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-DX146/DX126
VPL-DW126

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

HDMI

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USB Media Viewer

Others

Location and Function of Controls

Main Unit

① Focus ring (page 13)

② Zoom ring (page 13)

③ Lens
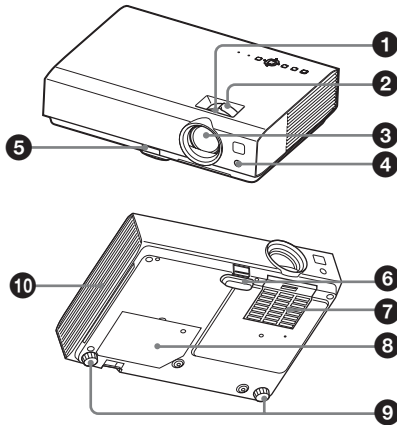
④ Remote control detector

⑤ Foot adjust button (page 14)

⑥ Front foot (adjustable) (page 14)

⑦ Air filter cover/Ventilation holes (intake) (page 47)

⑧ Lamp cover (page 45)

⑨ Rear feet (adjustable) (page 14)

⑩ Ventilation holes (exhaust)

Caution

Do not place anything near the ventilation holes as this may cause internal heat buildup. Do not place your hand near the ventilation holes and the circumference as this may cause injury.
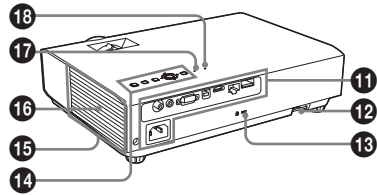
⑪ Connector panel (page 5)

⑫ Security bar

Connects to a commercially available security chain or wire.

⑬ Security lock

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

⑭ Control panel keys (page 5)

⑮ Ventilation holes (intake)

⑯ Speaker

⑰ LAMP/COVER indicator (page 41)

⑱ ON/STANDBY indicator (page 41)

Connector Panel
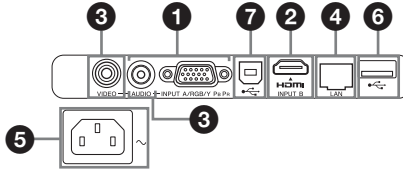
Input (pages 8, 10)

❶ INPUT A

Video: RGB/YPBPR input connector
Audio: Audio input connector

❷ INPUT B

Video: HDMI input connector
Audio: HDMI input connector

❸ VIDEO

Video: Video input connector
Audio: Audio input connector

Note

The audio inputs of INPUT A and VIDEO are
shared.

Others

❹ LAN connector (page 29)

❺ AC IN (~) socket

Connects the supplied AC power cord.

❻ USB connector (Type A) (⟵⟶) (pages 11, 37)

❼ USB connector (Type B) (⟵⟶) (page 36)

Remote Commander and Control Panel Keys

Remote Commander
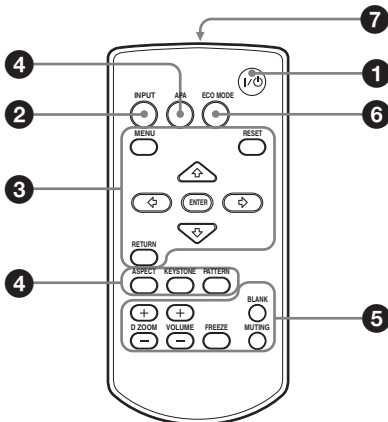
Control Panel Keys

❶ Turning on the power/Going to standby mode
I/⏻ (On/Standby) key

❷ Selecting an input signal (page 12)
INPUT key

3 **Operating a menu (page 17)**
MENU key
RESET key
ENTER /▲/▼/◀/▶ (arrow) keys
RETURN key

4 **Adjusting the image (page 13)**
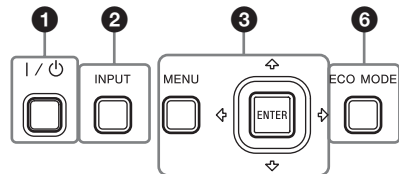
ASPECT key (page 19)

KEYSTONE key (page 15)

PATTERN key (page 15)

APA (Auto Pixel Alignment) key[*]
(page 15)

Note

[*] Use this key when inputting a computer signal via the RGB input connector (INPUT A).

5 **Using various functions during projecting**

D ZOOM (Digital Zoom) +/– key[*1]
Enlarges the image with the center of it as a starting point 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. Picture muting helps reduce power consumption.

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 A USB", "Type B USB" or "Network" is selected as the input.

6 **Setting the energy–saving mode easily**

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

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

ECO Mode Menu

```
┌─────────────────────────────┐
│ ECO Mode                    │
├─────────────────────────────┤
│  ECO                        │
│  User                    ▶  │
│                             │
│ ◕◑:Sel          RETURN:Back │
└─────────────────────────────┘
```
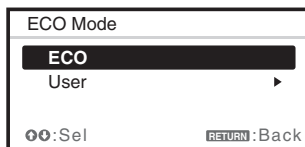
2 Press the ▲/▼ key or ECO MODE key to select "ECO" or "User" mode.
ECO: Sets each mode to the optimum energy-saving value.
Lamp Mode: Low
With No Input: Standby
With Static Signal: Lamp Dimming
Standby Mode: Low
User: Sets each item of the ECO mode menu as you desire (go to step **3**).

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

```
User

 Lamp Mode          High

 Auto Power Saving
   With No Input     Off
   With Static Signal Lamp Dimming
 Standby Mode        Standard

 ◑◐:Sel   ENTER:Set        RETURN:Back
```

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 previous
menu.

For details on ECO Mode settings, see
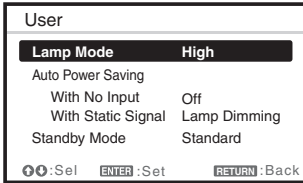"Lamp Mode," "With No Input," "With
Static Signal" and "Standby Mode" on
the Connection/Power menu (page 25).

Others

❼ Infrared transmitter

About remote commander operation
- Direct the remote commander toward the
  remote control detector.
- 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
  detector on the projector.
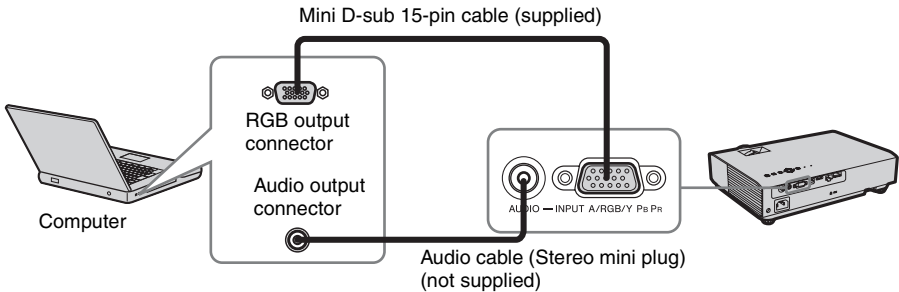
Connecting the Projector

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 connector.

Mini D-sub 15-pin cable (supplied)

RGB output connector

Audio output connector

Computer

AUDIO — INPUT A/RGB/Y Pв Pʀ

Audio cable (Stereo mini plug) (not supplied)

Note

It is recommended that you set the resolution of your computer to 1024 × 768 pixels (VPL-DX146/DX126) or 1280 × 800 pixels (VPL-DW126) for the external monitor.

INPUT B

For connecting a computer with an HDMI output connector.

HDMI output connector

HDMI cable (not supplied)

HDMI INPUT B

Computer

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 connector of this projector is not compatible with DSD (Direct Stream Digital) Signal or CEC (Consumer Electronics Control) Signal.
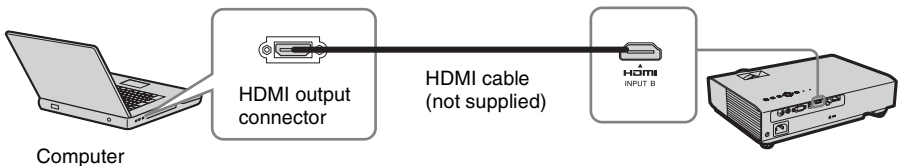- It is recommended that you set the resolution of your computer to 1024 × 768 pixels (VPL-DX146/DX126) or 1280 × 800 pixels (VPL-DW126) for the external monitor.

USB connector (Type B) (⬩⟷)
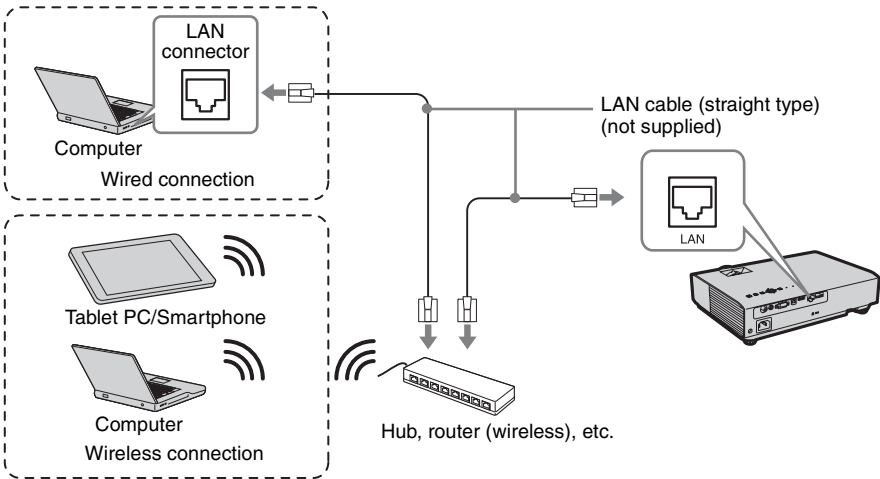
For connecting to a computer with a USB connector ("Projecting an Image using USB Connection" (page 36)).

Computer

USB connector (Type A)

USB A-B cable (not supplied)
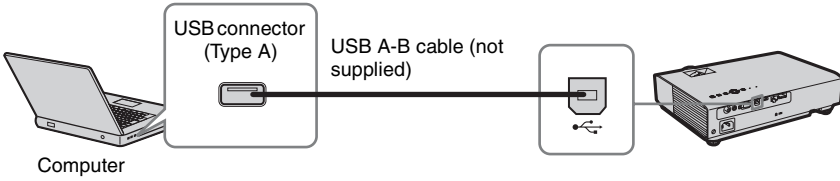
LAN connector

For connecting to a computer, tablet PC, or smartphone via a hub or router ("Presentation Function via Network" (page 33)).

