

LCD Data Projector

Operating Instructions

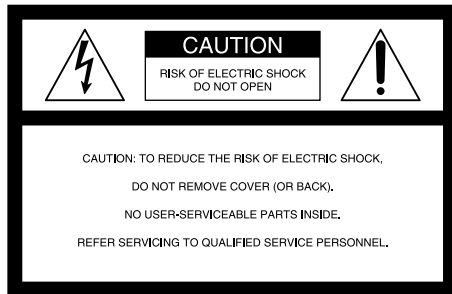
EN

VPL-X1000U
VPL-X1000E
VPL-X1000M

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.



This symbol is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



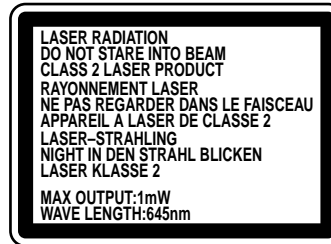
This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For the customers in the USA

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

For the customers of VPL-X1000E/X1000M



This label is located on the rear of the Remote Commander.



This label is located on the side of the Remote Commander.

For the customers of VPL-X1000U



This label is located on the rear of the Remote Commander.



This label is located on the rear of the Remote Commander.

Laser light shines out of this window.



Caution

use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Notes

- Do not aim the laser at people or not look into the laser transmitter.
- When the Remote Commander causes malfunction, consult with qualified Sony personnel. We change the Remote Commander as new one according to the guarantee.

For the customers in Canada

This Class A digital apparatus complies with Canadian ICES-003.

For the customers in the United Kingdom

WARNING

THIS APPARATUS MUST BE EARTHED

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Green-and-Yellow: Earth
Blue: Neutral
Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol \perp or coloured green or green-and-yellow.

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Voor de klanten in Nederland



Bij dit product zijn batterijen geleverd. Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA.

The socket-outlet should be installed near the equipment and be easily accessible.

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
On safety

- Check that the operating voltage of your unit is identical with the voltage of your local power supply. If voltage adaptation is required, consult with qualified Sony personnel.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it further.
- Unplug the unit from the wall outlet if it is not to be used for several days.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- The wall outlet should be near the unit and easily accessible.
- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- Do not look into the lens while the lamp is on.
- Do not aim the laser at people or not look into the laser transmitter.
- Do not place your hand or objects near the ventilation holes — the air coming out is hot.
- When the projector is mounted on the ceiling, the Sony PSS-600 Projector Suspension Support must be used for installation.
- Be careful not to catch your fingers by the adjusters when you lift up the projector. Do not push hard on the top of the projector with the adjusters out.

On illumination

- To obtain the best picture, the front of the screen should not be exposed to direct lighting or sunlight.
- Ceiling-mounted spot lighting is recommended. Use a cover over fluorescent lamps to avoid lowering the contrast ratio.
- Cover any windows that face the screen with opaque draperies.
- It is desirable to install the projector in a room where floor and walls are not of light-reflecting material. If the floor and walls are of reflecting material, it is recommended that the carpet and wall paper be changed to a dark color.

On preventing internal heat build-up

After you turn off the power with the I /  key on the Remote Commander or on the control panel, do not disconnect the unit from the wall outlet while the cooling fan is still running.

Caution

The projector is equipped with ventilation holes (intake) at the bottom and ventilation holes (exhaust) on the front. Do not block or place anything near these holes, or internal heat build-up may occur, causing picture degradation or damage to the projector.

On cleaning

- To keep the cabinet looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents, such as thinner, benzene, or abrasive cleansers, since these will damage the cabinet.
- Avoid touching the lens. To remove dust on the lens, use a soft dry cloth. Do not use a damp cloth, detergent solution, or thinner.
- Clean the filter at regular intervals.

On repacking

- Save the original shipping carton and packing material; they will come in handy if you ever have to ship your unit. For maximum protection, repack your unit as it was originally packed at the factory.

High brightness, high picture quality

- **High brightness**

The LCD panel with aspherical microlens and the 120 W UHP lamp allow high brightness (light output 1100 ANSI lumen) and excellent uniformity on the picture.

- **High resolution**

By adopting three 1.3-inch, about 790,000-pixel XGA panels, this projector offers resolution of 1024 × 768 dots for RGB input and 750 horizontal TV lines for video input.

Simple setup

- **Sony original APA (Auto Pixel Alignment) function**

You can get the clearest picture automatically by simply pressing the APA key when the signal is input from a computer.

- **Simple setup with external equipment**

This projector has 38 kinds of preset data for input signals. You can get a suitable picture by connecting an equipment with supplied cable and pressing the APA key.

Easy presentation

- **Remote Commander with mouse control and laser pointer functions**

You can operate a computer with the Remote Commander since the unit has a build-in mouse receiver. For your presentation, you can use the laser pointer built in the Remote Commander as well.

- **High portability**

This projector has been downsized to 5.9 kg (13 lb) of mass and 12 cm (4 ³/₄ inches) of height. In addition, the carrying handle and the front cover that holds the Remote Commander make it all the more convenient to carry.

Accepts various input signals

- **Scan converter loaded**

This projector has a build-in scan converter which converts the input signal within 1024 × 768 dots.

- **Compatible input signals**

This projector accepts video signals of the composite, S video, and component as well as the 15 k RGB, VGA¹⁾, SVGA¹⁾, XGA¹⁾, and SXGA¹⁾ signals, which all can be displayed.

- **Compatible with five color systems**

NTSC, PAL, SECAM, NTSC 4.43²⁾, or PAL-M color system can be selected automatically or manually.

