cord is not removed from the AC outlet and power is not turned off, you may touch the fan inside the unit, resulting in injury.

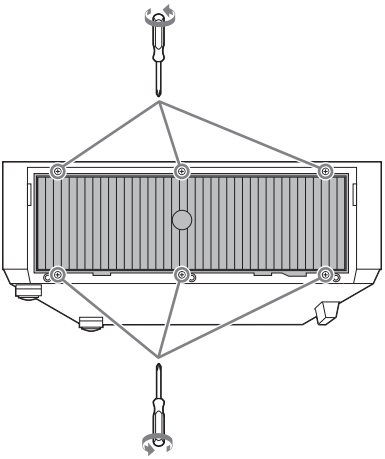
2 Loosen the screws (three) on the side cover.



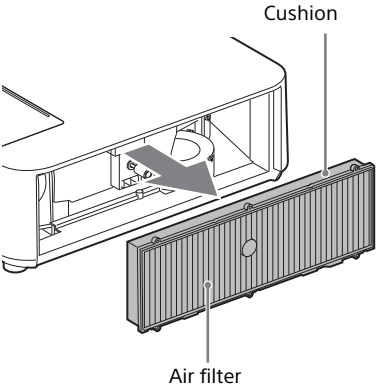
3 Lift up the bottom of the side cover to remove.



4 Loosen the screws (six) on the air filter.



5 Remove the air filter.



6 Clean the air filter with a vacuum cleaner.

Note

Before attaching the air filter to the unit, make sure that the cushion on the frame of the air filter is not dislocated or loose.

7 Replace the air filter and attach the side cover.

Notes

- Be sure to attach the air filter firmly; the power cannot be turned on if it is not attached securely.
- Be sure to attach the side cover firmly. Incorrect attachment of the cover may cause a malfunction.

Specifications

Items		Descriptions
Projection system		3 LCD system
Display device	Effective display size	0.76-inch (19.3 mm), 3 plate, Aspect ratio 16:10
	Effective picture elements	VPL-PHZ10: 6,912,000 pixels (1,920 × 1,200 pixels, 3 plate panels) VPL-PWZ10: 3,072,000 pixels (1,280 × 800 pixels, 3 plate panels)
Projection lens	Focus	Manual
	Zoom	Manual (1.45 times)
Light source		Laser diode
Projected image size		40 inches to 300 inches (1.02 m to 7.62 m)
Luminous flux (Brightness)		5,000 lm (when “Light Output Mode” is set to “Standard”) 4,500 lm (when “Light Output Mode” is set to “Standard”, "Constant Brightness" is set to "On.")
Speaker		16 W × 1 (monaural)
Applicable scanning frequency*1		Horizontal: 15 kHz to 92 kHz, Vertical: 48 Hz to 92 Hz
Resolution*1	Computer signal input	Maximum display resolution: 1,920 × 1,200 pixels
	Video signal input	NTSC, PAL, SECAM, 480/60i, 576/50i, 480/60p, 576/50p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/24p
Color system		NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PAL-N, PAL60

Items		Descriptions
INPUT OUTPUT (Computer/ video)	INPUT A	**RGB/YPBPR input terminal:** Mini D-sub 15-pin female, G with sync/Y: 1 Vp-p ± 2 dB, sync negative, 75 ohms terminated, RGB/PBPR: 0.7 Vp-p ± 2 dB, 75 ohms terminated, Sync signal: TTL level high impedance, positive/negative **Audio input terminal:** Stereo mini jack, rated input 500 mVrms, input impedance more than 47 kohms
	INPUT B/ INPUT C	**HDMI input terminal:** HDMI 19-pin, HDCP support, **Audio input terminal:** HDMI audio support
	VIDEO IN	**Video input terminal:** Phono jack, 1 Vp-p ± 2 dB, sync negative, 75 ohmes terminated **Audio input terminal:** Shared with INPUT A
	OUTPUT	**Audio output terminal:** Stereo mini jack, stereo, 1 Vrms (maximum volume, when inputting 500 mVrms), output impedance 5 kohms
Other terminals		**RS-232C terminal:** D-Sub 9 pin male
	INPUT D	**HDBaseT/LAN Port:** RJ45, HDBaseT/ 100BASE-TX HDBaseT transmittable signal: HDMI (Video, Audio), RS-232C, Ethernet HDBaseT LAN cable: STP type (CAT5e or higher, straight, not supplied), Maximum length: 100 m
		USB terminal: Type A
		USB terminal: Type B
Operating temperature/ Operating humidity		0 °C to 40 °C (32 °F to 104 °F)/20% to 80% (no condensation)
Storage temperature/ Storage humidity		–10 °C to +60 °C (14 °F to 140 °F)/20% to 80% (no condensation)
Power requirements		VPL-PHZ10: 100 V to 240 V AC, 4.3 A-1.7 A, 50/60 Hz VPL-PWZ10: 100 V to 240 V AC, 4.0 A-1.6 A, 50/60 Hz
Power consumption	AC 100 V to 120 V	VPL-PHZ10: 424 W VPL-PWZ10: 399 W
	AC 220 V to 240 V	VPL-PHZ10: 403 W VPL-PWZ10: 377 W

