

# ***Data Projector***

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Quick Reference Manual

**VPL-EW5**  
**VPL-EX50/EX5/EX5U**  
**VPL-ES5**

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# About the Quick Reference Manual

This Quick Reference Manual explains the connections and basic operations of this unit, and gives notes on operations and information required for maintenance. For details on the operations or safety precautions, refer to the Operating Instructions.

## On trademarks

- Display Data Channel is a trademark of the Video Electronics Standards Association.
- HDMI, HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.
- All other trademarks and registered trademarks are trademarks or registered trademarks of their respective holders. In this manual, ™ and © marks are not specified.

The instructions of EX5 double as the ones of EX5U when there is not a special note.

# Notes on Use

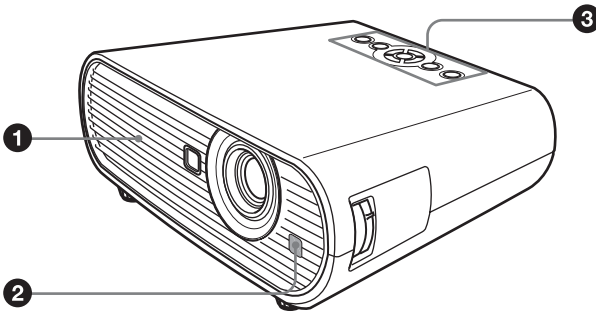
## Note on the Ventilation Holes

Do not block ventilation holes (exhaust/intake). If they are blocked, internal heat may build up and cause fire or damage to the unit.

Check the positions of the ventilation holes shown in the following illustrations.

For other precautions, read the separate Operating Instructions carefully.

### Top/Right Side/Front



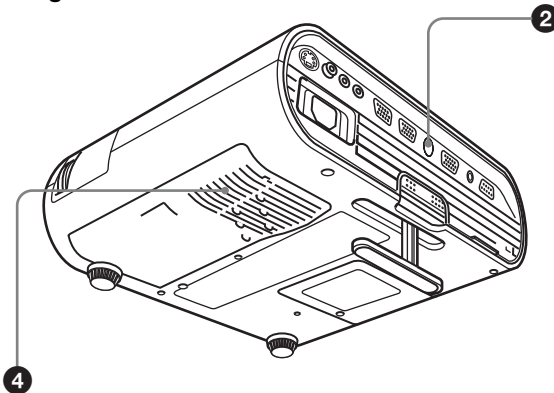
❶ Ventilation holes (exhaust)

❷ Remote control detector

❸ Indicators

❹ Ventilation holes (intake)