LAN connector

Computer
Wired connection

Tablet PC/Smartphone

Computer
Wireless connection

LAN cable (straight type) (not supplied)

LAN

Hub, router (wireless), etc.

USB connector (Type A) (⬩⟷)

For connecting a USB wireless LAN module IFU-WLM3 (supplied) ("Presentation Function via Network" (page 33)).

Tablet PC/Smartphone

Computer

USB wireless LAN module IFU-WLM3 (supplied)
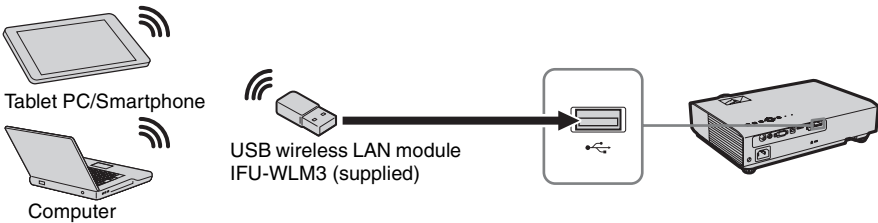
Notes

- 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.

• When wirelessly connecting a tablet PC/smartphone to the projector via USB wireless LAN module IFU-WLM3 (supplied), set "Access Point Setup" to "Manual" in the projector's "WLAN Settings" (page 25).
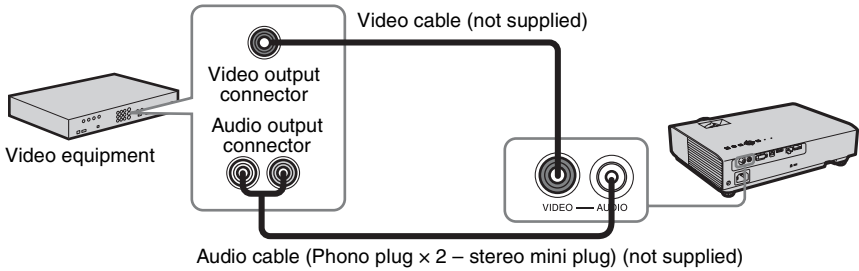
Connecting a Video equipment

Connections with a DVD player or BD player are explained for each input signal.

VIDEO

For connecting video equipment with a video output connector.

Video cable (not supplied)

Video output connector

Audio output connector

Video equipment

VIDEO — AUDIO

Audio cable (Phono plug × 2 – stereo mini plug) (not supplied)

INPUT A

For connecting video equipment with a YPBPR output connector.

Component – Mini D-sub 15-pin cable (not supplied)

YPBPR output connector

Audio output connector

Video equipment

AUDIO — INPUT A/RGB/Y PB PR

Audio cable (Phono plug × 2 – stereo mini plug) (not supplied)
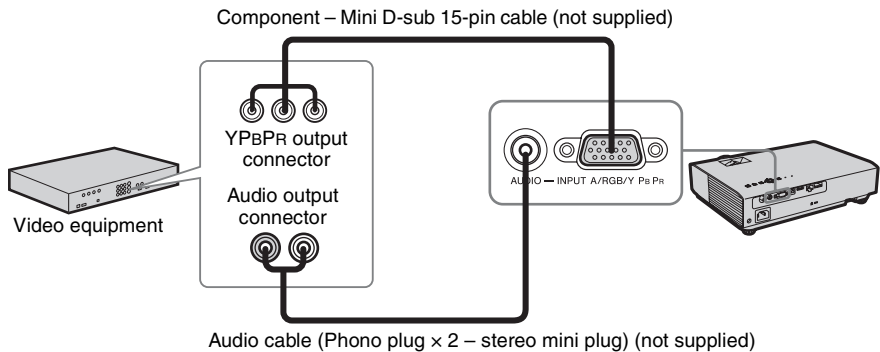
INPUT B

For connecting video equipment with an HDMI output connector.
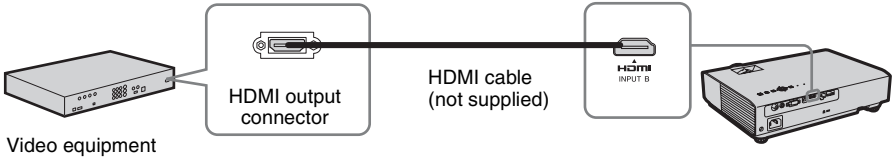
Video equipment

HDMI output connector

HDMI cable (not supplied)

HDMI INPUT B

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 connector of this projector is not compatible with DSD (Direct Stream Digital) Signal or CEC (Consumer Electronics Control) Signal.

Connecting a USB memory device

USB connector (Type A) (⟨⟨•)

For connecting a USB memory device ("Using USB Media Viewer" (page 37)).
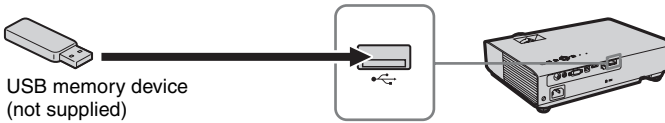
USB memory device (not supplied)

Projecting an Image

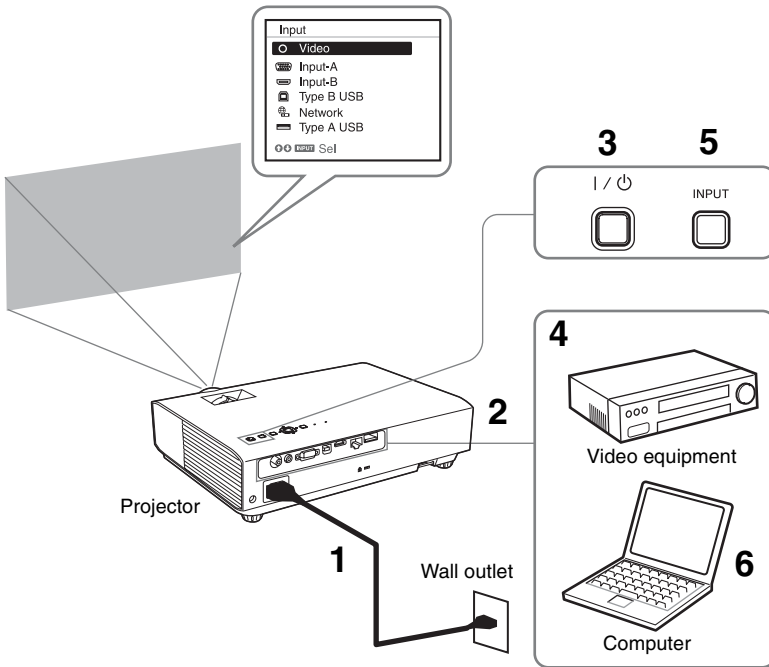The size of a projected image depends on the distance between the projector and screen. Install the projector so that the projected image fits the screen size. For details on projection distances and projected image sizes, see "Projection Distance" (page 53).

1 Plug the AC power cord into the wall outlet.

2 Connect all equipment to the projector (page 8).

3 Press the I/ᯖ 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
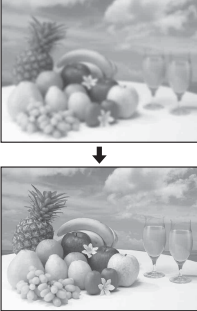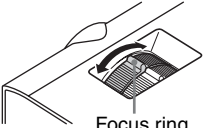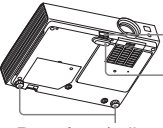
To project image files stored in a USB memory device, see "USB Media Viewer" (page 37). To project an image using USB Connection, see "Projecting an Image using USB Connection" (page 36). To use Presentation Function via Network, see "Presentation Function via Network" (page 33).

7 Adjust the focus, size and position of the projected image (page 13).

Adjusting the Projected image

Focus	Size (Zoom)	Position
 Focus ring	Zoom ring 	Foot adjust button Front foot (adjustable) Rear feet (adjustable)

Adjusting the tilt of the projector with the foot adjust button/rear feet (adjustable)

By changing the tilt of the projector with the foot adjust button/rear feet (adjustable), you can adjust the position of the projected image.

1 Press and hold the foot adjust button, then lift up the front of the projector to adjust the angle.
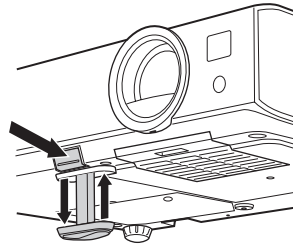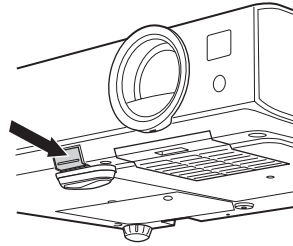
2 When the desired angle is achieved, release the foot adjust button to lock the position.

3 Set the angle of the projector precisely by turning the rear feet (adjustable).
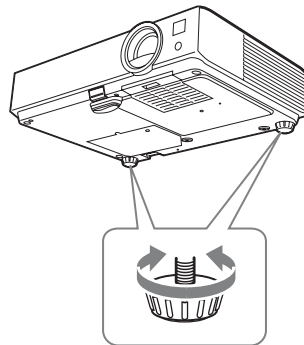
- Be careful not to let the projector down on your fingers.
- Do not push hard on the top of the projector with the front foot (adjustable) extended.
- Do not forcedly turn the rear feet (adjustable) more than they should be adjusted. Doing so may break them.

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 (pages 19, 21).

Correcting trapezoidal distortion of the projected image (Keystone feature)

Keystone feature may not work automatically when the screen is tilted. In this case, set keystone manually.

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

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

Note

Since the Keystone adjustment is an electronic correction, the image may be deteriorated.

Increase the number towards plus

Increase the number towards minus
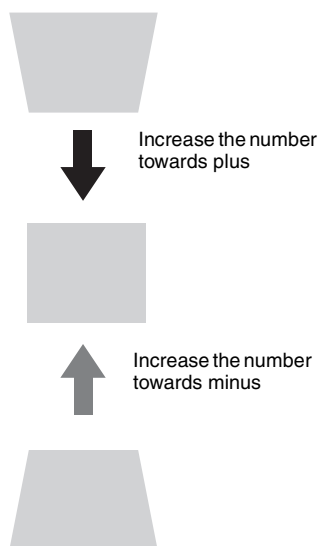
Displaying a pattern

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 A USB", "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 20). If Smart APA in the Function menu is set to "On", executes APA automatically when a signal is input (page 23).