Note on the VPL-X1000E model

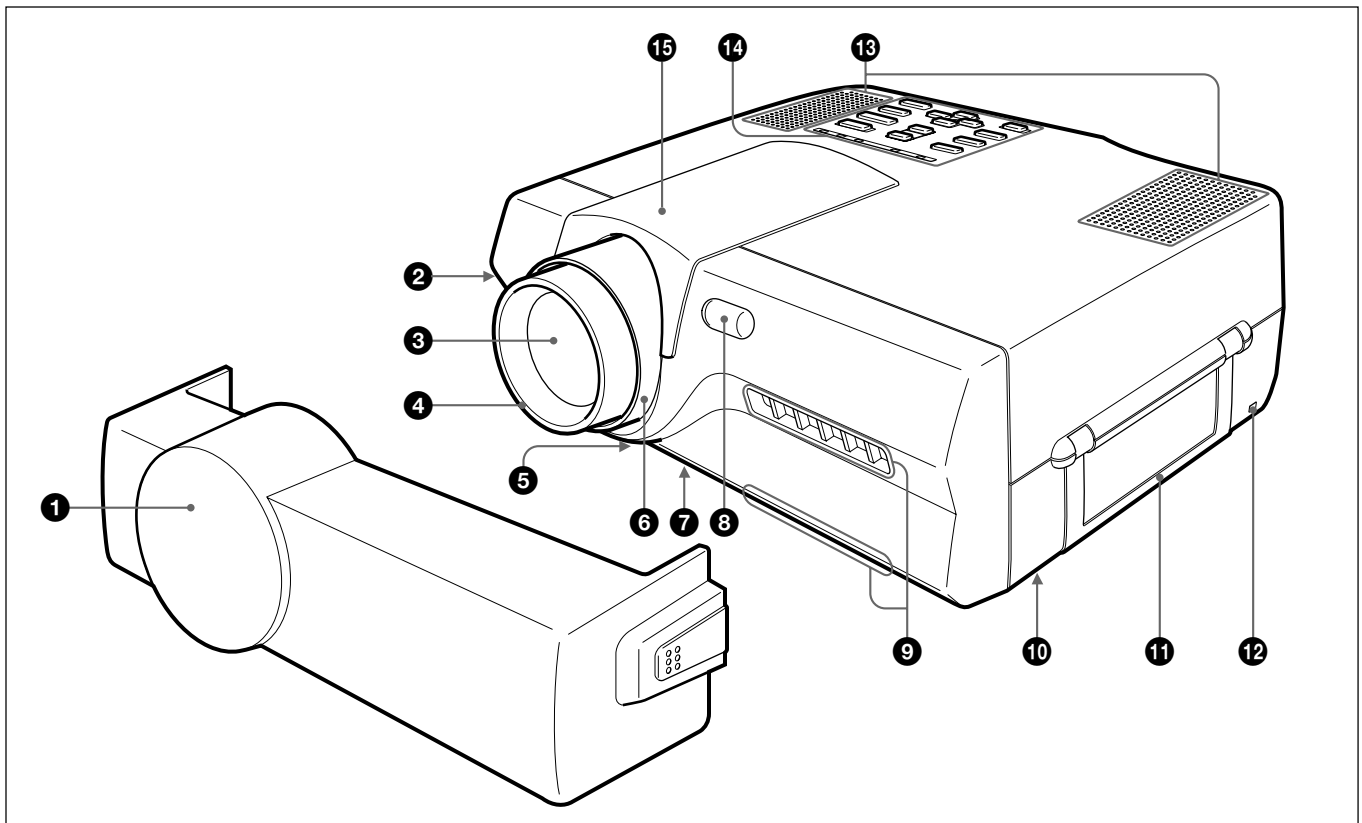
The optional IFB-X600E Interface Board is required for video composite input.

1) VGA, SVGA, XGA, and SXGA are registered trademarks of the International Business Machines Corporation, U.S.A.

8 (EN) 2) NTSC4.43 is the color system used when playing back a video recorded on NTSC on a NTSC4.43 system VCR.

Location and Function of Controls

Front



1 Front cover

Installs the Remote Commander in the back of the front cover.

2 Front adjuster button

Remove the front cover and the lens cap before projection.

3 Lens

Remove the front cover and the lens cap before projection.

4 Focus ring

Adjusts the picture focus.

5 Ventilation holes (bottom / intake)

6 Zoom ring

Adjusts the size of the picture.

7 Front adjuster

Used to keep the projector level if it is installed on an uneven surface.

For details on how to use the adjusters, see "How to use the adjusters" on page 11 (EN).

8 Front remote control detector

9 Ventilation holes (exhaust)

Notes

- Do not place anything near the ventilation holes as it may cause internal heat build-up.
- Do not place your hand or objects near the ventilation holes — the air coming out is hot.

10 Lamp cover (bottom)

11 Carrying handle

Used for carrying the projector.

12 Security lock

Connects to an optional security cable (Kensington's).

The security lock corresponds to Kensington's MicroSaver Security System.

If you have any comment, contact

Kensington

2853 Campus Drive, San Mateo, CA 94403

U.S.A.

Tel: 800-535-4242: extension 3348

Home page address: <http://www.kensington.com/>

Location and Function of Controls

13 Speakers

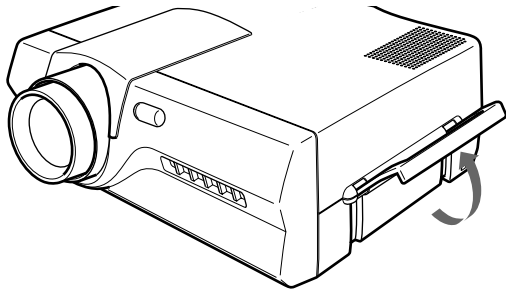
14 Control panel

For details, see “Control panel” on page 11 (EN).

15 Lens hood

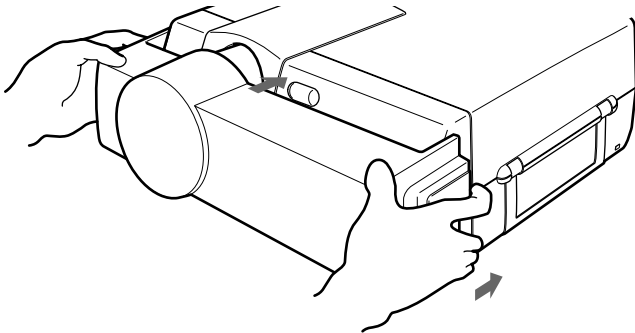
How to use the carrying handle

Pull up the handle from the projector for carrying.



How to attach the front cover

Attach the front cover on the front cabinet by stretching out both right and left sides on the front cover.

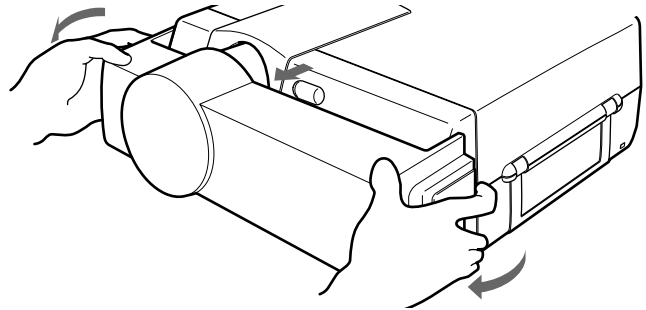


Notes

- Do not plug or turn on the projector when the front cover is attached.
- Do not hold the front cover when you carry the projector.

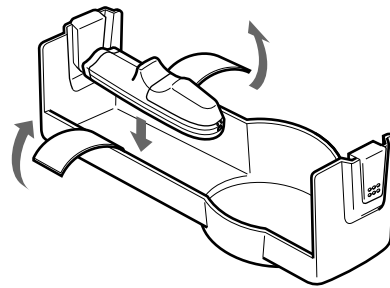
How to remove the front cover

Remove the front cover from the front cabinet by stretching out both right and left sides on the front cover.



How to install the Remote Commander in the front cover

Install the Remote Commander in the back of the front cover and fix it with the velcro tapes. When housing the Remote Commander, make sure that the infrared transmitter faces outside and rear faces upwards.