### Rear/Right Side/Bottom



# Projecting

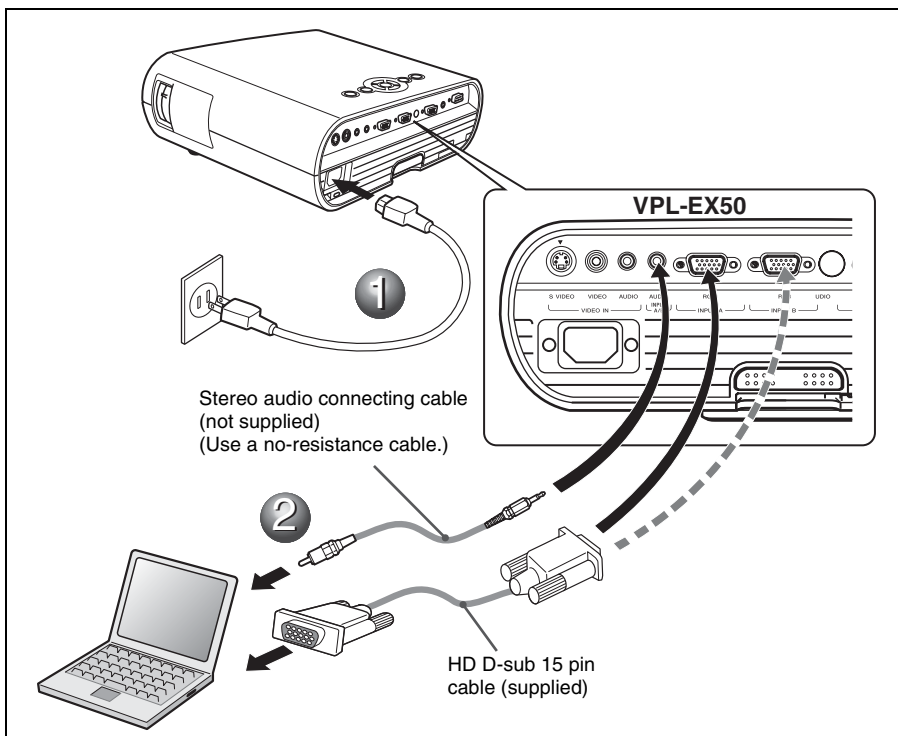
## Connecting the Projector

### When you connect the projector, make sure to:

- Turn off all equipment before making any connections.
- Use the proper cables for each connection.
- Insert the cable plugs firmly. When pulling out a cable, be sure to pull it out from the plug, not the cable itself.
- Refer also to the instruction manual of the equipment to be connected.

### To connect a computer (Analog)

- ❶ Plug the AC power cord into a wall outlet.
- ❷ Connect the projector to a computer.



### Note

For stereo audio connection, connect the stereo audio connecting cable to following connectors:

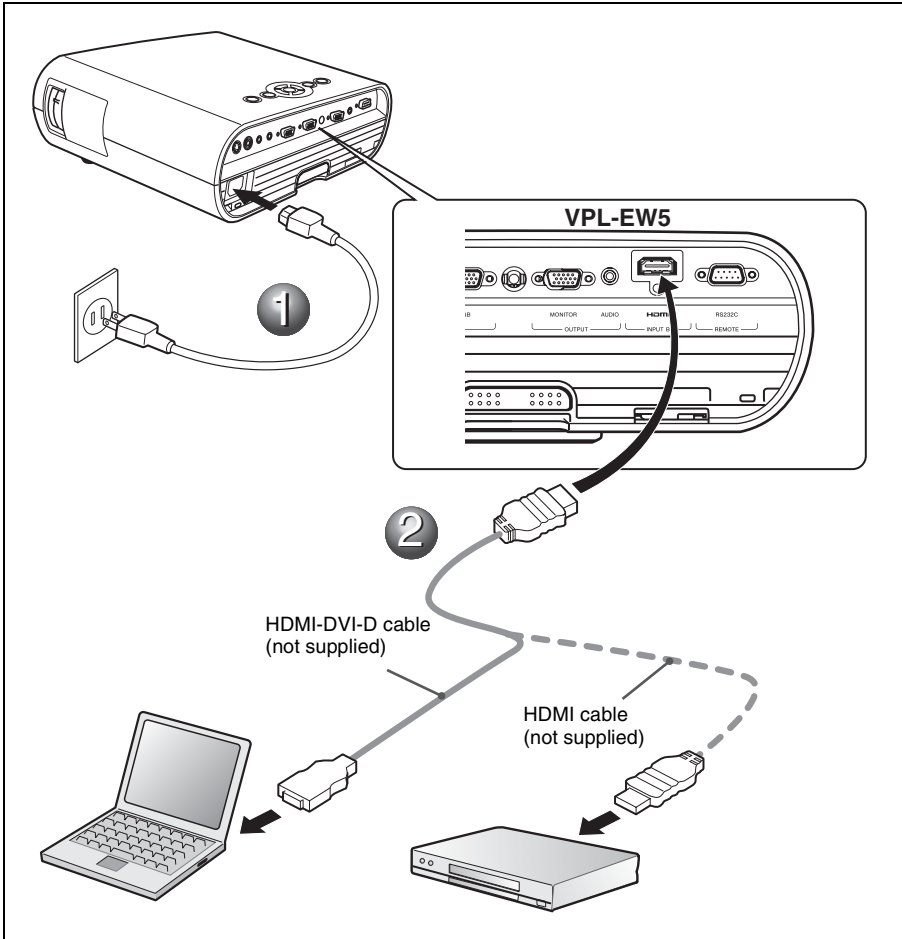
VPL-EX5/ES5: INPUT A/VIDEO IN AUDIO connector

VPL-EW5: INPUT A AUDIO connector

VPL-EX50: INPUT A/B AUDIO connector

To connect a computer (Digital) or video equipment (Digital) (VPL-EW5 only)

- 1 Plug the AC power cord into a wall outlet.
- 2 Connect the projector to a computer or video equipment.