Items		Descriptions
Power consumption (Standby Mode)	AC 100 V to 120 V	0.50 W (when “Standby mode” is set to “Low”)
	AC 220 V to 240 V	0.50 W (when “Standby mode” is set to “Low”)
Power consumption (Networked Standby Mode)	AC 100 V to 120 V	12.5 W (LAN) 16.8 W (HDBaseT) 13.2 W (optional WLAN module) 17.4 W (all terminals and networks connected) (when “Standby Mode” is set to “Standard”)
	AC 220 V to 240 V	11.9 W (LAN) 17.0 W (HDBaseT) 12.6 W (optional WLAN module) 17.6 W (all terminals and networks connected) (when “Standby Mode” is set to “Standard”)
Heat dissipation	AC 100 V to 120 V	VPL-PHZ10: 1,446 BTU/h VPL-PWZ10: 1,361 BTU/h
	AC 220 V to 240 V	VPL-PHZ10: 1,374 BTU/h VPL-PWZ10: 1,286 BTU/h
Standard dimensions (W/H/D)		Approx. 510 × 128.5 × 354.6 mm (20 $^{3}/_{32}$ × 5 $^{1}/_{16}$ × 13 $^{31}/_{32}$ inches) Approx. 510 × 113 × 354.6 mm (20 $^{3}/_{32}$ × 4 $^{7}/_{16}$ × 13 $^{31}/_{32}$ inches) (without projecting parts)
Mass		Approx. 8.7 kg (19 lb)
Supplied accessories		See “Checking the Supplied Accessories” in the supplied Quick Reference Manual.
Optional accessories *2 *3		USB wireless LAN module IFU-WLM3

Notes

*1: For details, refer to “Acceptable Input Signals” on page 80.

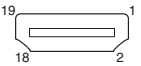
*2: Information on accessories in this manual is current as of May 2017.

*3: Not all optional accessories are available in all countries and area. Please check with your local Sony Authorized Dealer.

Design and specifications of the unit, including the optional accessories, are subject to change without notice.

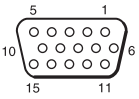
Pin assignment

HDMI terminal (HDMI, female)



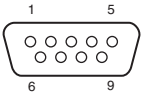
1	T.M.D.S. Data2+	11	T.M.D.S. Clock Shield
2	T.M.D.S. Data2 Shield	12	T.M.D.S. Clock –
3	T.M.D.S. Data2 –	13	N.C.
4	T.M.D.S. Data1+	14	RESERVED (N.C.)
5	T.M.D.S. Data1 Shield	15	SCL
6	T.M.D.S. Data1 –	16	SDA
7	T.M.D.S. Data0+	17	DDC GND
8	T.M.D.S. Data0 Shield	18	+5V Power
9	T.M.D.S. Data0 –	19	Hot Plug Detect
10	T.M.D.S. Clock+		

RGB input terminal (Mini D-sub 15-pin, female)



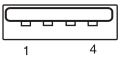
1	Video input (red) R	9	Power supply input for DDC
2	Video input (green) G	10	GND
3	Video input (blue) B	11	GND
4	GND	12	DDC/SDA
5	RESERVE	13	Horizontal sync signal
6	GND (R)	14	Vertical sync signal
7	GND (G)	15	DDC/SCL
8	GND (B)		

RS-232C terminal (D-Sub 9-pin, male)



1	NC	6	NC
2	RXDA	7	RTS
3	TXDA	8	CTS
4	DTR	9	NC
5	GND		

USB terminal (Type A, female)



1	V_{BUS} (4.4 - 5.25 V)
2	Data–
3	Data+
4	Ground

USB terminal (Type B, female)



1	VCC (+5 V)
2	Data–
3	Data+
4	Ground

Acceptable Input Signals[*1]