Turning Off the Power

1 Press the I/$\bigcirc$ key on the unit or the remote commander.
The projector starts shutdown and turns off. If you press the I/$\bigcirc$ key within 10 seconds of the message being displayed, shutdown is canceled.

2 Unplug the AC power cord from the wall outlet.

To turn off without displaying confirmation message

Press and hold the I/$\bigcirc$ key on the unit for a few seconds (page 42).

ECO gauge

This gauge indicates the current effectiveness of the projector's ECO function.
(For details on the ECO function, see "ECO MODE key" (page 6) and "ECO" (page 25).)
The leaf icons are displayed when the projector is shut down. The number of displayed icons varies according to how much energy is saved as a result of using the ECO function.
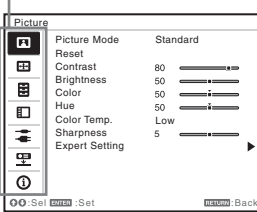

ECO gauge
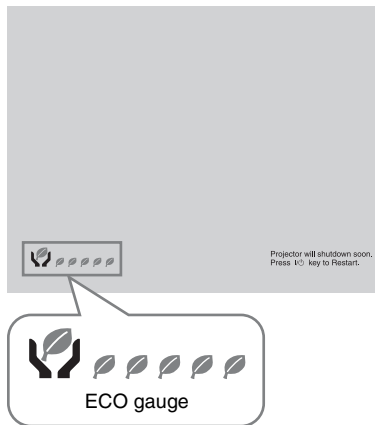
Using a MENU

Note

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

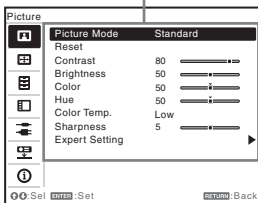**1** Press the MENU key to display the menu.

2 Select the setting menu.
Use the ▲/▼ key to select the setting menu then press the ➜ key or ENTER key.

Setting menu

```
Picture
  ┌──────────────────────────────────────────┐
  │ Picture Mode        Standard             │
  │ Reset                                    │
  │ Contrast            80    ══════▪══       │
  │ Brightness          50    ═══▪═════       │
  │ Color               50    ═══▪═════       │
  │ Hue                 50    ═══▪═════       │
  │ Color Temp.         Low                  │
  │ Sharpness           5     ══▪══════       │
  │ Expert Setting                      ▶    │
  │                                          │
  │ ◖◗:Sel ENTER :Set              RETURN :Back│
  └──────────────────────────────────────────┘
```

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

```
Picture
  ┌──────────────────────────────────────────┐
  │ Picture Mode        Standard             │
  │ Reset                                    │
  │ Contrast            80    ══════▪══       │
  │ Brightness          50    ═══▪═════       │
  │ Color               50    ═══▪═════       │
  │ Hue                 50    ═══▪═════       │
  │ Color Temp.         Low                  │
  │ Sharpness           5     ══▪══════       │
  │ Expert Setting                      ▶    │
  │                                          │
  │ ◖◗:Sel ENTER :Set              RETURN :Back│
  └──────────────────────────────────────────┘
```
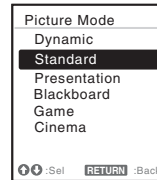
4 Make the setting or adjustment for the selected item.
The setting method varies, depending on the setting item.
If the next menu window is displayed, select the item according to the

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. As an aid to setting or adjusting items, you can press the RESET key to return an item to its factory setting.

Using a pop-up menu
Press the ▲/▼/◀/➜ key to select an item. A selected item takes effect immediately, except "Language", which will take effect after you press the ENTER key.
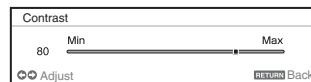
```
  ┌──────────────────────────┐
  │ Picture Mode             │
  │   Dynamic                │
  │ ▌ Standard             ▌ │
  │   Presentation           │
  │   Blackboard             │
  │   Game                   │
  │   Cinema                 │
  │                          │
  │ ◖◗:Sel  RETURN :Back     │
  └──────────────────────────┘
```

Using the setting menu
Press the ▲/▼ key to select the item. A selected item takes effect immediately. The previous screen is restored.
Using the adjustment menu
To increase the value, press the ▲/➜ key and to decrease the number, press the ▼/◀ key. If you press the ENTER key, the selected item takes effect immediately. The previous screen is restored.

```
  ┌──────────────────────────────────────────┐
  │ Contrast                                 │
  │        Min                        Max    │
  │   80   ══════════════════════════════    │
  │ ◖◗ Adjust               RETURN Back      │
  └──────────────────────────────────────────┘
```

5 Press the MENU key to clear the menu.
The menu disappears automatically if no operation is performed.

🖼 The Picture Menu

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

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**[*1]**:** Provides a bright image, suitable for presentations. **Blackboard:** Provides an image suitable for displaying on a blackboard. **Game:** Provides an image suitable for viewing games. **Cinema:** Provides an image suitable for viewing movies.
Reset[*2]	Resets to 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[*3 *4]	The higher the value, the greater the intensity. The lower the value, the lower the intensity.
Hue[*3 *4 *5]	The higher the value, the more greenish the picture becomes. The lower the value, the more reddish the picture becomes.
Color Temp.[*6]	**High/Middle/Low:** The higher the value, the more bluish the picture becomes. The lower the value, the more reddish the picture becomes.
Sharpness	The higher the value, the sharper the picture becomes. The lower the value, the softer the picture becomes.
Expert Setting	
Gamma Mode[*1 *7]	**Graphics 1:** Gamma correction to make halftones brighter. This setting is suitable when projecting highly colorful images, such as photos, in a bright place. **Graphics 2:** Gamma correction to improve the reproduction of halftones. Highly colorful images, such as photos, can be reproduced in natural tones. **Text:** Improves back and white contrast. Suitable for images with lots of text content.

Notes

*1: When a computer signal is input, this option is available.
*2: The settings in the Picture return to their factory defaults, except for Picture Mode.
*3: When a video signal is input, this option is available.
*4: When the signal without color burst signal is input, this option is unavailable.
*5: When an analog TV signal is input, this option may not available, depending on the color system.
*6: When "Picture Mode" is set to the item other than "Presentation" or "Blackboard," this option is available.
*7: When "Picture Mode" is set to "Blackboard," this option is unavailable.

⊞ The Screen Menu

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

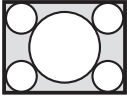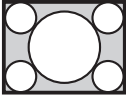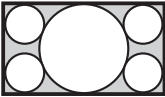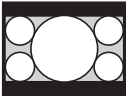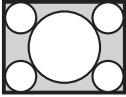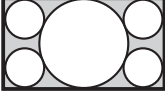| Items		Item descriptions
Aspect[*1]		Changes the aspect ratio of the projected image (page 21).
	VPL-DX146/DX126: When the computer signal is input	**4:3:** Displays the image to fit the maximum projected image size with an aspect ratio fixed to 4:3. **16:9:** Displays the image to fit the maximum 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. **Normal:** Displays the image on the center position of the projected image without changing the resolution of the input signal or enlarging the image.
	VPL-DX146/DX126: 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. **Zoom:** Zooms the center area of a projected image.
	VPL-DW126: 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 image without changing the resolution of the input signal or enlarging the image.
	VPL-DW126: 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.
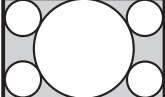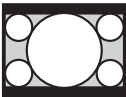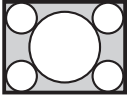
Items	Item descriptions
Adjust Signal	Adjusts the image of a computer signal. Use this item if the edge of the image is cut, or is not displayed properly.
APA[*2][*3]	Automatically adjusts the projected image to an optimum quality when you press the ENTER key (page 6).
Phase[*2]	Adjusts the dot phase of the display pixel and the input signal. Set to the value where looks clearest.
Pitch[*2]	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 (Horizontal):** The higher the value, the farther right the image is projected on the screen. The lower the value, the image farther left. **V (Vertical):** 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 connector (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 connector (INPUT A).

Aspect

VPL-DX146/DX126

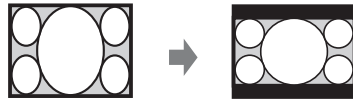|	Input signal	Recommended setting value and projected image
Computer signal	4:3	Full1*1
Computer signal	16:9	Full1*1 *2
Computer signal	16:10	Full1*1 *2
Video signal	4:3	4:3*3
Video signal	16:9	16:9*4

*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 "4:3," the image is projected to fit the projected image size, regardless of the aspect ratio of the image.
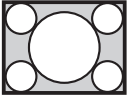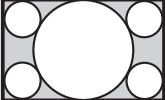
*3: Depending on the input signal, the projected image may be projected as illustrated below. In this case, select "16:9."

*4: Depending on the input signal, the projected image may be projected as illustrated below. In this case, select "Zoom."

Adjustments and Settings Using a Menu

VPL-DW126

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.
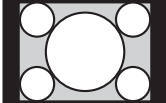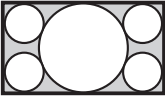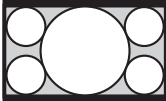
*3: If you adjust the projected image position using an image with 16:9 aspect ratio and then switch the input source to 4:3 image, the top and bottom edge of the image may be hidden. In this case, select "Full3."
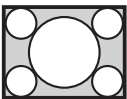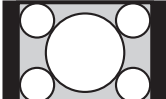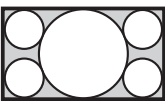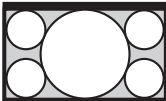
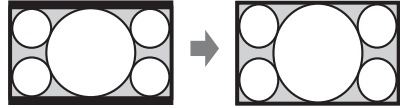*4: Depending on the input signal, the projected image may be projected as illustrated below. In this case, select "16:9."

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

⊞The Function Menu

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

Items	Item descriptions
Volume	The higher the value, the louder an audio volume and the lower the value, the lower the audio volume.
Smart APA	**On/Off:** When set to "On," APA functions automatically when a signal is input.[*1]
CC Display	**Off:** Closed caption does not appear. **CC1/CC2/CC3/CC4/Text1/Text2/Text3/Text4:** Select the closed caption service (captions or text).
Lamp Timer Reset	When replacing the lamp, resets the lamp timer (page 45).
Start Up Image	**On/Off:** When set to "On," the Start Up Image is displayed on the screen when the projector is powered on.