**Notes**

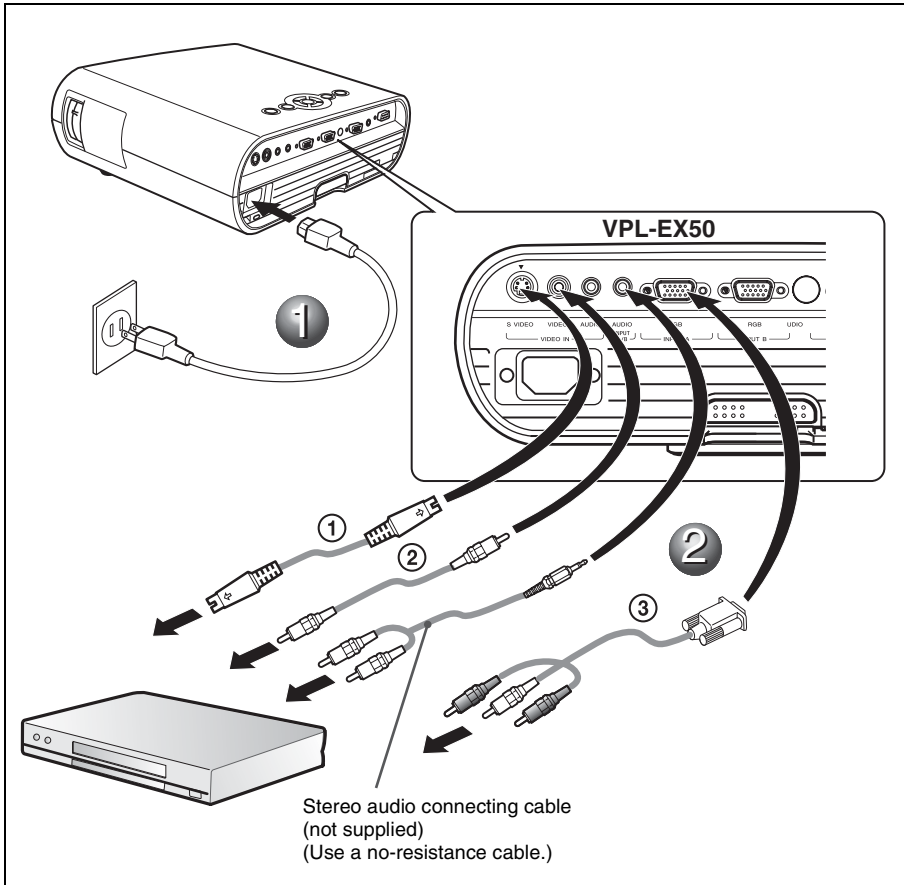
- Be sure to use the HDMI cable with an HDMI logo.
- The HDMI connector of this projector is not compatible with DSD (Direct Stream Digital) Signal or CEC (Consumer Electronics control) Signal.

## To connect a VCR/DVD player

- 1 Plug the AC power cord into a wall outlet.
- 2 Connect the projector to a video equipment.