Computer signal

Resolution	fH[kHz]/ fV[Hz]	Input terminal	
		RGB/ YPBPR	HDMI
640 × 350	31.5/70	●	
	37.9/85	●	
640 × 400	31.5/70	●	
	37.9/85	●	
640 × 480	31.5/60	●	●
	35.0/67	●	
	37.9/73	●	
	37.5/75	●	
	43.3/85	●	
800 × 600	35.2/56	●	
	37.9/60	●	●
	48.1/72	●	
	46.9/75	●	
	53.7/85	●	
832 × 624	49.7/75	●	
1024 × 768	48.4/60	●	●
	56.5/70	●	
	60.0/75	●	
	68.7/85	●	
1152 × 864	64.0/70	●	
	67.5/75	●	
	77.5/85	●	
1152 × 900	61.8/66	●	
1280 × 960	60.0/60		●
1280 × 1024	64.0/60	●	●
	80.0/75	●	
	91.1/85	●	
1400 × 1050	65.3/60		●
1600 × 1200	75.0/60	●	●
1280 × 768	47.8/60		●
1280 × 720	45.0/60	●	●[*2]
1920 × 1080	67.5/60		●[*3]
1366 × 768	47.7/60	●	●
1440 × 900	55.9/60	●	●
1680 × 1050	65.3/60	●	●
1280 × 800	49.7/60	●	●
1920 × 1200	74.0/60	●[*5]	●[*5]
1600 × 900	60.0/60	●[*5]	●[*5]

Video signal

Signal	fV[Hz]	Input terminal		
		VIDEO	INPUT A [*4]	INPUT B/ INPUT C/ INPUT D
NTSC	60	●	–	–
PAL/ SECAM	50	●	–	–
480i	60	–	●	●
576i	50	–	●	●
480p	60	–	●	●
576p	50	–	●	●
1080i	60	–	●	●
1080i	50	–	●	●
720p	60	–	●	●
720p	50	–	●	●
1080p	60	–	–	●
1080p	50	–	–	●
1080p	24	–	–	●

Notes

*1: • When a signal other than the signals listed in table is input, the picture may not be displayed properly.
• An input signal meant for screen resolution different from that of the panel will not be displayed in its original resolution. Text and lines may be uneven.

*2: This is identified as a movie delivery signal of 720/60p.

*3: This is identified as a movie delivery signal of 1080/60p.

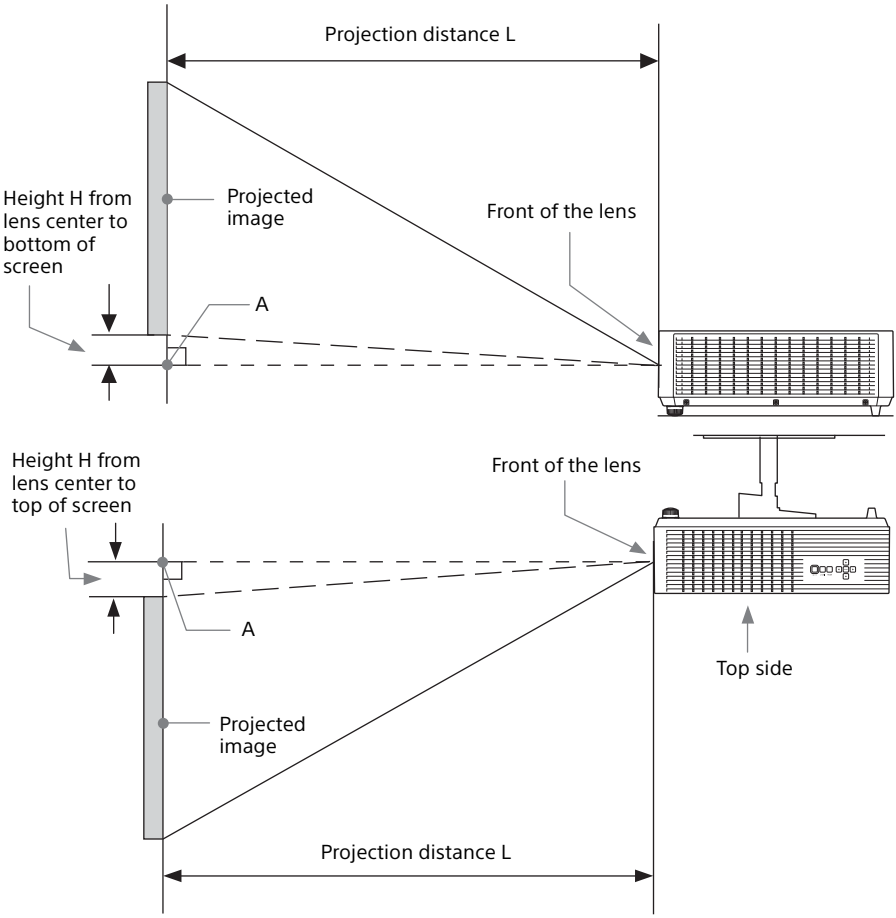
*4: Only G with sync/Y is supported.