Note

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

⊡ The Operation Menu

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

Items	Item descriptions
Language	Selects the language used in the menu and messages.
Status	**On:** All on-screen statuses are enabled. **Off:** Turns off the on-screen displays, except for menus, warning messages and messages from the message list.

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.

Items	Item descriptions
LAN Settings	
IP Address Setup[9]	**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[10]	
WLAN Connection[8]	**On/Off:** Set the wireless output of the USB wireless LAN module (supplied) to On/Off.
Access Point Setup	**Auto/Manual** [11]**:** Set the access point automatically or manually.
Input-A Signal Sel.[1]	**Auto/Computer/Video GBR/Component:** When set to "Auto," selects the type of video signal input automatically when "Input-A" is selected.
ECO	
Lamp Mode	**High/Standard/Low/Auto**[5][7]**:** When set to "High," the image becomes brighter, and power consumption becomes higher. When set to "Low," power consumption is minimized; however, the image will be darker. 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.
Auto Power Saving	
With No Input	**Lamp Cutoff:** The lamp turns off automatically and power consumption is reduced if no signal is input for more than 10 minutes. The lamp lights again when a signal is input or any key is pressed. In Lamp Cutoff, the ON/STANDBY indicator lights in orange. (page 41) **Standby**[2]**:** If no signal is input to the unit for more than 10 minutes, the power turns off automatically, and the unit enters standby mode. **Off:** You can deactivate the With No Input.
With Static Signal	**Lamp Dimming**[4][5][7]**:** If an image does not change for about 10 seconds, lamp output is gradually reduced (approximately 10% to 15%[3]) from that set in the Lamp Mode. Automatically the lamp slowly darkens to approximately 30% of its lamp output according to the selected time (with no change to input signal) "**5**," "**10**," "**15**," "**20**" minutes or "**Demo**.," While dimming the lamp, the message "Lamp 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[6]	**Standard/Low:** When set to "Low," lowers power consumption in Standby mode.

Items	Item descriptions
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: This may not be optimum depending on the input signal. In this case, set manually according to the connected equipment.
*2: Select "Off" to avoid entering standby mode when there is no input signal.
*3: This varies depending on the "Lamp Mode" setting.
*4: As the lamp is dimmed gradually, you may not notice any change in brightness. You might only notice that the lamp has dimmed when its brightness is restored after there is a change in input signal.
*5: This mode does not work for about three minutes after the lamp lights. A change in signal may not be detected depending on the input image. The lamp may become brighter at intervals if you continue to use the projector during lamp dimming. However, this is not a malfunction. If With No Input is set, it takes priority.
*6: When "Standby Mode" is set to "Low," the network and network control function cannot be operated while the projector is in standby mode.
*7: Does not function when "Type A USB", "Type B USB" or "Network" is selected as the input. In this case, it becomes equivalent to "Standard."
*8: Reflecting changes in WLAN settings may take a few moments.
*9: To set the IP address manually, select "Manual", press "Apply", then enter the IP address.
*10: When you send images or files from a tablet PC/smartphone and display them (page 35), USB wireless LAN module IFU-WLM3 (supplied) can be used as a wireless access point.
*11: The factory default settings for "Manual" are as follows.
SSID: VPL + MAC address for LAN
Security Method: WEP(64bit)
Password: sony1
To change the settings for "Manual", use a web browser.
If "Manual" is set, when you use Presentation Function via Network (page 33), select "Manual Connect" to connect to the network.

⏚ The Installation Menu

The Installation menu is used for installing the projector.

Items	Item descriptions
Image Flip	**HV/H/V/Off:** Flips the projected image horizontally or vertically according to the installation method.
Installation Attitude	**Right Side Up/Upside Down/Link to Image Flip:** Change the cooling setting to suit to the installation attitude. When set to "Link to Image Flip," the cooling setting changes based on the setting of "Image Flip." Continuing to use the wrong setting may affect component reliability.
High Altitude Mode[*1]	**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.
V keystone[*2]	**Auto/Manual[*2]:** The higher the value, the narrower the top of the projected image. The lower the value, the narrower the bottom.

Notes

*1: When "High Altitude Mode" is set to "On," the speed of the fan increases, and the fan noise becomes slightly louder.
*2: Since the Keystone adjustment is an electronic correction, the image may be deteriorated.

ⓘ The Information Menu

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

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.
Lamp Timer	Indicates the total usage time of a lamp.

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, PJ Talk, PJ Link, AMX DDDP [Dynamic Device Discovery Protocol], Crestron RoomView).

Notes

• The menu displays used for the explanation below may be different depending on the model you are using.
• Supported Web browsers are Internet Explorer 6/7/8/9/10.
• 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 9).

2 Set the network settings for the projector using "LAN Settings" on the Connection/Power menu (page 25).

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 25).

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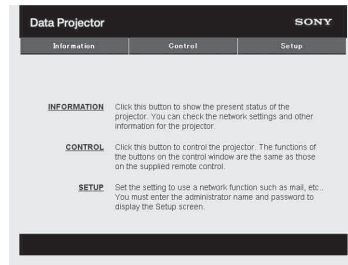
Once you make the network settings, you can open the Control window only by performing step **3** of this procedure.

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

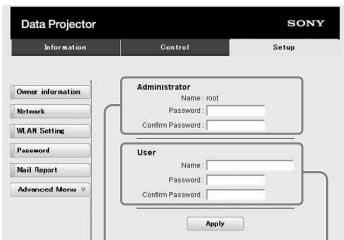You can limit a user for accessing any particular page.

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" for user name and enter nothing for password.

The name 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.

Note

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

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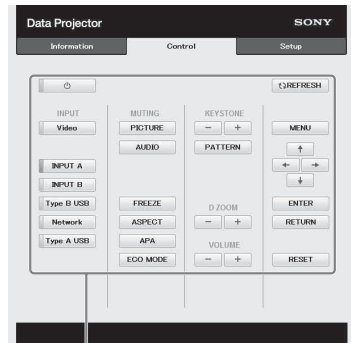
You can confirm the current settings for the projector on the Information page.

Information area

Operating the Projector from a Computer

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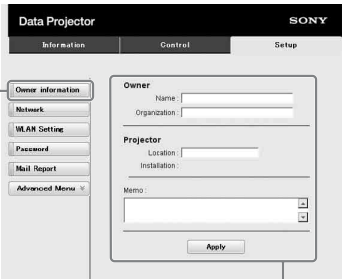

Operation area

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 **1**

2 Set the timing of the e-mail report.
Click on [Mail Report] to open the Mail Report page.

Lamp Reminder (Lamp1): Set the timing of the email report for lamp replacement. To reset Lamp Reminder, execute "Lamp Timer Reset" on the projector (page 23).

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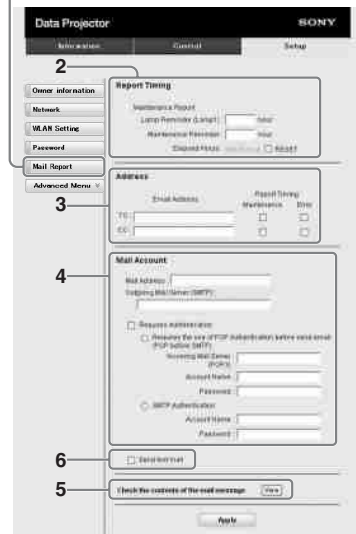
3 Enter the outgoing e-mail address in the Email Address box then check the Report Timing check box of the e-mail report to be sent.

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.

Network

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: " ' ", " " ", " \ ", " & ", " < ", " > "

Using Presentation Function via Network

The Presentation Function via Network enables you to do the following:
• Connect a maximum of 8 computers to the projector.
• Project images from a maximum of 4 computers simultaneously.
• Connecting a USB wireless LAN module (supplied) to the projector allows the projector to connect to up to 7 computers simultaneously.

Presentation Function via Network requires installation of Projector Station for Network Presentation (supplied CD-ROM). For information on updates of Projector Station for Network Presentation, visit Sony's web site: https://www.servicesplus.sel.sony.com/
System requirements for using the application are as follows.

OS

WindowsXP: Home/Professional (recommended)
WindowsVista: Home Premium/Business/Ultimate/Enterprise
Windows7: Home Premium/Professional (Recommended)/Ultimate/Enterprise

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.
• Movie player (Media Player, etc.) images may not be projected properly.

Installing Projector Station for Network Presentation

1 Close all running applications.

2 Insert the supplied CD-ROM into the CD-ROM drive of the computer.

3 Open the CD-ROM and double-click the .exe file.
When the message "User Account Control" is displayed, click "Allow" or "Yes."

4 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 (page 29).
For a wireless connection, see "LAN connector" (page 9) or "USB connector (Type A) (⟵⟶)" (page 9). Also check the WLAN Settings (page 25).

2 Turn on the projector.
Select "Network" as the input source (page 12).

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

Projecting an Image

After starting Projector Station for Network Presentation, the connection setting window appears.

1 Find projectors connected to the network.

Click "Search" in the connection setting window to search for projectors.
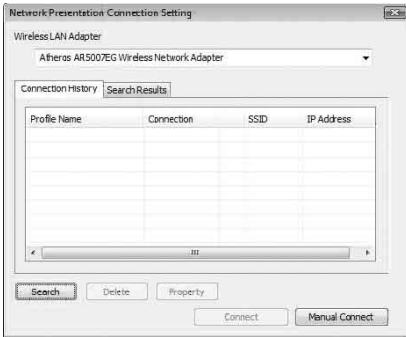
2 Select a projector to project an image.
Check the checkbox.

3 Click "Connect".

If other users are projecting an image, the controller appears on the screen.
Click the ► to start projecting an image (page 35).
If no users are projecting an image, the controller appears on the screen and starts projecting an image.

Note

Display related settings (such as your computer's resolution) change when the application is started.