For video signal connections, the following three connecting options are available:

- 1 S video (Mini DIN 4-pin) cable (not supplied)
- 2 Composite video (phono) cable (not supplied)
- 3 Component (phono × 3) cable (not supplied)



### Notes

For stereo audio connection, connect the stereo audio connecting cable to following connectors:

VPL-EX5/ES5: INPUT A/VIDEO IN AUDIO connector

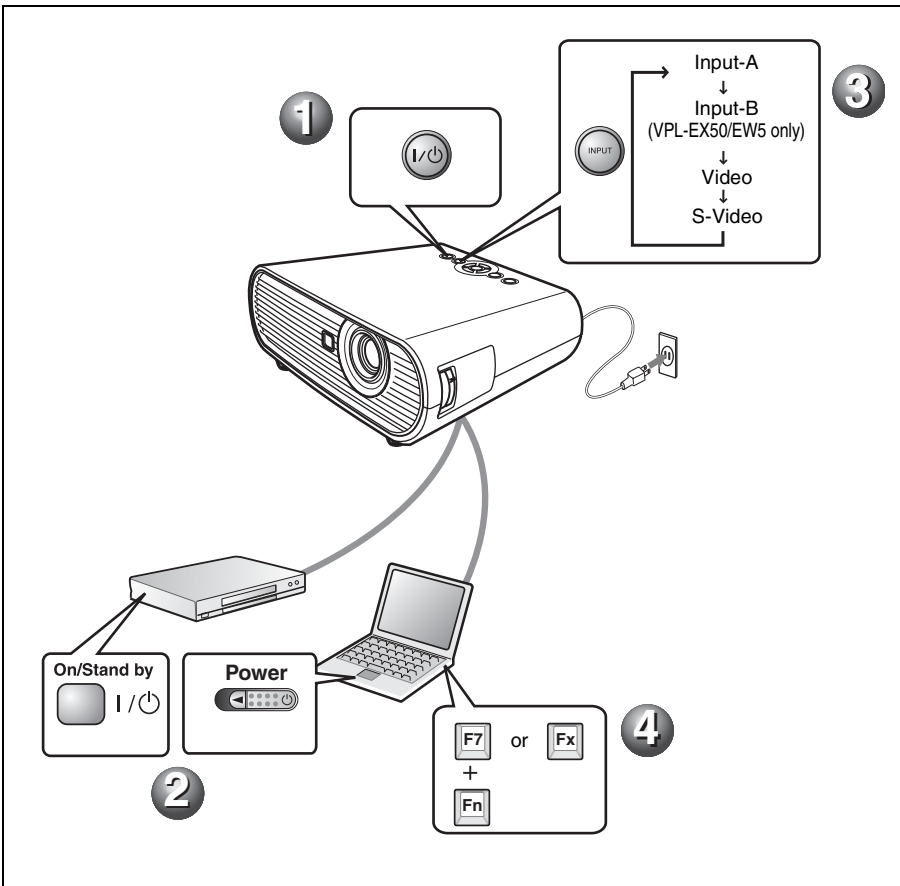
VPL-EW5/EX50: VIDEO IN AUDIO connector

## Projecting

### Note

EX5U does not have the Control panel keys. Use the Remote Commander for all operations.

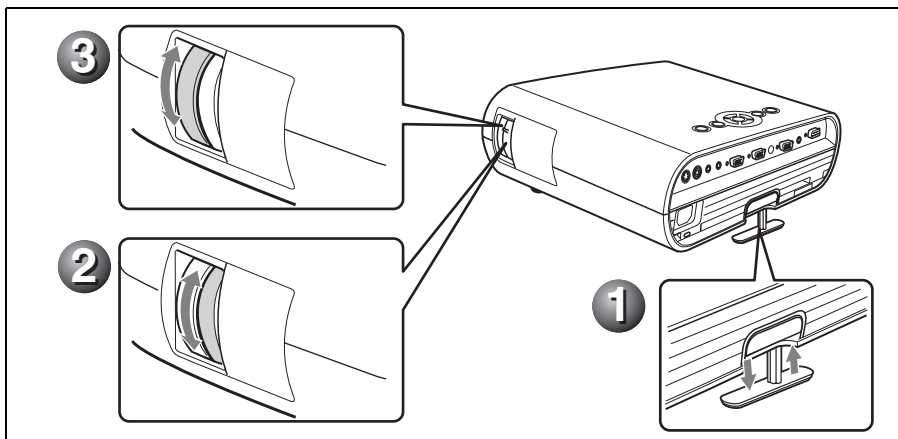
- 1 Press the I/⏻ (on/standby) key.
- 2 Turn on the equipment connected to the projector.
- 3 Press the INPUT key on the Remote Commander or the control panel to select the input source.
- 4 When the computer is connected, set it to output the signal to only the external monitor.