Note

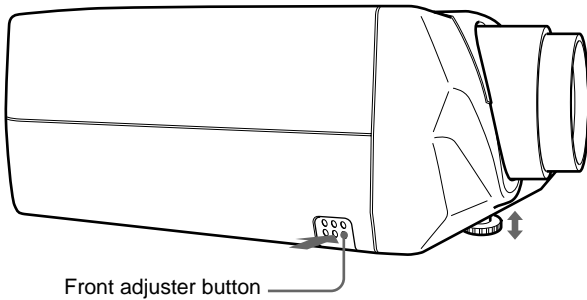
Set the COMMAND ON/OFF switch on the Remote Commander to OFF before installing the Remote Commander.

How to use the adjusters

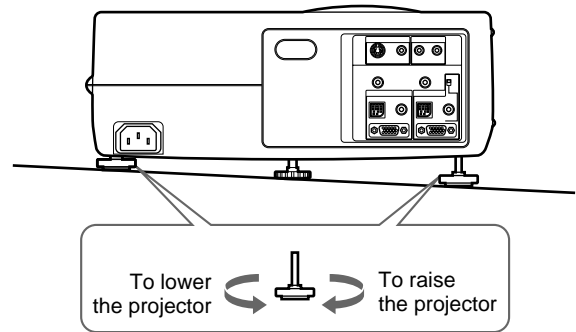
While lifting the projector, adjust the height so that the projector becomes level.

There are one adjuster at the front and two at the rear of the projector.

As for the front adjuster, press the front adjuster button while lifting the projector to adjust the height. Turn the front adjuster for fine adjustment.



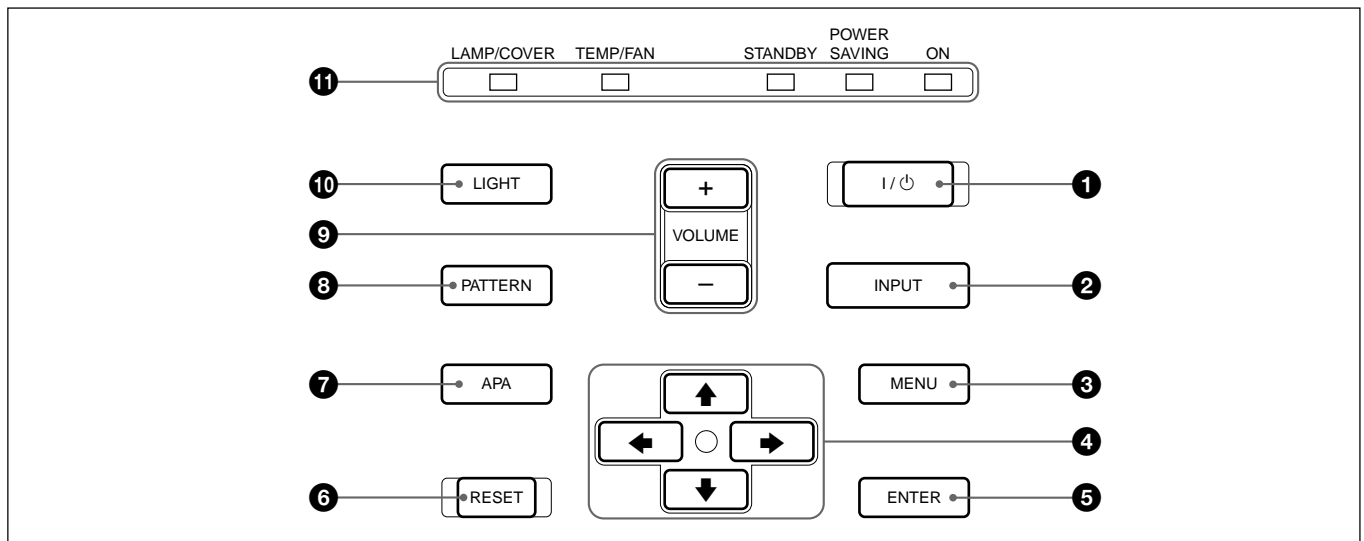
As for the rear adjusters, turn them for adjustment.



Notes

- Be careful not to let the projector down on your fingers.
- Do not push hard on the top of the projector with the adjusters out.
- Do not force the rear adjusters when you turn them. Using too much force may result in damage.

Control panel



1 I / ⏻ (on / standby) key

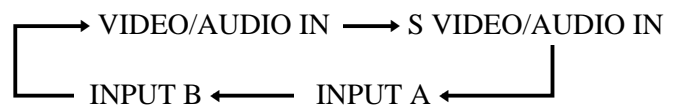
Turns on and off the projector when the projector is in the standby mode. The ON indicator lights in green when the power is turned on.

When turning off the power, press the I / ⏻ key twice following the message on the screen, or press and hold the key for about one second.

For details on steps for turning off the power, see "To turn off the power" on page 24 (EN).

2 INPUT key

Selects the input signal. Each time you press the key, the input signal switches as follows (When the RGB IN/OUT select switch is set to OUT, you cannot select INPUT B.):



Note on the VPL-X1000E model

The optional IFB-X600E Interface Board is required for VIDEO IN and AUDIO IN jacks.

3 MENU key

Displays the on-screen menu. Press again to clear the menu.

4 Arrow keys (↑/↓/←/→)

Used to select the menu or to make various adjustments.

(Continued)

Location and Function of Controls

5 ENTER key

Enters the settings of items in the menu system.

6 RESET key

Resets the value of an item back to its factory preset value. This key functions when the menu or a setting item is displayed on the screen.

7 APA (Auto Pixel Alignment) key

Adjusts a picture to be projected clearest automatically while a signal from the computer is input.

8 PATTERN key

Displays an H pattern on the screen for focus, zoom adjustments. Press again to clear the pattern.

9 VOLUME +/- keys

Adjust the volume of the built-in speakers and output level of the AUDIO OUT jacks.

- + : Increases the volume.
- : Decreases the volume.

10 LIGHT key

Lights the back lighting (orange) for the keys on the control panel when the power is turned on. Press again to turn off the back lighting.

11 Indicators

ON: Lights in green when the power is turned on. Flashes in green while the cooling fan runs after turning off the power with the I / ⏻ key. The fan runs for about 90 seconds after turning off the power. The ON indicator flashes quickly for the first 30 seconds. During this time, you cannot turn the power back on with the I / ⏻ key.

POWER SAVING: Lights up when the projector is in the power saving mode. When POWER SAVING in the SET SETTING menu is set to ON, the projector goes into the power saving mode if no signal is input for 10 minutes. Although the lamp goes out, the cooling fan keeps running. In the power saving mode, any key does not function for the first 30 seconds. The power saving mode is canceled when a signal is input or any key is pressed.

STANDBY: Lights in red when the AC power cord is plugged into the wall outlet. Once in the standby mode, you can turn on the projector with the I / ⏻ key on the Remote Commander or on the control panel.