*5: Only VESA Reduced Blanking is supported.

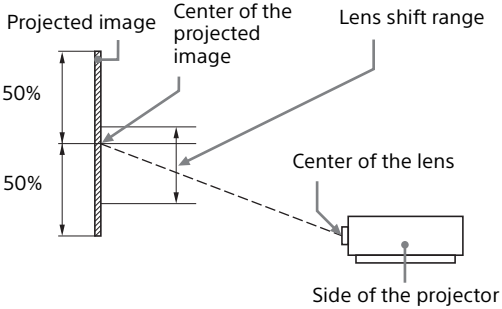
Projection Distance and Lens Shift Range

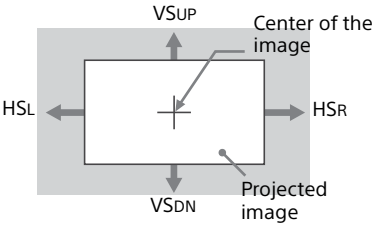
The following describes the projection distance and height from lens center to bottom of screen by each projected screen size.
The projection distance is the distance between the front of the lens and the surface of the projected image.
Height H is the height from the bottom of the projected image (top for ceiling mount) to A (determined by drawing a perpendicular line from lens center to projected image surface). For this unit, the same projection distance calculations apply to both floor and ceiling installation.

Floor Installation/Ceiling Installation (Top side parallel to ceiling)

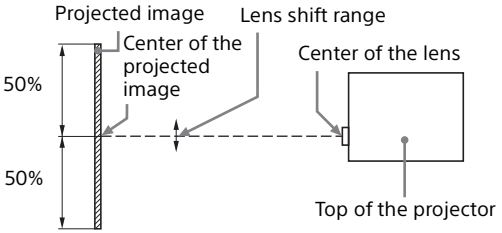


The lens shift range represents the distance in percent (%) by which the lens can be shifted from the initial position of the projected image, with full width or full height of the projected image regarded as 100%.





Shaded region: Lens shift range



VSUP: Vertical lens shift range (up) [%]
VSDN: Vertical lens shift range (down) [%]
HSR: Horizontal lens shift range (right) [%]
HSL: Horizontal lens shift range (left) [%]

Projection distance/Projection distance formula

Projection distance

Unit: m (inches)

Projected image size		Projection Distance L	Height H from lens center to bottom of screen	
Diagonal	Width × Height		Minimum Projection Distance L	Maximum Projection Distance L
80 inch (2.03m)	1.72 × 1.08 (68 × 42)	2.18 - 3.23 (86 - 127)	-0.01 (0)	-0.01 (0)
100 inch (2.54m)	2.15 × 1.35 (85 × 53)	2.74 – 4.06 (108 – 159)	-0.01 (0)	-0.01 (0)
120 inch (3.05m)	2.58 × 1.62 (102 × 64)	3.30 – 4.88 (130 – 192)	-0.01 (0)	-0.01 (0)
150 inch (3.81m)	3.23 × 2.02 (127 × 79)	4.13 – 6.11 (163 – 240)	-0.01 (0)	-0.01 (0)
200 inch (5.08m)	4.31 × 2.69 (170 × 106)	5.53 – 8.16 (218 – 321)	-0.02 (-1)	-0.02 (-1)

Projection distance formula

D: Projection image size (")
Example) Enter 80 in D for the 80" projection image size.
H: Distance between the bottom edge of the image and the center of the lens

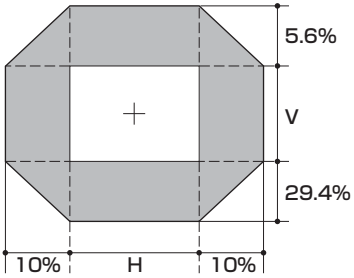
Expression#1 Unit: m (inches)

Minimum Projection Distance L	Maximum Projection Distance L
L=0.027857 × D-0.0487 (L=1.096719 × D-1.9185)	L=0.041087 × D-0.0485 (L=1.617608 × D-1.9097)