## Adjusting the Projector

- 1 Adjust the position of the picture.
- 2 Adjust the size of the picture.
- 3 Adjust the focus.

The projector is equipped with the Picture menu to select the picture mode, and the Screen menu to select the appropriate aspect ratio of the picture.

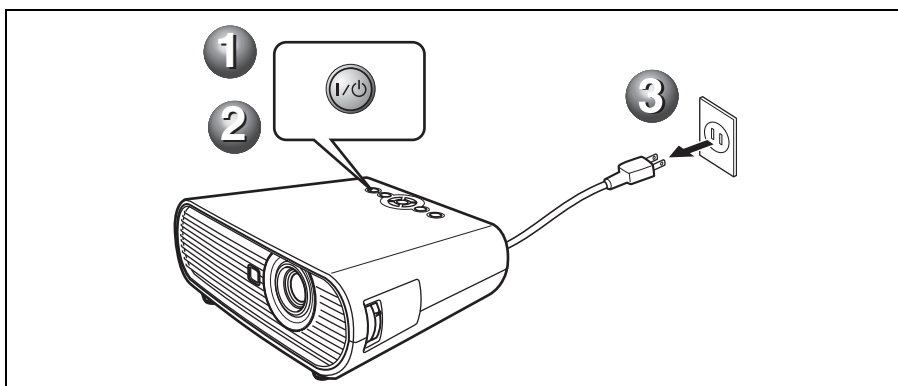


## Turning off the Power

### Note

EX5U does not have the Control panel keys. Use the Remote Commander for all operations.

- 1 Press the I/⏻ (on/standby) key.
- 2 When a message appears, press the I/⏻ (on/standby) key again.
- 3 Unplug the AC power cord from the wall outlet after the fan stops running and the I/⏻ (on/standby) key lights in red. (Except when using the Direct Power On/Off function or the Off & Go function.)





# Replacing the Lamp

The lamp used as a light source is consumable product. Thus replace the lamp with a new one in the following cases.

- When the lamp has burnt out or dims
- “Please replace the Lamp.” appears on the screen
- The LAMP/COVER indicator lights up (repeats flashing three times)

The lamp life varies depending on conditions of use.

Use an LMP-E190 Projector Lamp as the replacement lamp.

Use of any other lamps than the LMP-E190 may cause damage to the projector.

## Notes

- **If the lamp breaks, ask qualified Sony personnel to replace the lamp and to check inside.**
- Pull out the lamp by holding the handle.
- When removing the lamp, make sure it remains horizontal, then pull straight up. Do not tilt the lamp. If you pull out the lamp while it is tilted and if the lamp breaks.

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

## Note

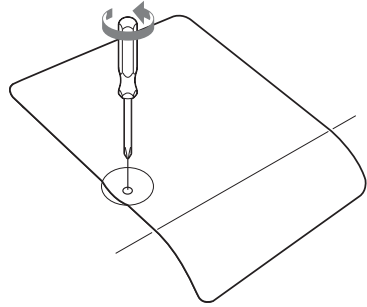
When replacing the lamp after using the projector, wait for at least an hour for the lamp to cool.

- 2** Place a protective sheet (cloth) beneath the projector. Turn the projector over so you can see its underside.

## Note

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

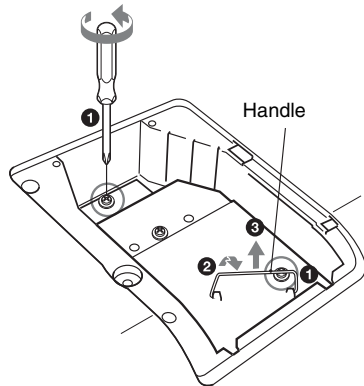
- 3** Open the lamp cover by loosening the screw with a Phillips screwdriver.