TEMP (Temperature)/FAN: Lights up or flashes under the following conditions:

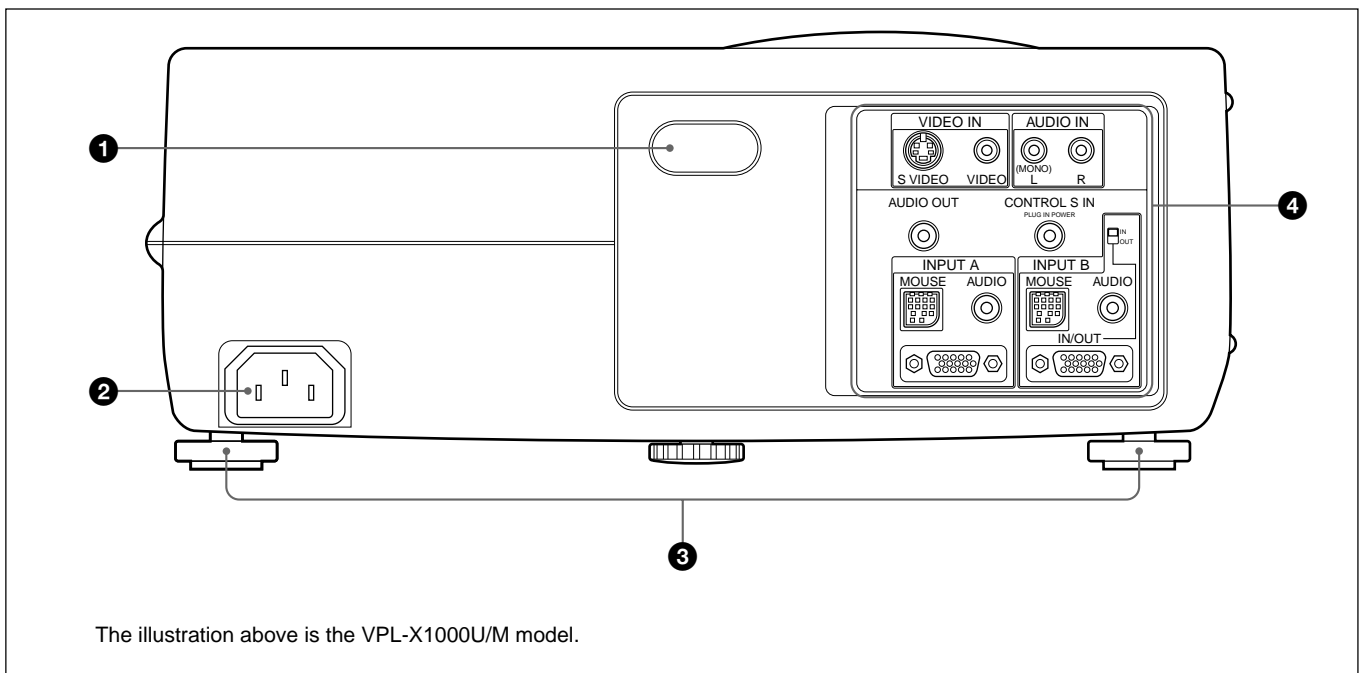
- Lights up when temperature inside the projector becomes unusually high.
- Flashes when the fan is broken.

LAMP/COVER: Lights up or flashes under the following conditions:

- Lights up when the lamp has reached the end of its life.
- Flashes when the lamp cover or air filter cover is not secured firmly.

For details on the LAMP/COVER and the TEMP/FAN indicators, see page 39 (EN).

Rear



❶ Rear remote control detector

❷ AC IN socket

Connects the supplied AC power cord.

❸ Rear adjusters

Used to keep the projector level if it is installed on an uneven surface.

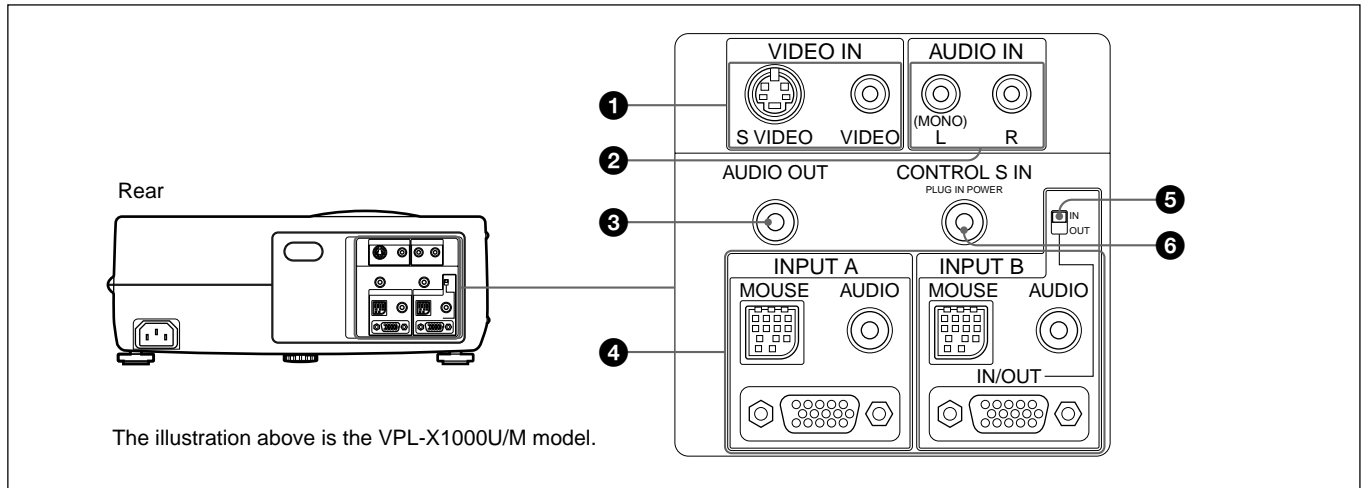
For details on using the adjusters, see “How to use the adjusters” on page 11 (EN).

❹ Connector panel

For details, see page 14 (EN).

Location and Function of Controls

Connector panel



1 VIDEO IN jacks

Connect to external video equipment such as a VCR.

S VIDEO (mini DIN 4-pin): Connects to the S video output (Y/C video output) of a video equipment.

VIDEO (phono type): Connects to the composite video output of video equipment.

2 AUDIO IN L (MONO)/R jacks (phono type)

Connect to the audio output of equipment. For stereo equipment, use both the L and R jacks; for monaural equipment, use the L (MONO) jack only.

3 AUDIO OUT jack (stereo minijack)

Connects to external active speakers.

The volume of the speakers can be controlled by the VOLUME keys on the Remote Commander or the control panel.

4 INPUT A/INPUT B connectors

Connect to external equipment such as a computer. You can control the mouse signal with the Remote Commander.

MOUSE (13-pin): Connects to the mouse port on a computer to control the mouse function using the supplied mouse cable.

AUDIO (stereo minijack): Connects to the audio output on a computer to input the audio signal.