Connection Settings

Item	Item descriptions
Wireless LAN Adapter	To select a wireless LAN adapter used for Projector Station for Network Presentation (appears only when wireless connection is used).
Connection History	List profiles that have been connected before.
Search Results	Show the search result.
Profile Name	Display the registered names of the projectors found in the network.
Connection	Display the connection method (wired/wireless).
▥	Displays the strength of the wireless signal (appears only when wireless connection is used).
SSID	Display SSID (appears only when wireless connection is used).
IP Address	Display IP address (appears only when wired connection is used).
Search	Start searching for projectors in the network.
Delete	Delete selected profile.
Property	Display the properties of the selected profile.
Connect	Connect to the selected projector and start projecting an image.
Manual Connect	Enter the SSID and IP address manually to connect with the projector, and start projecting an image.

Using the Controller
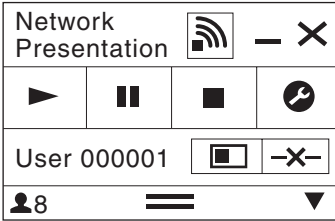
Network Presentation	🔊	—	✕
►	❚❚	■	⚙
User 000001		▣	─✕─
👤8	═══		▼

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.
🔊		Display the strength of the wireless signal.
👤		Display the number of users connected to the projector.
▼		Display the users' status.

Displaying Images or Files Sent from a Tablet PC/ Smartphone

You can project JPEG images, PDF files, etc. stored in a tablet PC/smartphone wirelessly by using a specific application.[*1]
For downloading[*2] or detailed method of using the application, access the following URL.
http://PWPresenter.pixelworks.com

*1: To use the application, one of the following conditions is required.
   • Connected to network where wireless connection can be established (page 9).
   • Connected to a wireless network via USB wireless LAN module IFU-WLM3 (supplied) that is connected to the projector (page 9).
*2: Depending on your Internet connection, a data communication fee for downloading the application may apply.

Projecting an Image using USB Connection

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

OS
WindowsXP: Home/Professional (recommended)
WindowsVista: Home Premium/Business/Ultimate/Enterprise
Windows7: Home Premium/Professional (Recommended)/Ultimate/Enterprise

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 9).

2 Turn on the projector.
Select "Type B USB" as the input source (page 12). 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.

Projecting an Image

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

Using the Controller
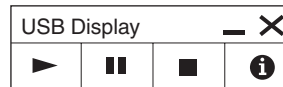
USB Display	— ✕
►	❚❚	■	❶

Items	Functions
►	Start projecting an image.
❚❚	Pause projecting an image.
■	Stop projecting an image (the screen turns black).
❶	Display information about USB Display.

Using USB Media Viewer

You can browse image files stored in a USB memory device inserted in the USB connector of the projector, without using a computer.
Supported storage media and file format:
- Supported storage media: USB flash memory
- Supported format of storage media: FAT format
- Supported file format: JPEG (.jpg/.jpeg), Bitmap (.bmp), PNG (.png), GIF (.gif), TIFF (.tif/.tiff)

Notes
- exFAT, NTFS are not supported.
- TIFF files containing EXIF information are not supported.
- Image files in a USB memory device connected to the projector via a USB hub may not be displayed.
- Security protected USB memory may not function correctly.
- A USB memory card reader that is recognized as more than one drive may not function correctly.
- Display of image files that are larger than 4092 × 3072 pixels is not guaranteed. It may take a long time to display, or may not be displayed.
- A folder with a deep folder structure or with a very long folder name may not be displayed.
- An image may not be displayed, depending on its file type.
- Files or folders with names including non-alphanumeric characters may not be displayed.
- When displaying an image file, do not disconnect the USB memory device. It may cause a malfunction of the USB memory device or the projector. Disconnect the USB memory device when the USB Memory device selection screen is displayed.

1 Connect a USB Memory device to the projector (page 11).

2 Select "Type A USB" as the input source (page 12).
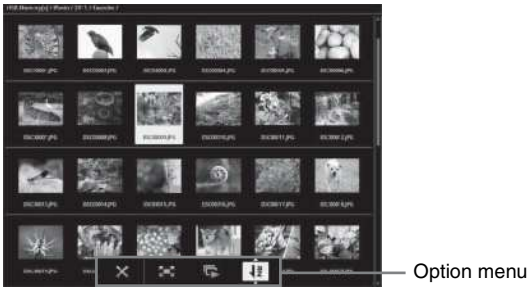
3 Select the USB Memory device.
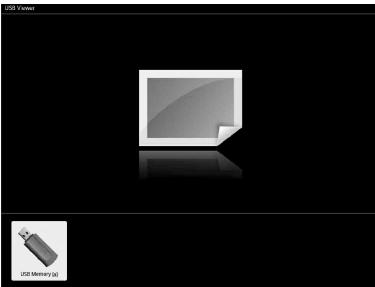
Press the ENTER key to display in the thumbnail mode.
USB Media Viewer has three display modes: "thumbnail mode," "display mode" and "slideshow mode."

Thumbnail Mode

The image files in the folder are displayed as a thumbnail list.

Option menu

Press the ↑/↓/←/→ key on the remote commander to select an image, then press the ENTER key. The option menu appears in the lower part of the screen.

Option Menu

You can select the display order of thumbnails and display method of image files.

Items	Item descriptions
✕	Hide the option menu.
⛶	Switch to the display mode, and display the selected image in full screen view. (page 39)
⛶	Switch to the slideshow mode, and start the slideshow from the selected image. (page 39)
↓ᵃ₂	Sort image files.
Sort image files	
↓ᵃ₂	Sort by name in alphabetical order.
↓ᶻₐ	Sort by name in reverse alphabetical order.
↓¹₂	Sort by date in chronological order.
↓²₁	Sort by date in reverse chronological order.

Notes

- Files without thumbnail data (including those created by an application) appear as blank icons.
- Cannot display more than 200 image files and folders in one folder.

Display Mode

In display mode, you can view a selected image in full screen view.

 — Option menu

Press the ENTER key on the remote commander. The option menu appears in the lower part of the screen.

Option Menu

Items	Item descriptions
✕	Hide the option menu.
⠿	Return to the thumbnail mode (page 38).
↺	Rotate the image 90 degrees counter-clockwise.
↻	Rotate the image 90 degrees clockwise.
⧉	Switch to the slideshow mode, and start the slideshow from the selected image. (page 39)
←	Display the previous image.
→	Display the next image.

Slideshow Mode

In slideshow mode, you can view images as a slideshow.

 — Option menu

Press ENTER key on the remote commander. The slideshow pauses and the option menu appears in the lower part of the screen.

Option Menu

Items	Item descriptions
✕	Hide the option menu.
▦	Return to the thumbnail mode (page 38).
←	Display the previous image.
→	Display the next image.
⛶	Press the ▲/▼ key to change the slideshow time interval.
Slideshow time interval	
⛶	After 3 seconds, display the next image.
⛶	After 5 seconds, display the next image.
⛶	After 10 seconds, display the next image.
▓	Press the ▲/▼ key to change the slideshow effect.
Slideshow effect	
▓	The next image appears with tile transition effect.
◰	The next image appears from the left side of the screen.
◳	The next image appears from the right side of the screen.
◱	The next image appears from the top of the screen.
◲	The next image appears from the bottom of the screen.
⟲ On	Press the ▲/▼ key to change the slideshow repeat setting.
Repeat Setting	
⟲ On	After displaying the last image, the slideshow starts from the first image again.
⟲ Off	After displaying the last image, the slideshow ends and returns to the thumbnail mode.

Indicators

The indicators allow checking the status and notify you of abnormal operation of the projector. If the projector exhibits abnormal status, address the problem in accordance with the table below.

ON/STANDBY indicator

Status	Meaning/Remedies
Lights in red	The projector is in Standby mode.
Flashes in green	• The projector is ready to operate after having been turned on. • The lamp cools after the projector is turned off.
Lights in green	The projector's power is on.
Lights in orange	The projector is in With No Input (Lamp Cutoff). (page 25)
Flashes in red	The projector is in abnormal status. Symptoms are indicated by number of flashes. Address the problem in accordance with the following. If a symptom persists, despite having taken measures below, consult with qualified Sony personnel.
Flashes twice	The internal temperature is unusually high. Check the items below. • Check if nothing is blocking the ventilation holes. (pages 4, 4) • Check if the air filter is not clogged. (page 47) • Check if the Installation Attitude in the Installation menu is set correctly. (page 27)
Flashes six times	Unplug the AC power cord from a wall outlet. After checking that the ON/STANDBY indicator goes out, plug the power cord to a wall outlet again then turn on the projector.
Other number of flashes	Consult with qualified Sony personnel.

LAMP/COVER indicator

Status	Meaning/Remedies
Flashes in red	Symptoms are indicated by number of flashes. Address the problem in accordance with the following.
Flashes twice	The lamp cover is not attached securely. (page 45)
Flashes three times	The temperature of lamp is unusually high. Turn off the power and wait for lamp to cool then turn on the power again. If the symptom is shown again, the lamp may be burnt out. In this case, replace the lamp with a new one (page 45).

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
High temp.! Lamp off in 1 min.	Check the items below. • Check if nothing is blocking the ventilation holes. • Check if the air filter is not clogged. • Check if the Installation Attitude in the Installation menu is set correctly.	4, 4, 27, 47
Frequency is out of range!	Change the output setting of the connected equipment to one for signals supported by the projector.	52
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.	25
Please clean the filter.	Clean the air filter.	47
Please replace the Lamp and clean the Filter.	Replace the lamp with a new one and clean the air filter. The message appears whenever you turn on the power until you replace the lamp and reset the lamp timer.	45, 47
Projector temperature is high. High Altitude Mode should be "On" if Projector is being used at high altitude.	When not using the projector at an altitude of 1,500 m or higher, check the items below. • Check if nothing is blocking the ventilation holes. • Check if the air filter is not clogged. • Check if Installation Attitude in the Installation menu is set correctly.	4, 4, 27, 47
Not applicable!	Invalid key was pressed.	–
The control keys are locked!	"Control Key Lock" is set to "On."	24
Projector will shutdown soon Press I/⏻ Key to Restart	The I/⏻ key was pressed and the projector will be shut down soon. To cancel shutdown, press the I/⏻ key again (the projector will remain on). To turn off the projector directly, press and hold the I/⏻ key for a few seconds.	16
Lamp Dimming	Reduces lamp 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.	25