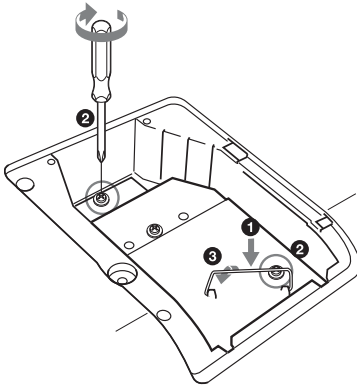
## Note

For safety reasons, do not loosen any other screws.

- 4** Loosen the two screws on the lamp unit with the Phillips screwdriver (1). Fold out the handle (2), then pull out the lamp unit by the handle (3).



- 5** Insert the new lamp all the way in until it is securely in place (1). Tighten the two screws (2). Fold down the handle to replace it (3).



**Notes**

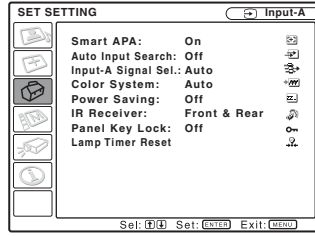
- Be careful not to touch the glass surface of the lamp.
- The power will not turn on if the lamp is not secured properly.
- Do not allow any liquid or other objects into the slot **to avoid electrical shock or fire.**

- 6** Close the lamp cover and tighten the screw.

**Note**

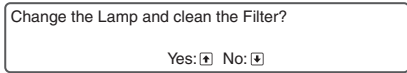
Be sure to attach the lamp cover securely as it was. If not, the projector cannot be turned on.

- 7** Turn the projector back over.
- 8** Connect the power cord.  
The I/O key lights in red.
- 9** Press the I/O key to turn the projector on.
- 10** Press the MENU key, and then select the Setup menu.
- 11** Select “Lamp Timer Reset”, and then press the ENTER key.



- 12** Select “Execute” with the ▼ key, and then press the ENTER key.

The Lamp Timer is initialized to 0, and “Change the Lamp and clean the Filter?” is displayed in the menu screen.



*Refer to page 11 for “Cleaning the Air Filter”.*

- 13** Select “Yes” with the ▲ key.  
“Lamp Timer Reset Complete!” is displayed in the menu screen.

**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 Electronic Industries Alliance ([www.eiae.org](http://www.eiae.org)).

# Cleaning the Air Filter

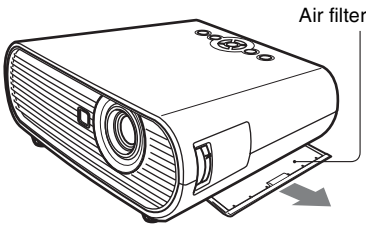
The air filter should be cleaned whenever you replace the lamp.

Remove the air filter, and then remove the dust with a vacuum cleaner.

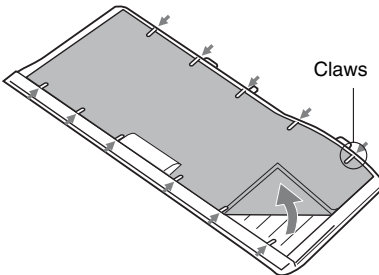
The time needed to clean the air filter will vary depending on the environment or how the projector is used.

When it becomes difficult to remove the dust from the filter with a vacuum cleaner, remove the air filter and wash it.

- 1 Turn the power off and unplug the power cord.
- 2 Draw out the air filter cover and remove it.



- 3 Remove the air filter.



- 4 Wash the air filter with a mild detergent solution and dry it in a shaded place.
- 5 Attach the air filter so that it fits into the each claws on the air filter cover and replace the cover.

## Notes

- 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.
- Be sure to attach the air filter cover firmly; the power can not be turned on if it is not closed securely.
- The air filter has a face and a reverse side. Place the air filter so that it fits in a notch on the air filter cover.

# Troubleshooting

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

For details on the symptoms, see the Operating Instructions contained in the CD-ROM.