Expression#2 Unit: m (inches)

Height H from lens center to bottom of screen	
Minimum Projection Distance L	**Maximum Projection Distance L**
H=-0.00008 × D+0.00000 (H=-0.00312 × D+0.00000)	H=-0.00008 × D+0.00000 (H=-0.00312 × D+0.00000)

Lens shift range

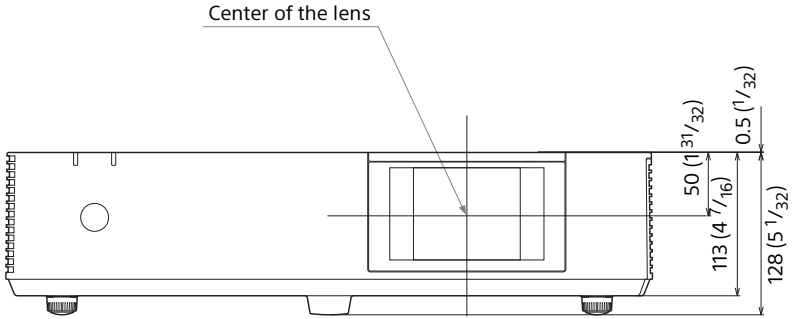


VSUP = 5.6 [%]
VSDN = 29.4 [%]
HSR = HSL = 10 [%]

VSUP [%] = 5.6 - 0.560 × (HSR[%] or HSL[%])
VSDN [%] = 29.4 - 2.940 × (HSR[%] or HSL[%])
HSR [%] = HSL [%] = 10 - 1.786 × (VSUP[%])
HSR [%] = HSL [%] = 10 - 0.340 × (VSDN[%])