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.	24
	If the lamp or lamp cover is not attached securely, the projector cannot be turned on.	45
No image.	Check if the connecting cable is connected to external equipment firmly.	8
	Check the computer signal is set for output to an external monitor only. If you set your computer to output to both the computer's display and an external monitor, the external monitor image may not be displayed properly. Set your computer to output to only an external monitor.	12
	Check if the application "USB Display" or "Projector Station for Network Presentation" is running.	33, 36
	Check if the USB memory device connected to the projector is compatible with the projector.	37
	Check if the input source is correctly selected.	12
	Check if the picture is muted.	6
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.	33, 36
The computer cannot connect to the projector.	• Check "LAN Settings" of the projector. • Check the condition of the wireless connection.	25
On-screen display does not appear.	The on-screen display does not appear when "Status" in the Operation menu is set to "Off."	24
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, 19, 21
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, 15, 27
	When the "V Keystone" is set to "Manual," the keystone feature does not work automatically. Set "V Keystone" to "Auto" or "Manual" to set manually.	6, 15, 27
	When the projector is installed on an uneven surface, the keystone feature may not work properly. In this case, select "Manual" to set "V Keystone" manually.	6, 15, 27

Others

Symptoms	Remedy	Page
The image is dark/too bright.	The settings for "Brightness," "Contrast," and "Lamp Mode" affect brightness of the image. Check if the value is appropriate.	18, 25
	The image will be dark when the lamp is burnt out. Check "Lamp Timer," and replace the lamp with a new one if necessary.	28, 45
	"With Static Signal" is set to "On."	25
	During picture muting, the lamp is dimmed to reduce power consumption.	25
	When video signal is not input, the lamp is dimmed to reduce power consumption.	–
The image becomes darker or brighter.	When the lamp is dimmed for a long time, brightness may increase temporarily, but this is not malfunction.	–
	When the "Lamp Mode" is set to "Auto," the luminance of the lamp changes according to the input image.	25
The image is not clear.	Check if the projector is in focus.	13
	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.	8
No sound.	Check that the connecting cables between the projector and external video or audio equipment are securely connected.	8
	Check if the external audio equipment is set properly.	–
	Audio is not output if audio muting is activated.	6
	Check if the volume is not set to minimum.	6, 23
The remote commander does not work.	Check if the batteries are installed correctly.	–
	Check if the batteries are not exhausted.	–
The fan is noisy.	The sound from the fan is often greater than normal to cool the lamp, etc. in the following cases. • "Lamp Mode" is set to "High." • The unit is used at a high altitude. "High Altitude Mode" is set to "On." • The unit is used in the location where the temperature is high.	25, 27
	If the ventilation holes are blocked, the internal temperature of the projector rises and the fan noise becomes larger.	4, 4

Replacing the Lamp

Replace the lamp with a new one if a message displayed on the projected image (page 42).
Use an LMP-D213 projector lamp (not supplied) for replacement.

Caution

- The lamp remains hot after the projector is turned off. **If you touch the lamp, you may burn your finger. When you replace the lamp, wait for at least an hour after turning off the projector for the lamp to cool sufficiently.**
- Do not allow any metallic or inflammable objects into the lamp replacement slot after removing the lamp, otherwise it may cause electrical shock or fire. Do not put your hands into the slot.

Notes

- **If the lamp breaks, contact qualified Sony personnel. Do not replace the lamp yourself.**
- When removing the lamp, be sure to pull it out straight, by holding the designated location. If you touch a part of the lamp other than the designated location, you may be burned or injured. If you pull out the lamp while the projector is tilted, the pieces may scatter if the lamp breaks any may cause injury.

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

2 When the lamp has cooled sufficiently, open the lamp cover by loosening one screw.
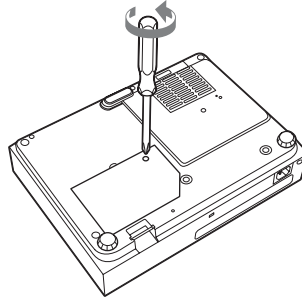
Note

For safety reasons, do not loosen any other screws.

3 Loosen the two screws on the lamp unit (❶). Fold out the handle (❷), then pull out the lamp unit by the handle (❸).

Fold out the handle.
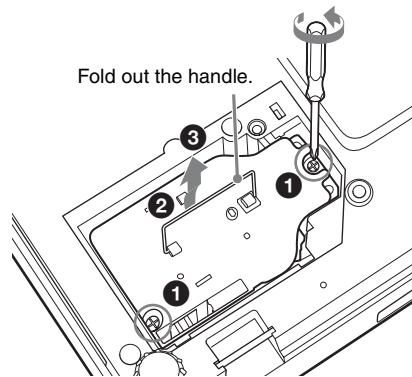
Others

Caution

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

4 Insert the new lamp all the way in until it is securely in place (❶). Tighten the two screws (❷). Fold down the handle to replace it (❸).

Fold down the handle.
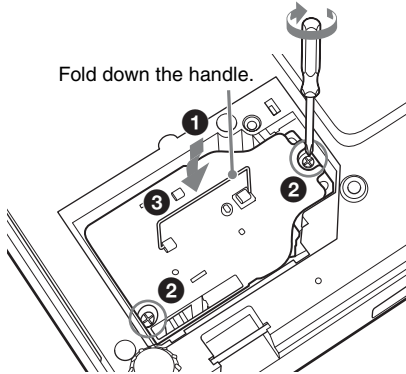
Notes

• Be careful not to touch the glass surface of the lamp and a inside conductor.
• Insert the handle firmly to attach it securely.
• The power will not turn on if the lamp is not secured properly.

5 Close the lamp cover and tighten the 1 screw.
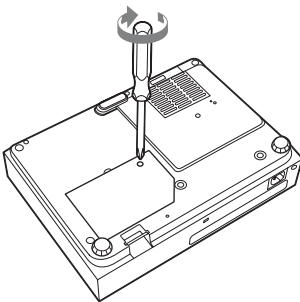
6 Connect the AC power cord to a wall outlet and turn on the projector.

7 Reset the lamp timer for notification of the next replacement time.
Select "Lamp Timer Reset" on the Function menu then press the ENTER key. When a message appears, select "Yes" to reset the lamp timer (page 23).

Caution

Disposal of the used lamp
For the customers in the USA
Lamp in this product contains mercury. Disposal of these materials may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or the Telecommunications Industry Association (www.eiae.org).

Cleaning the Air Filter

When a message appears on the projected image indicating time for a filter cleaning, clean the air filter (page 42).
If the dust cannot be removed from the air filter even after cleaning, replace the air filter with a new one. For details on purchasing/fitting a new air filter, consult with the store where you purchased the projector, or contact qualified Sony personnel.

Caution

If you neglect to clean the air filter, 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.

2 Slide out and remove the air filter cover from the unit.
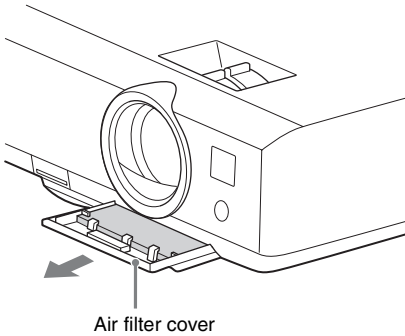
Air filter cover

3 Clean the air filter with a vacuum cleaner.

Pull out and remove the air filter, and clean it with a vacuum cleaner.

Claws
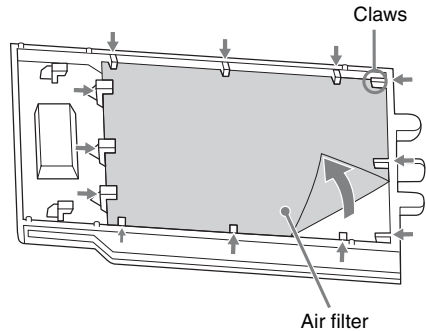
Air filter

4 Reattach the air filter cover to the unit.

Note

Install the air filter with its open weave side facing the bottom of the unit, then place the air filter cover back in the unit.

Others

Specifications

Items		Descriptions
Model		**VPL-DX146/DX126/VPL-DW126**
Projection system		3 LCD system
Display device	Effective display size	VPL-DX146/DX126: 0.63 inch (16.0 mm), 3 plate panels, Aspect ratio 4:3 VPL-DW126: 0.59 inch (15.0 mm), 3 plate panels, Aspect ratio 16:10
	Effective picture elements	VPL-DX146/DX126: 2,359,296 pixels (1024 × 768 pixels, 3 plate panels) VPL-DW126: 3,072,000 pixels (1280 × 800 pixels, 3 plate panels)
Projection lens	Zoom	Manual zoom: VPL-DX146/VPL-DW126: approx.1.3 times VPL-DX126: approx.1.2 times
	Focus	Manual
Light source		High-pressure mercury lamp, 210 W type
Projected image size		30 inches to 300 inches (0.76 m to 7.62 m)
Luminous flux (Brightness)		VPL-DX146: 3200 lm VPL-DX126/VPL-DW126: 2600 lm (when "Lamp Mode" is set to "High")
Speaker		1 W × 1 (monaural)
Applicable scanning frequency[*1]		Horizontal: 15 kHz to 92 kHz, Vertical: 48 Hz to 92 Hz
Resolution[*1]	When a computer signal is input	Maximum display resolution: 1600 × 1200 pixels (resize) Panel display resolution: VPL-DX146/DX126: 1024 × 768 pixels VPL-DW126: 1280 × 800 pixels
	When a video signal is input	NTSC, PAL, SECAM, 480/60i, 576/50i, 480/60p, 576/50p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/60p, 1080/50p
Color system		NTSC$_{3.58}$, PAL, SECAM, NTSC$_{4.43}$, PAL-M, PAL-N