## Power

Symptom	Cause and Remedy
The power is not turned on.	<ul style="list-style-type: none"><li>• The power has been turned off and on with the I/⏻ key at a short interval. → Wait for about 90 seconds before turning on the power.</li><li>• The lamp cover is not secured. → Close the lamp cover securely.</li><li>• The air filter cover is detached. → Attach the air filter cover securely.</li></ul>

## Picture

Symptom	Cause and Remedy
No picture.	<ul style="list-style-type: none"><li>• A cable is disconnected or the connections are wrong. → Check that the proper connections have been made.</li><li>• The connections are wrong. → This projector is compatible with DDC2B (Digital Data Channel 2B). If your computer is compatible with DDC, turn the projector on according to the following procedures. 1 Connect the projector to the computer. 2 Turn the projector on. 3 Start the computer.</li><li>• Input selection is incorrect. → Select the input source correctly.</li><li>• The picture is muted. → Press the PIC MUTING key to release the picture muting.</li><li>• The computer signal is not set to output to an external monitor or set to output both to an external monitor and a LCD monitor of a computer. → Set the computer signal to output <b>only</b> to an external monitor .</li></ul>
The picture is noisy.	<ul style="list-style-type: none"><li>• Noise may appear on the background depending on the combination of the number of dots input from the computer and the numbers of pixels on the LCD panel. → Change the desktop pattern on the connected computer.</li></ul>
The picture is not clear.	<ul style="list-style-type: none"><li>• The picture is out of focus. → Adjust the focus.</li><li>• Condensation has accumulated on the lens. → Leave the projector for about two hours with the power on.</li></ul>

Symptom	Cause and Remedy
The image extends beyond the screen.	The APA key has been pressed even though there are black edges around the image. → Display the full image on the screen and press the APA key. Adjust “Shift” in the Input setting menu properly.
The picture flickers.	“Dot Phase” in the Input setting menu has not been adjusted properly. → Adjust “Dot Phase” in the Input setting menu properly.

## Indicators

Message	Meaning and Remedy
The LAMP/COVER indicator flashes in orange. (Repetition rate of 2 flashes)	<ul style="list-style-type: none"> <li>The lamp cover or the air filter cover is detached. → Attach the cover securely.</li> </ul>
The LAMP/COVER indicator flashes in orange. (Repetition rate of 3 flashes)	<ul style="list-style-type: none"> <li>The lamp has reached the end of its life. → Replace the lamp.</li> <li>The lamp has reached a high temperature. → Wait for 60 seconds to cool the lamp and then turn on the power again.</li> </ul>
I/⏻ key flashes in red. (Repetition rate of 2 flashes)	<ul style="list-style-type: none"> <li>The internal temperature is unusually high. → Check to see that nothing is blocking the ventilation holes.</li> <li>The projector is being used at a high altitude. → Ensure that “High Altitude Mode” in the Setup menu is set to “On.”</li> </ul>
I/⏻ key flashes in red. (Repetition rate of 4 flashes)	<p>The fan is broken.</p> <p>→ Consult with qualified Sony personnel.</p>
I/⏻ key flashes in red. (Repetition rate of 6 flashes)	<p>Unplug the AC power cord from the wall outlet after the I/⏻ indicator goes out, plug the power cord to the wall outlet, and then turn the projector on again. If the I/⏻ flashes in red and the problem persists, the electrical system has failed.</p> <p>→ Consult with qualified Sony personnel.</p>

# Specifications

## Projection system

3 LCD panels, 1 lens, 3 primary color shutter system

LCD panel VPL-ES5: 0.63-inch SVGA panel, about 1,440,000 pixels (800 × 600 × 3)

VPL-EX50/EX5: 0.63-inch XGA panel, about 2,360,000 pixels (1024 × 768 × 3)

VPL-EW5: 0.59-inch WXGA panel, about 3,070,000 pixels (1280 × 800 × 3)

Lamp 190 W Ultra high pressure lamp

## Projected picture size

40 to 300-inches (measured diagonally)

Light output VPL-EX50<sup>1)</sup>: 2500 lm

VPL-EW5<sup>1)</sup>/EX5/ES5: 2000 lm

VPL-EX5U: 1500 lm

<sup>1)</sup> When the Lamp Mode is set to “High.”