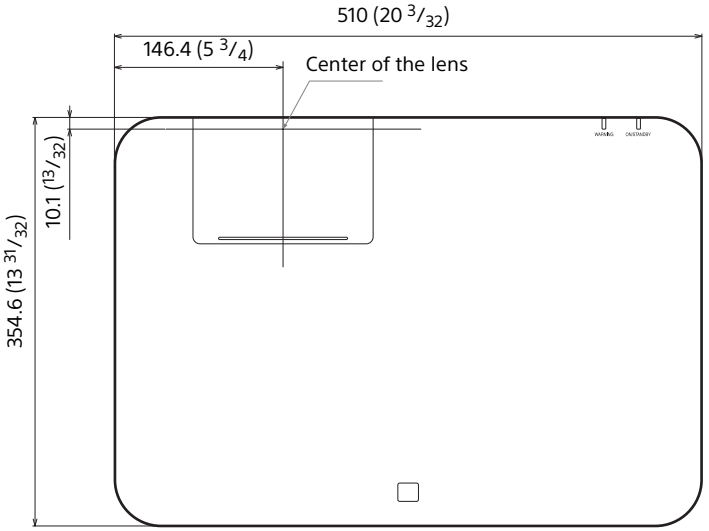
Dimensions

Front

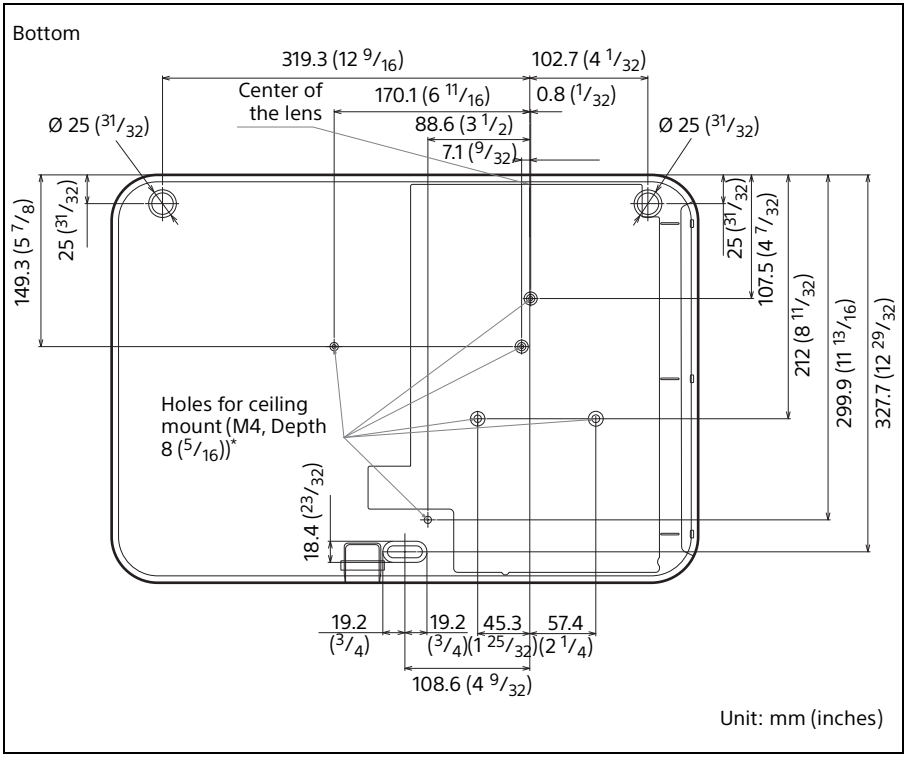


Unit: mm (inches)

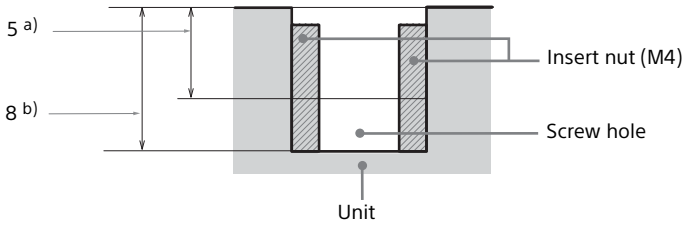
Side



Unit: mm (inches)



*** Specifications of ceiling mount holes**



a) Minimum length of engagement required
b) Maximum depth of screw holes

Unit: mm (inches)

- Be sure to use screws that are longer than the minimum length of engagement and shorter than the maximum depth of screw holes as shown in the figure above.
- Recommended tightening torque: 1.1 ±0.1 N-m

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Index

A

AC IN 5
Acceptable input signal 80
Adjust Signal 28
Adjusting lens shift 19
Air filter 73
APA 6
Aspect 6, 28, 30

B

BLANK 6
Brightness 26

C

CC Display 31
Color 26
Color Calibration 31
Color Matching 39
Color Space 27
Color Temp. 26
Connecting a computer 9
Connecting a Video equipment 12
Connecting Audio Equipment 16
Connection/Power Menu 34
Constant Brightness 35
Contrast 26
Contrast Enhancer 26
Control Key Lock 33
Control Panel Keys 6
Corner Keystone 22, 38
Correcting trapezoidal distortion of the projected image (Keystone feature) 20

D

Digital Shrink 38
Digital Zoom 6

E

ECO MODE (Energy-saving mode) 7

F

fH 40
Filter Cleaning 38
Focus 18
Focus lever 4, 18
Freeze 7
Front feet (adjustable) 4, 19
Function menu 31
fV 40

G

Gamma Mode 27

H

H 28
H Keystone 21, 38
HDBaseT terminal 5
High Altitude Mode 38
Hue 26

I

Image Flip 38
Indicators 66
Information menu 40
Input 5
Installation menu 38
IR Receiver 33

K

Keystone 6, 20

L

LAN terminal 5
Language 33
Lens Adjustment Cover 4
Lens shift cover 19
Lens shift dial 4
Light Timer 40
Location and function of controls 4

M

Main unit 4
Menu Position 33
Messages list 68
Model Name 40
MUTING 6

N

Network Features 41

O

ON/STANDBY indicator 4
Operation menu 33
Optional accessories 77
Output 5

P

Panel Alignment 39
Phase, Pitch, Shift 28
Picture menu 26
Picture mode 26
Pin assignment 78
Presentation Function via Network 54
Projecting an image 17
Projection distance 81

R

Reality Creation 26
Remote commander 6
Remote control Receiver 4
Reset 26
RS-232C 5

S

Screen menu 28
Security bar 4
Security Lock 4, 33
Selecting an input signal 6
Serial No. 40
Sharpness 26
Side cover/Ventilation holes (intake) 4
Signal Type 40
Smart APA 31
Speaker 31
Specifications 75
Start Up Image 31
Status 33

T

Terminals 4, 5
Troubleshooting 70
Turn off 23
Turn on 6, 17

U

USB Display 64
Using a menu 24
Using the e-mail report Function 43

V

V Keystone 20, 38
Ventilation holes 4
Volume 6

W

WARNING indicator 4, 66
With No Input 35
With Static Signal 36

Z

Zoom lever 4, 18