Items		Descriptions
Model		**VPL-DX146/DX126/VPL-DW126**
INPUT OUTPUT (Computer/video)	INPUT A	**RGB/YPʙPʀ input connector:** Mini D-sub 15 pin female, G with sync/Y: 1 Vp-p ± 2 dB, sync negative, 75 ohms terminated, RGB/PʙPʀ: 0.7 Vp-p ± 2 dB, 75 ohms terminated, Sync signal: TTL level high impedance, positive/negative **Audio input connector:** Stereo mini jack, rated input 500 mVrms, input impedance more than 47 kohms
	INPUT B	**HDMI input connector:** HDMI 19-pin, HDCP, HDMI audio support
	VIDEO	**Video input connector:** Pin jack, 1 Vp-p ± 2 dB, sync negative, 75 ohmes terminated **Audio input connector:** Shared with INPUT A
Other connectors		**LAN connector:** RJ45, 10BASE-T/100BASE-TX
		USB connector: Type A
		USB connector: Type B
Operating temperature/ Operating humidity		0 °C to 35 °C (32 °F to 95 °F)/20% ~ 80% (no condensation)
Storage temperature/ Storage humidity		–10 °C to +60 °C (14 °F to 140 °F)/20% to 80% (no condensation)
Power requirements		100V to 240V AC, 3.0 - 1.2 A, 50/60Hz
Power consumption		VPL-DX146: **100V to 120V AC:** 291W **220V to 240V AC:** 279W VPL-DX126: **100V to 120V AC:** 290W **220V to 240V AC:** 278W VPL-DW126: **100V to 120V AC:** 294W **220V to 240V AC:** 280W
Standby power		**100V to 120V AC:** 5.7W (when "Standby mode" is set to "Standard")/0.4W(when "Standby mode" is set to "Low") **220V to 240V AC:** 5.9W (when "Standby mode" is set to "Standard")/0.5W(when "Standby mode" is set to "Low")
Heat dissipation		VPL-DX146: **100V to 120V AC:** 992BTU **220V to 240V AC:** 951BTU VPL-DX126: **100V to 120V AC:** 991BTU **220V to 240V AC:** 949BTU VPL-DW126: **100V to 120V AC:** 1004BTU **220V to 240V AC:** 956BTU

Others

Items	Descriptions
Model	**VPL-DX146/DX126/VPL-DW126**
Standard dimensions (W/H/D)	Approx. 315 × 87.2 × 233 mm (12 $^{13}/_{32}$ × 3 $^{7}/_{16}$ × 9 $^{3}/_{16}$ inches) Approx. 315 × 75 × 230.5 mm (12 $^{13}/_{32}$ × 2 $^{15}/_{16}$ × 9 $^{1}/_{16}$ inches) (without projecting parts)
Mass	Approx. 2.6 kg (5.8 lb)
Supplied accessories	See "Checking the Supplied Accessories" in the supplied Quick Reference Manual.
Optional accessories [2] [3]	**Projector Lamp LMP-D213 (for replacement)**

Notes

[1]: For details, refer to "Acceptable Input Signals" on page 52.

[2]: Information on accessories in this manual is current as of July 2013.

[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.

Notes

- Always verify that the unit is operating properly before use. SONY WILL NOT BE LIABLE FOR DAMAGES OF ANY KIND INCLUDING, BUT NOT LIMITED TO, COMPENSATION OR REIMBURSEMENT ON ACCOUNT OF THE LOSS OF PRESENT OR PROSPECTIVE PROFITS DUE TO FAILURE OF THIS UNIT, EITHER DURING THE WARRANTY PERIOD OR AFTER EXPIRATION OF THE WARRANTY, OR FOR ANY OTHER REASON WHATSOEVER.
- SONY WILL NOT BE LIABLE FOR CLAIMS OF ANY KIND MADE BY USERS OF THIS UNIT OR MADE BY THIRD PARTIES.
- SONY WILL NOT BE LIABLE FOR THE TERMINATION OR DISCONTINUATION OF ANY SERVICES RELATED TO THIS UNIT THAT MAY RESULT DUE TO CIRCUMSTANCES OF ANY KIND.

SONY WILL NOT BE LIABLE FOR DAMAGES OF ANY KIND RESULTING FROM A FAILURE TO IMPLEMENT PROPER SECURITY MEASURES ON TRANSMISSION DEVICES, UNAVOIDABLE DATA LEAKS RESULTING FROM TRANSMISSION SPECIFICATIONS, OR SECURITY PROBLEMS OF ANY KIND.
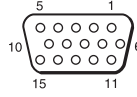
Pin assignment

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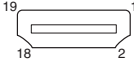
1	T.M.D.S. Data2+	11	T.M.D.S. Clock Shield
2	T.M.D.S. Data2 Shield	12	T.M.D.S. Clock –
3	T.M.D.S. Data2 –	13	N.C.
4	T.M.D.S. Data1+	14	RESERVED (N.C.)
5	T.M.D.S. Data1 Shield	15	SCL
6	T.M.D.S. Data1 –	16	SDA
7	T.M.D.S. Data0+	17	DDC GND
8	T.M.D.S. Data0 Shield	18	+5V Power
9	T.M.D.S. Data0 –	19	Hot Plug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

RGB input connector (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)		

USB connector (Type A, female)
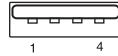
1	V_{BUS} (4.4 - 5.25 V)
2	Data–
3	Data+
4	Ground

USB connector (Type B, female)

1	VCC (+5 V)
2	Data–
3	Data+
4	Ground

Others

Acceptable Input Signals[*1]

Computer signal

Resolution	fH[kHz]/ fV[Hz]	Input connector	
		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	●	●

Resolution	fH[kHz]/ fV[Hz]	Input connector	
		RGB/ YPBPR	HDMI
1280 × 800	49.7/60	●	●

Digital TV signal[*4]

Signal	fV[Hz]	Input connector	
		RGB/ YPBPR	HDMI
480i	60	●	●
576i	50	●	●
480p	60	●	●
576p	50	●	●
1080i	60	●	●
1080i	50	●	●
720p	60	●	●
720p	50	●	●
1080p	60		●
1080p	50		●

Analog TV signal

Signal	fV[Hz]	Input connector
		VIDEO
NTSC	60	●
PAL/SECAM	50	●

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.

Projection Distance

The projection distance is the distance between the front of the lens and the surface of the projected image. The following describes the projection distance and height from the center of the lens to edge of screen by each projected screen size. 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 the center of the lens to projected image surface).

Caution

Never mount the projector on the ceiling or move it by yourself. Be sure to consult with qualified Sony personnel (charged).
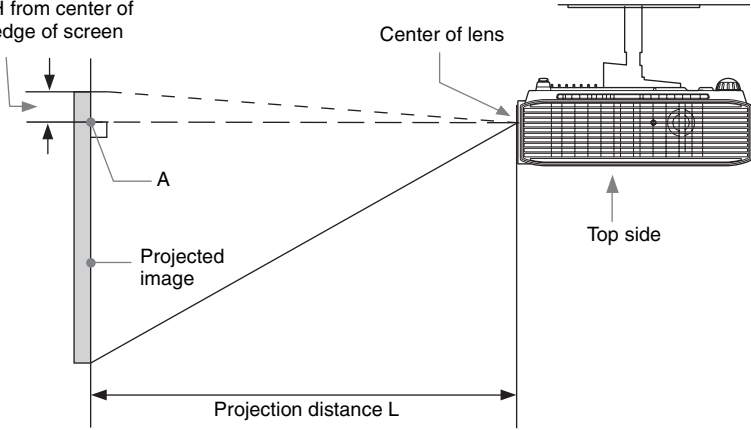
Floor Installation
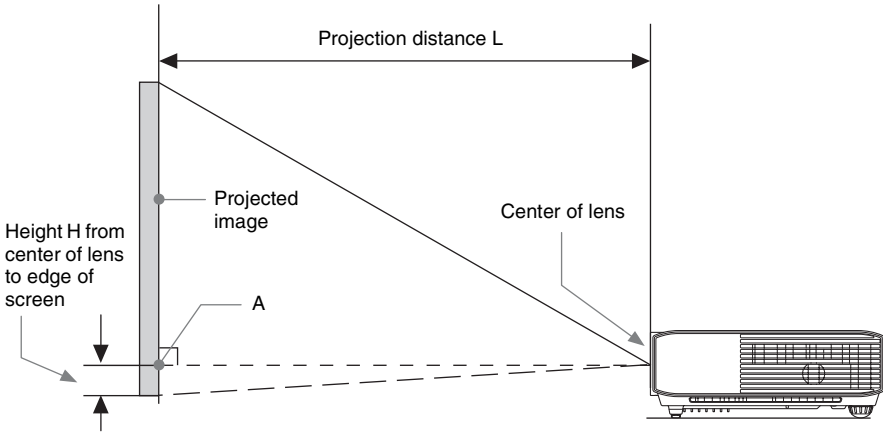
Ceiling Installation

Height H from center of lens to edge of screen

Center of lens

A

Projected image

Top side

Projection distance L

L: Projection distance L
H: Height H from center of lens to edge of screen

Projection distance table (VPL-DX146)

Unit: m (inches)

Projected image size		Projection Distance L	Height H from center of lens to edge of screen	
Diagonal D	Width × Height		Minimum Projection Distance L	Maximum Projection Distance L
80 inch (2.03 m)	1.63 × 1.22 (64 × 48)	2.25-2.92 (89-115)	-0.20 (-8)	-0.20 (-8)
100 inch (2.54 m)	2.03 × 1.52 (80 × 60)	2.81-3.66 (111-144)	-0.25 (-10)	-0.25 (-10)
120 inch (3.05 m)	2.44 × 1.83 (96 × 72)	3.38-4.40 (133-173)	-0.30 (-12)	-0.30 (-12)
150 inch (3.81 m)	3.05 × 2.29 (120 × 90)	4.23-5.51 (167-217)	-0.38 (-15)	-0.38 (-15)
200 inch (5.08 m)	4.06 × 3.05 (160 × 120)	5.65-7.36 (223-289)	-0.51 (-20)	-0.51 (-20)

Projection distance formula (VPL-DX146)

D: Projected image size (Diagonal)
H: Height H from center of lens to edge of screen

Expression#1   Unit: m (inches)

Minimum Projection Distance L	Maximum Projection Distance L
$L=0.028366 \times D-0.0290$ $(L=1.116781 \times D-1.1416)$	$L=0.036956 \times D-0.0283$ $(L=1.454972 \times D-1.1124)$

Expression#2

Height H from center of lens to edge of screen	
Minimum Projection Distance L	Maximum Projection Distance L
$H=-0.00254 \times D+0.00000$ $(H=-0.10000 \times D+0.00000)$	$H=-0.00254 \times D+0.00000$ $(H=-0.10000 \times D+0.00000)$

Projection distance table (VPL-DX126)

Unit: m (inches)