Throwing distance (When placed on the floor./ Adjuster not stretched, and the V Keystone function has been done.)

### VPL-EX50/EX5/ES5:

40-inch: 1.1 to 1.4 m  
(3.6 to 4.6 feet)

80-inch: 2.3 to 2.8 m  
(7.5 to 9.2 feet)

100-inch: 2.9 to 3.5 m  
(9.5 to 11.5 feet)

150-inch: 4.4 to 5.2 m  
(14.4 to 17.1 feet)

200-inch: 5.8 to 7.0 m  
(19.0 to 23.0 feet)

250-inch: 7.3 to 8.8 m  
(24.0 to 28.9 feet)

300-inch: 8.8 to 10.5 m  
(28.9 to 34.5 feet)

### VPL-EW5:

(When “Aspect” on the Signal menu is set to “Full 2”)

40-inch: 1.2 to 1.5 m  
(3.9 to 4.9 feet)

80-inch: 2.5 to 2.9 m  
(8.2 to 9.5 feet)

100-inch: 3.1 to 3.7 m  
(10.2 to 12.1 feet)

150-inch: 4.6 to 5.6 m  
(15.1 to 18.4 feet)

200-inch: 6.2 to 7.4 m  
(20.3 to 24.3 feet)

250-inch: 7.7 to 9.3 m  
(25.3 to 30.5 feet)

300-inch: 9.3 to 11.1 m  
(30.5 to 36.4 feet)

There may be a slight difference between the actual value and the design value shown above.

Color system NTSC3.58/PAL/SECAM/NTSC4.43/PAL-M/PAL-N/PAL60 system, switched automatically/manually (NTSC4.43 is the color system used when playing back a video recorded in NTSC on a NTSC4.43 system VCR.)

Acceptable computer signals<sup>2)</sup>

fH: 19 to 92 kHz

fV: 48 to 92 Hz

(Maximum input signal resolution:

SXGA+ 1400 × 1050

fV: 60 Hz)

<sup>2)</sup> Set the resolution and the frequency of the signal of the connected computer within the range of acceptable preset signals of the projector.

## Applicable video signals

15 k RGB 50/60 Hz, Progressive component 50/60 Hz, DTV (480/60i, 575/50i, 480/60p, 575/50p, 720/60p, 720/50p, 1080/60i, 1080/50i), Composite video, Y/C video

Dimensions 314 × 109 × 269 mm  
(12 <sup>3</sup>/<sub>8</sub> × 4 <sup>3</sup>/<sub>8</sub> × 10 <sup>5</sup>/<sub>8</sub> inches)

(w/h/d) (not including the projection parts)

Mass VPL-EX50/EW5:

Approx. 3.0 kg (6 lb 10 oz)

VPL-EX5/ES5:

Approx. 2.9 kg (6 lb 6 oz)

## Power requirements

VPL-EX50/EW5: AC 100 to 240 V, 2.6 to 1.1 A, 50/60 Hz

VPL-EX5/ES5: AC 100 to 240 V, 2.2 to 1.0 A, 50/60 Hz

## Power consumption

VPL-EX50/EW5: Max.260 W (in standby 3 W)

VPL-EX5/ES5: Max.225 W (in standby 3 W)

## Supplied accessories

Remote Commander (1)

Lithium battery CR2025 (1)

HD D-sub 15 pin cable (1.8 m) (1)  
(1-832-428-11, SONY)

Carrying case (1)

AC power cord (1)

Lens cap (1)

Operating Instructions (CD-ROM)  
(except for VPL-EX5U) (1)  
Operating Instructions (VPL-  
EX5U) (1)  
Quick Reference Manual (1)  
Safety Regulations (except for  
VPL-EX5U) (1)  
Security Label (1)

Design and specifications are subject to change  
without notice.

**Note**

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.

**Optional accessories**

Projector Lamp  
LMP-E190

<http://www.sony.net/>

Halogenated flame retardants are not used in cabinets and printed wiring boards.

Sony Corporation Printed in China

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