RGB input (INPUT A) / RGB IN/OUT (INPUT B)

(HD D-sub 15-pin, female): Connects to the monitor output on a computer using the supplied cable. When inputting a component, or 15k RGB signal, use the optional cable.

As for the RGB IN/OUT connector on INPUT B, you can use it as an output connector with the RGB IN/OUT select switch. This connector outputs the signal which input through the RGB input connector on INPUT A.

5 RGB IN/OUT select switch

Switches the input/output of the RGB IN/OUT connector on INPUT B.

IN: Functions as an input connector.

OUT: Functions as an output connector. The RGB IN/OUT connector outputs the signal which input through the RGB input connector on INPUT A. The MOUSE connector and AUDIO jack on INPUT B do not function at this time.

6 CONTROL S IN/PLUG IN POWER jack (DC 5 V output, stereo minijack)

Connects to the CONTROL S OUT jack on the supplied Remote Commander with the stereo connecting cable (not supplied) when using it as a wired Remote Commander. You do not need to install the batteries since the power is supplied via this jack. Batteries are required when you use the laser pointer function.

Note on the VPL-X1000E model

The optional IFB-X600E Interface Board is required for the VIDEO IN 1 and AUDIO IN 2 jacks.

Remote Commander

The Remote Commander can be used as a wireless or wired Remote Commander.

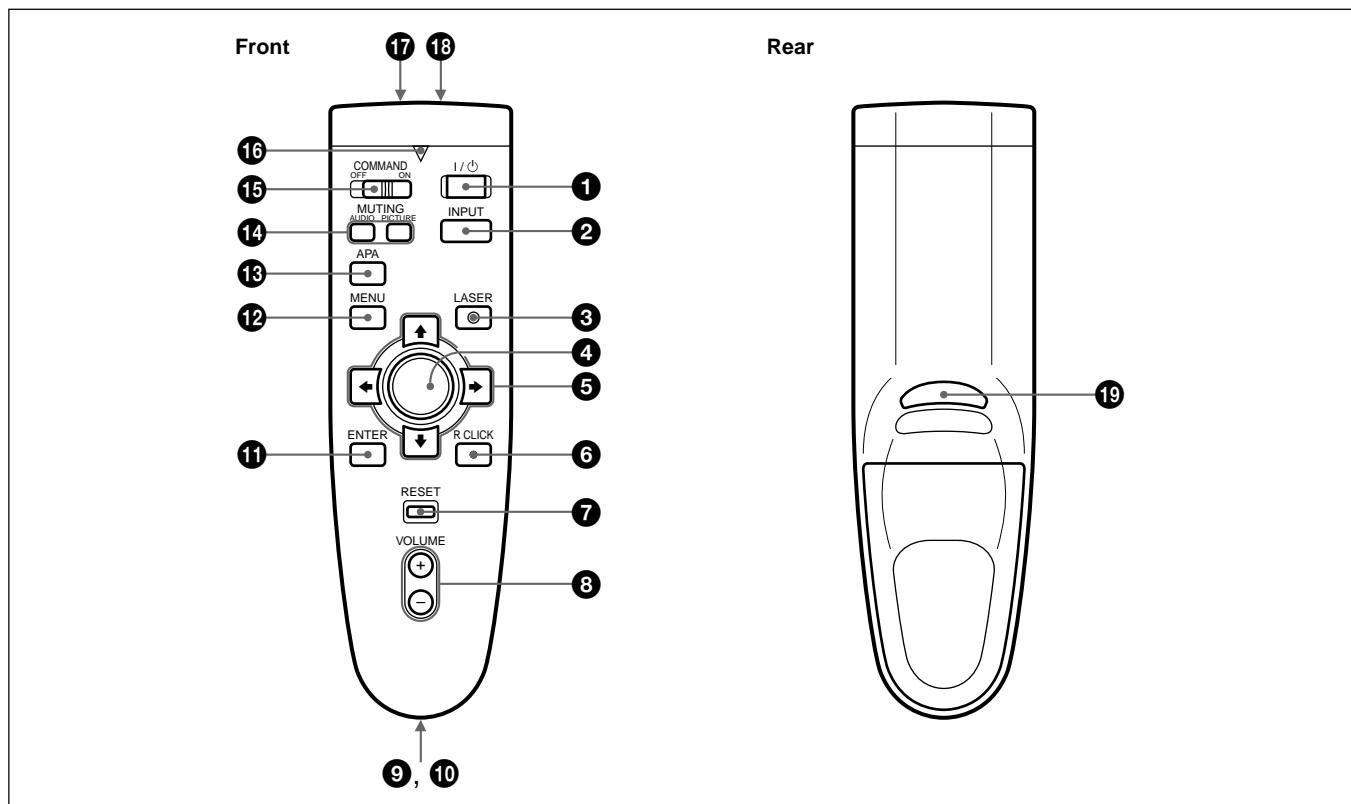
The keys which have the same names as on the control panel function identically.

You can control a connected computer using the Remote Commander.

For details, see "Connecting with a Computer" on page 18 (EN).

Notes on laser beam

- Do not look into the laser transmitter.
- Do not aim the laser at people.



1 I / ⏻ key

2 INPUT key

3 LASER key

Emits laser beam from the laser transmitter when you press this key.

4 Joy stick

Functions as a mouse of a computer connected to the unit.

5 Arrow keys (↑/↓/←/→)

6 R CLICK key

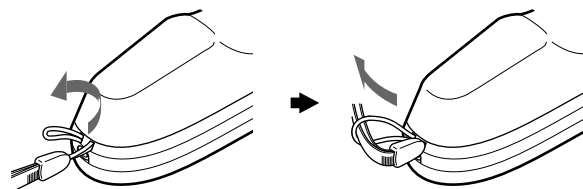
Functions as a right button on a mouse. When connected to a Macintosh¹⁾ computer, the R CLICK key functions as a mouse button.

7 RESET key

8 VOLUME +/- keys

9 Strap holder

Attaches the supplied strap.



(Continued)

1) Macintosh is a registered trademark of Apple Computer, Inc.

Location and Function of Controls

10 CONTROL S OUT jack (stereo minijack)

Connects to the CONTROL S IN jack on the projector with the connecting cable (not supplied) when using the Remote Commander as a wired one. In this case, you do not need to install the batteries since the power is supplied via the CONTROL S IN jack on the projector.

11 ENTER key

12 MENU key

13 APA (Auto Pixel Alignment) key

14 MUTING keys

Cut off the picture and sound.

PICTURE: Cuts off the picture. Press again to restore the picture.

AUDIO: Cuts off the sound from speakers and AUDIO OUT jack. Press again or press the VOLUME + key to restore the sound.

15 COMMAND ON/OFF switch

When this switch is set to OFF, no key on the Remote Commander function. This saves the battery power.

16 Transmission indicator

Lights up when you press a key on the Remote Commander.

This indicator does not light up when you use the laser pointer.