Projected image size		Projection Distance L	Height H from center of lens to edge of screen	
Diagonal D	Width × Height		Minimum Projection Distance L	Maximum Projection Distance L
80 inch (2.03 m)	1.63 × 1.22 (64 × 48)	2.42-2.88 (95-113)	-0.20 (-8)	-0.20 (-8)
100 inch (2.54 m)	2.03 × 1.52 (80 × 60)	3.02-3.60 (119-141)	-0.25 (-10)	-0.25 (-10)
120 inch (3.05 m)	2.44 × 1.83 (96 × 72)	3.63-4.33 (143-170)	-0.30 (-12)	-0.30 (-12)
150 inch (3.81 m)	3.05 × 2.29 (120 × 90)	4.55-5.42 (179-213)	-0.38 (-15)	-0.38 (-15)
200 inch (5.08 m)	4.06 × 3.05 (160 × 120)	6.07-7.23 (239-284)	-0.51 (-20)	-0.51 (-20)

Projection distance formula (VPL-DX126)

D: Projected image size (Diagonal)
H: Height H from center of lens to edge of screen

Expression#1   Unit: m (inches)

Minimum Projection Distance L	Maximum Projection Distance L
L=0.030427 × D-0.0234 (L=1.197898 × D-0.9193)	L=0.036301 × D-0.0236 (L=1.429177 × D-0.9283)

Expression#2

Height H from center of lens to edge of screen	
Minimum Projection Distance L	Maximum Projection Distance L
H=-0.00254 × D+0.00000 (H=-0.10000 × D+0.00000)	H=-0.00254 × D+0.00000 (H=-0.10000 × D+0.00000)

Projection distance table (VPL-DW126)

Unit: m (inches)

Projected image size		Projection Distance L	Height H from center of lens to edge of screen	
Diagonal D	Width × Height		Minimum Projection Distance L	Maximum Projection Distance L
80 inch (2.03 m)	1.72 × 1.08 (68 × 42)	2.36-3.05 (93-120)	-0.20 (-8)	-0.20 (-8)
100 inch (2.54 m)	2.15 × 1.35 (85 × 53)	2.95-3.82 (117-150)	-0.25 (-10)	-0.25 (-10)
120 inch (3.05 m)	2.58 × 1.62 (102 × 64)	3.55-4.59 (140-180)	-0.29 (-12)	-0.29 (-12)
150 inch (3.81 m)	3.23 × 2.02 (127 × 79)	4.44-5.75 (175-226)	-0.37 (-15)	-0.37 (-15)
200 inch (5.08 m)	4.31 × 2.69 (170 × 106)	5.93-7.67 (234-302)	-0.49 (-19)	-0.49 (-19)

Projection distance formula (VPL-DW126)

D: Projected image size (Diagonal)
H: Height H from center of lens to edge of screen

Expression#1   Unit: m (inches)

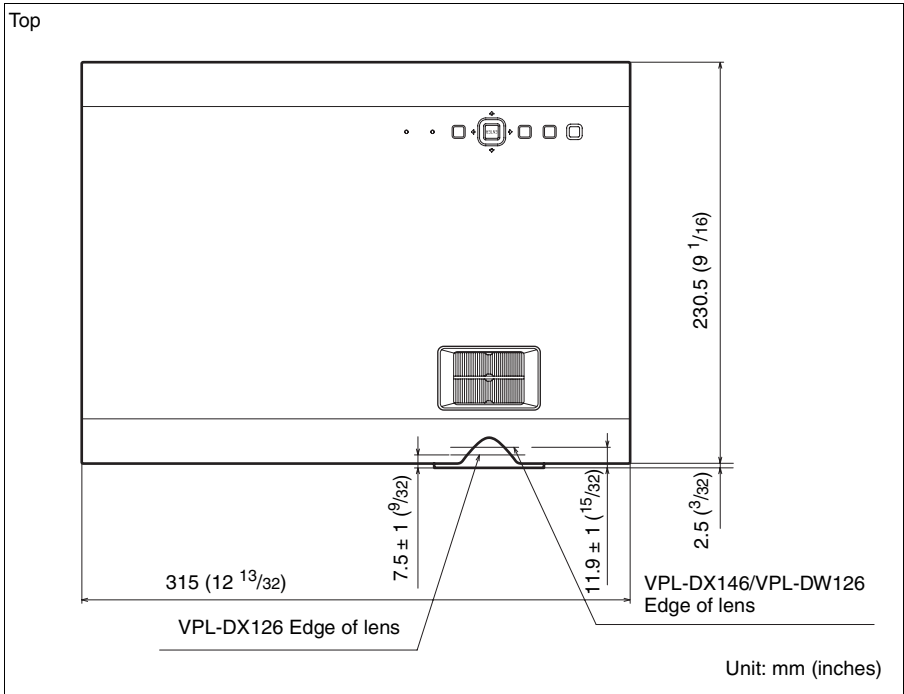| Minimum Projection Distance L	Maximum Projection Distance L
$L=0.029757 \times D-0.0291$ $(L=1.171525 \times D-1.1450)$	$L=0.038536 \times D-0.0282$ $(L=1.517164 \times D-1.1091)$

Expression#2

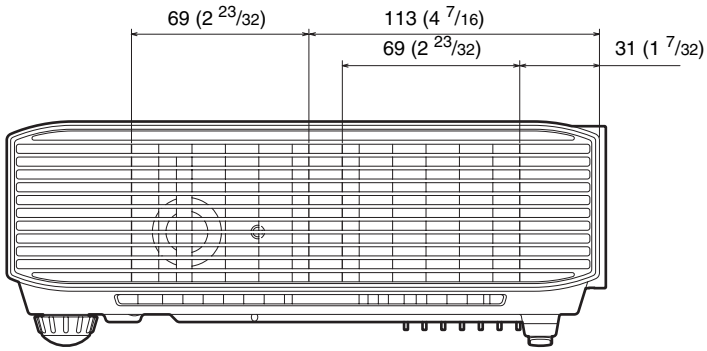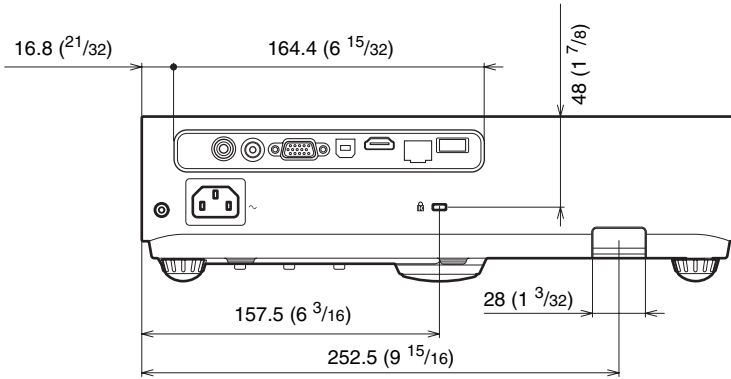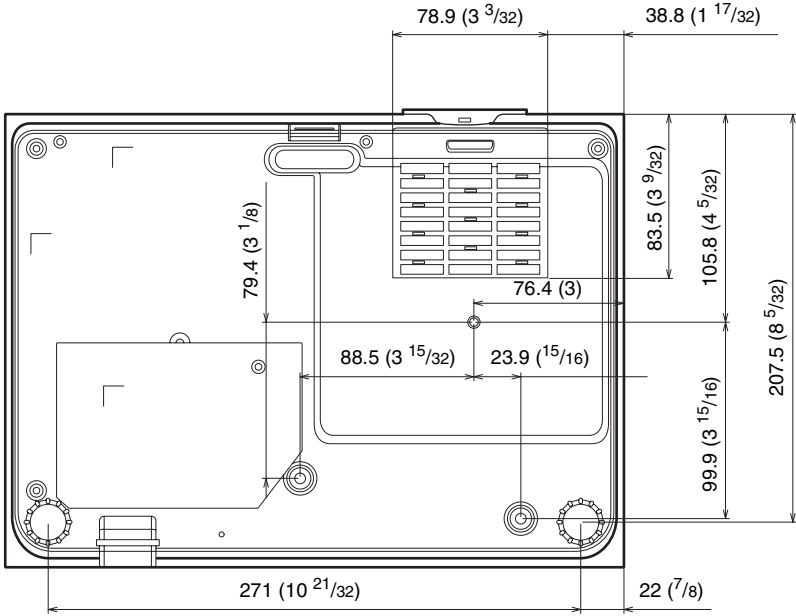| Height H from center of lens to edge of screen	
Minimum Projection Distance L	Maximum Projection Distance L
$H=-0.00246 \times D+0.00000$ $(H=-0.09675 \times D+0.00000)$	$H=-0.00246 \times D+0.00000$ $(H=-0.09675 \times D+0.00000)$

Others

Dimensions

Top

230.5 (9 ^{1}/$_{16}$)

7.5 ± 1 (^{9}/$_{32}$)

11.9 ± 1 (^{15}/$_{32}$)

2.5 (^{3}/$_{32}$)

315 (12 ^{13}/$_{32}$)

VPL-DX146/VPL-DW126
Edge of lens

VPL-DX126 Edge of lens

Unit: mm (inches)

Front

157.5 (6 ^{3}/$_{16}$)

81 (3 ^{3}/$_{16}$)

33.3 (1 ^{5}/$_{16}$)

26 (1 ^{1}/$_{32}$)

46.3 (1 ^{13}/$_{16}$)

75 (2 ^{15}/$_{16}$)

66 (2 ^{19}/$_{32}$)

78 (3 ^{1}/$_{16}$)

87.2 (3 ^{7}/$_{16}$)

Unit: mm (inches)

Side

69 (2 ^{23}/32) 113 (4 ^{7}/16)

69 (2 ^{23}/32) 31 (1 ^{7}/32)

Unit: mm (inches)

Rear

16.8 (^{21}/32) 164.4 (6 ^{15}/32) 48 (1 ^{7}/8)

157.5 (6 ^{3}/16) 28 (1 ^{3}/32)

252.5 (9 ^{15}/16)

Unit: mm (inches)

Others

Bottom

78.9 (3 $\frac{3}{32}$)   38.8 (1 $\frac{17}{32}$)

83.5 (3 $\frac{9}{32}$)

105.8 (4 $\frac{5}{32}$)

79.4 (3 $\frac{1}{8}$)

76.4 (3)

207.5 (8 $\frac{5}{32}$)

88.5 (3 $\frac{15}{32}$)   23.9 ($\frac{15}{16}$)

99.9 (3 $\frac{15}{16}$)

271 (10 $\frac{21}{32}$)   22 ($\frac{7}{8}$)

Unit: mm (inches)

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Others

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