17 Infrared transmitter

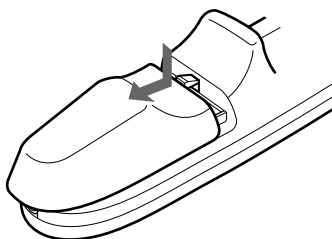
18 Laser transmitter

19 L CLICK key

Functions as a left button on a mouse. When connected to a Macintosh computer, the L CLICK key functions as a mouse button.

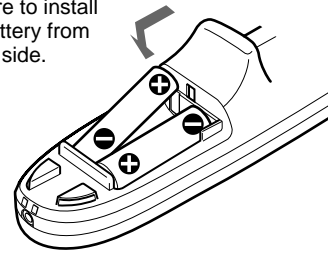
Battery installation

1 Push and slide to open the lid.



2 Install the two size AA (R6) batteries (supplied) with the correct polarity.

Be sure to install the battery from the ⊖ side.



3 Replace the lid.

Notes on batteries

- Make sure that the battery orientation is correct when inserting batteries.
- Do not mix an old battery with a new one, or different types of batteries.
- If you will not use the Remote Commander for a long time, remove the batteries to avoid damage from battery leakage. If batteries have leaked, remove them, wipe the battery compartment dry and replace the batteries with new ones.

Notes on wireless Remote Commander operation

- Make sure that there is nothing to obstruct the infrared beam between the Remote Commander and the remote control detector on the projector.
- The operation range is limited. The shorter the distance between the Remote Commander and the projector is, the wider the angle within which the commander can control the projector.
- The remote control detectors on the projector do not function when the connecting cable (not supplied) is connected to the projector. When using the Remote Commander as a wireless Remote Commander, remove the connecting cable from both the Remote Commander and the projector.

Note on wired Remote Commander operation

The laser pointer function does not work when you use the Remote Commander as a wired one without batteries.

Installing the Projector

This section describes the installation arrangements for installing the projector on a table. For ceiling installation, consult with qualified Sony personnel (see page 34 (EN)).

Horizontal center of the screen

The distance between the lens and the screen varies depending on the size of the screen. Use the following table as a guide.

Adjust the vertical and horizontal positioning of the projector.

Vertical positioning (side view)

Adjust the height of the projector so that the center of the lens is just above the bottom edge of the screen.

Horizontal positioning (top view)

Center of the lens
57.5 mm (2 3/8 inches)
Center of the unit

Adjust the horizontal positioning of the projector so that the lens is aligned with the horizontal center of the screen.

Note

Install the projector to be level.
Avoid followings which may cause malfunction.

- The projector topples over on its side.
- The projector titles more than 20 degrees.

		Unit: m (feet)										
Screen size (inches)		40	60	80	100	120	150	180	200	250	300	
Distance	Minimum	1.6 (5.1)	2.4 (7.8)	3.2 (10.5)	4.0 (13.3)	4.9 (15.9)	6.1 (20.0)	7.3 (24.1)	8.2 (26.8)	10.2 (33.6)	11.2 (40.4)	
	Maximum	2.0 (6.5)	3.0 (9.9)	4.1 (13.3)	5.1 (16.7)	6.1 (20.1)	7.7 (25.2)	9.2 (30.3)	10.3 (33.7)	12.9 (42.2)	15.5 (50.7)	

For detailed information on installation measurements, see page 33 (EN).

Note on the VPL-X1000E model

The optional IFB-X600E Interface Board is required for the VIDEO IN and AUDIO IN jacks.

Connecting with a Computer

This section describes how to connect the projector with a computer. For details on how to connect VCR or other equipment, see page 20 (EN).

When the projector is connected to a computer, you can control the mouse of a computer by the Remote Commander.

The R/L CLICK keys and joy stick function as follows.

Note

Make sure that there is nothing to obstruct the infrared beam between the Remote Commander and the remoter control detector on the projector.

Key and joy stick	Function	
	IBM PC/AT ^{a)} compatible, Serial	Macintosh
R CLICK (front)	Right button	Mouse button
L CLICK (rear)	Left button	Mouse button
Joy stick	Corresponds with the movements of the mouse	

a) IBM PC/AT is a registered trademark of International Business Machines Corporation, U.S.A.

Also refer to the instruction manual of equipment to be connected.

Notes

- This unit accepts the VGA, SVGA, XGA, and SXGA signals. However, we recommend you to set the output mode of your computer to the XGA mode for the external monitor. (For Macintosh computer, set the output mode to 19-inch mode.)
- If you set your computer, such as a notebook type IBM PC/AT compatible, to output the signal to both the display of your computer and the external monitor, the picture of the external monitor may not appear properly. In such cases, set the output mode of your computer to output the signal to only the external monitor.

For details, refer to the operating instructions supplied with your computer.

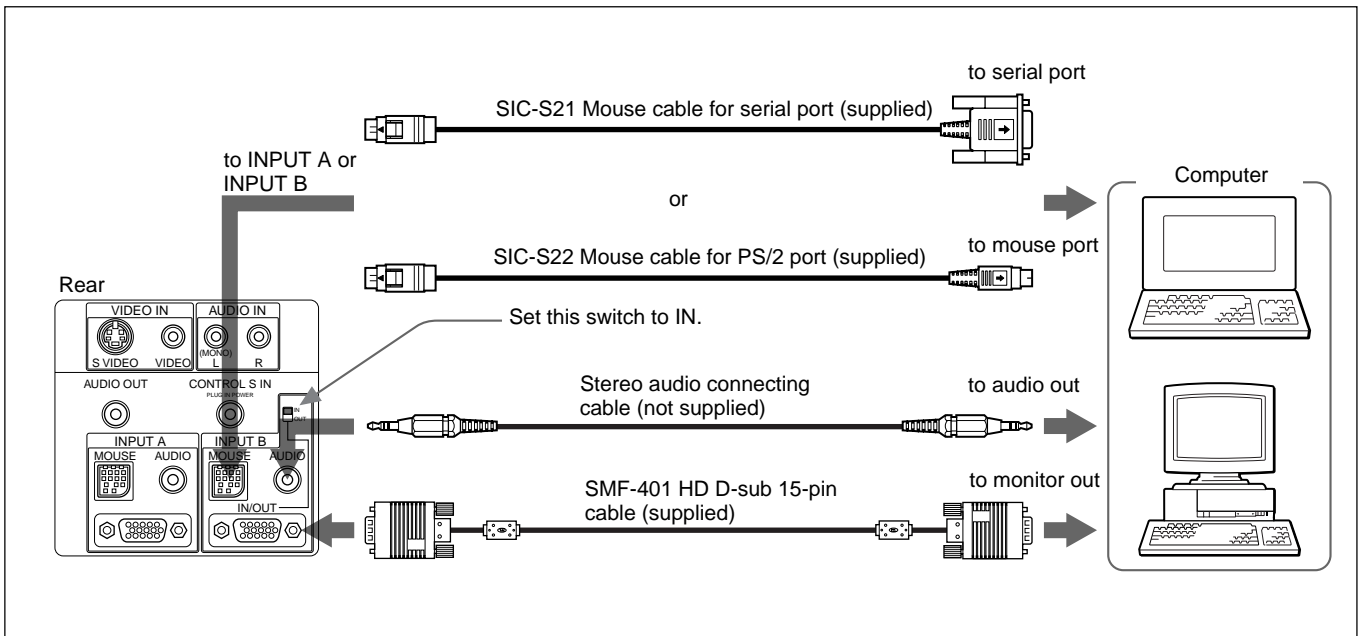
When making connections, be sure to:

- turn off all equipment before making any connections.
- use the proper cables for each connection.
- insert the plugs of the cables properly; plugs that are not fully inserted often generate noise. When pulling out a cable, be sure to pull it out from the plug, not the cable itself.

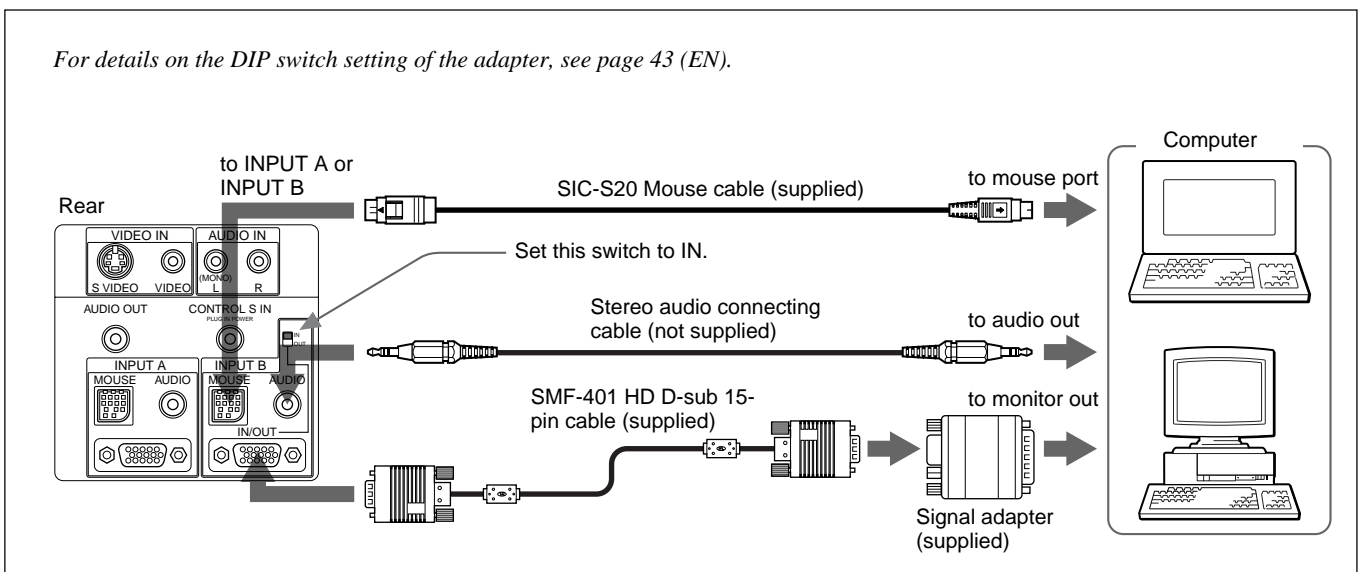
Notes

- Connect all the connecting cables to the INPUT A connector when you input a signal from the INPUT A connector. Connect all the cables to the INPUT B connector when you input a signal from the INPUT B connector as well.
- When connecting to INPUT B, make sure that the RGB IN/OUT select switch is set to IN.
- Supplied mouse cable may not work properly according to your computer.

When connecting with an IBM PC/AT compatible computer



When connecting with a Macintosh computer



Connecting

Connecting with a VCR, 15k RGB/Component Equipment

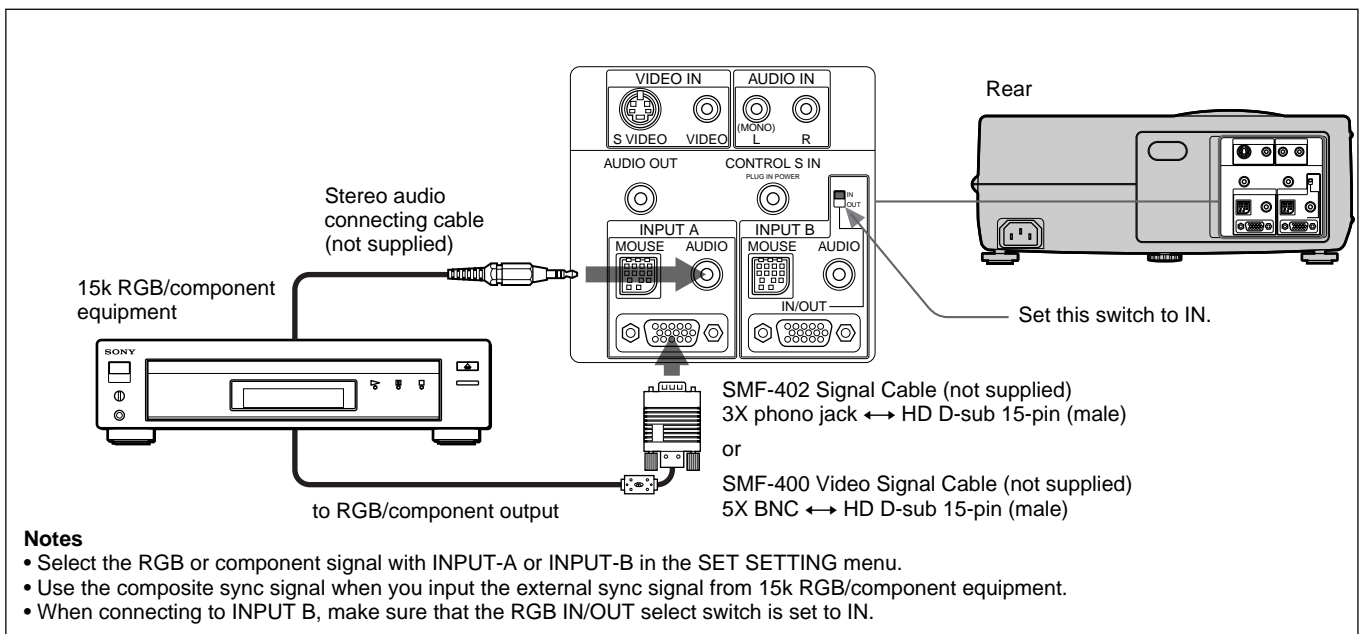
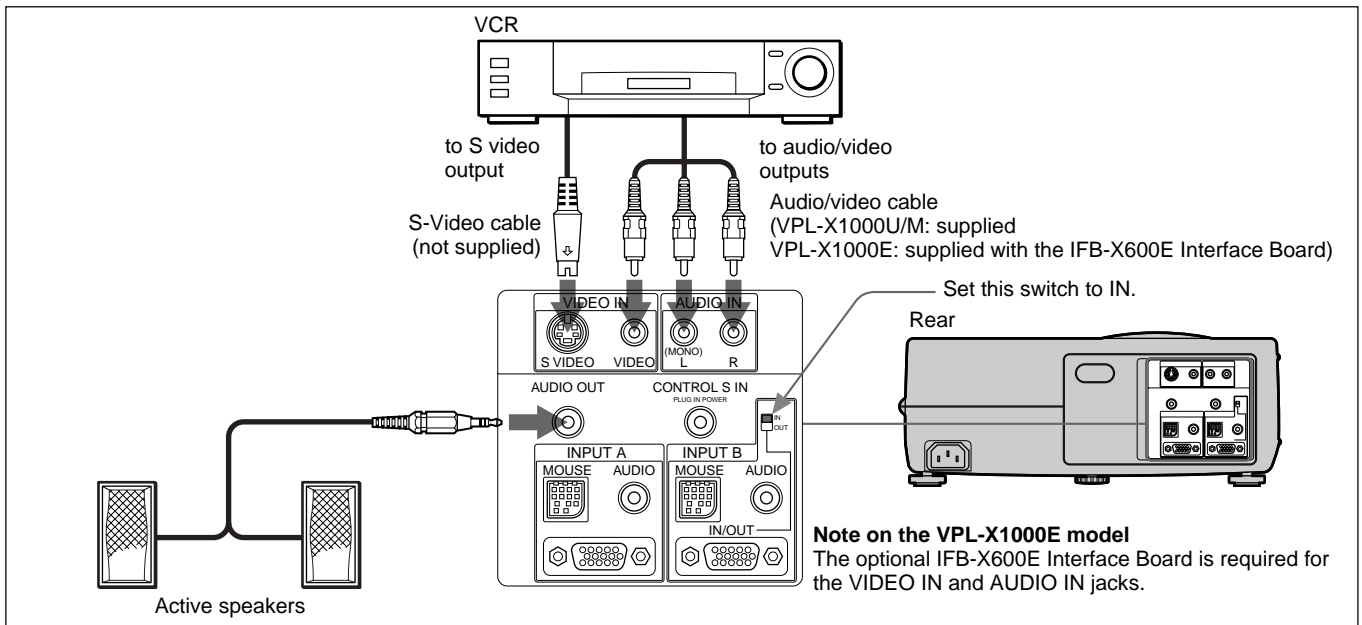
This section describes how to connect the projector with a VCR, external active speakers and 15k RGB/component equipment.

For details on how to connect a computer, see page 18 (EN).

Also refer to the instruction manuals of equipment to be connected.

When making connections, be sure to:

- turn off all equipment before making any connections.
- use the proper cables for each connection.
- insert the plugs of the cables properly; plugs that are not fully inserted often generate noise. When pulling out a cable, be sure to pull it out from the plug, not the cable itself.

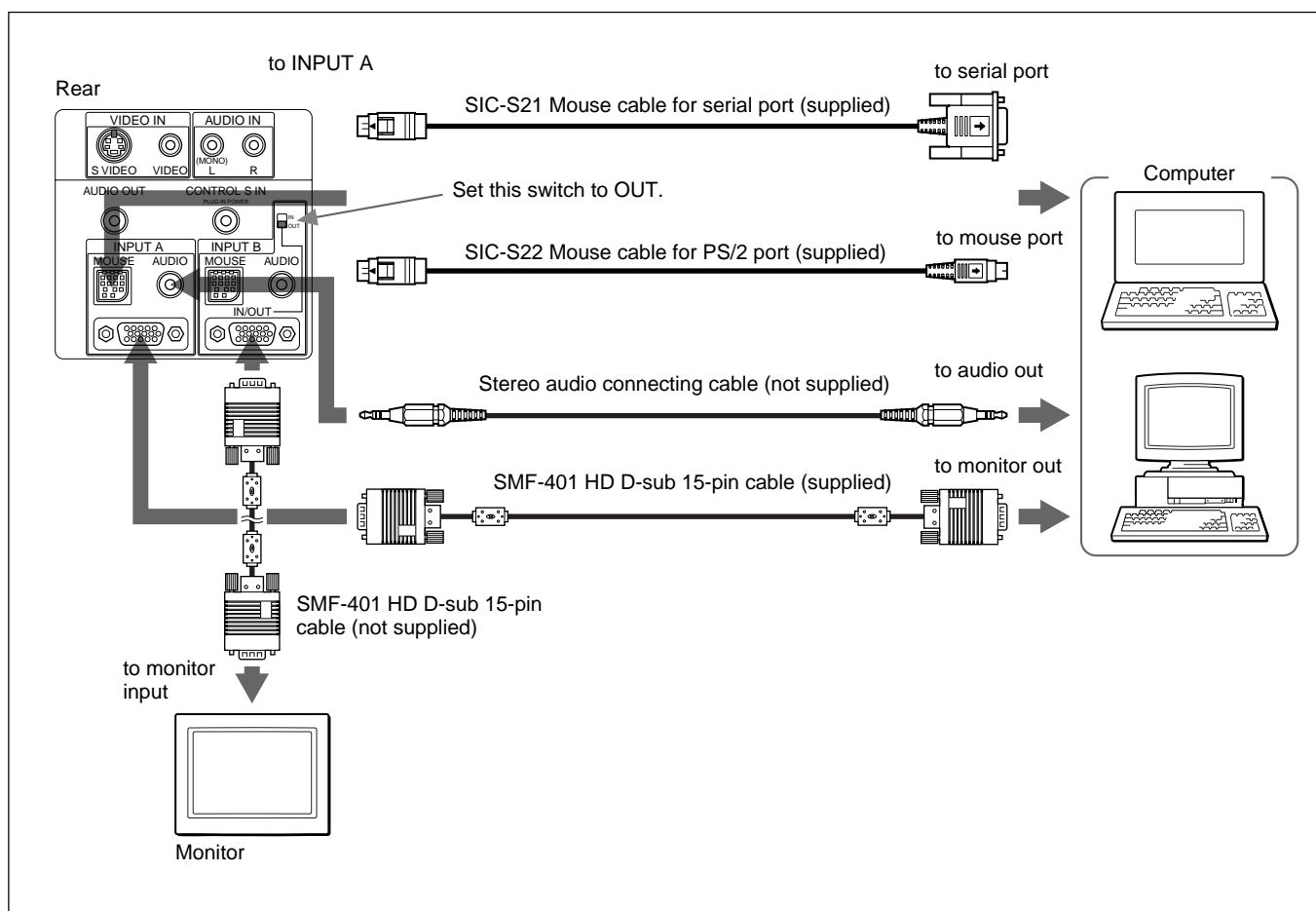


Using the RGB IN/OUT connector on INPUT B as a monitor output connector

This section describes connections when using the RGB IN/OUT connector on INPUT B as a monitor output connector.

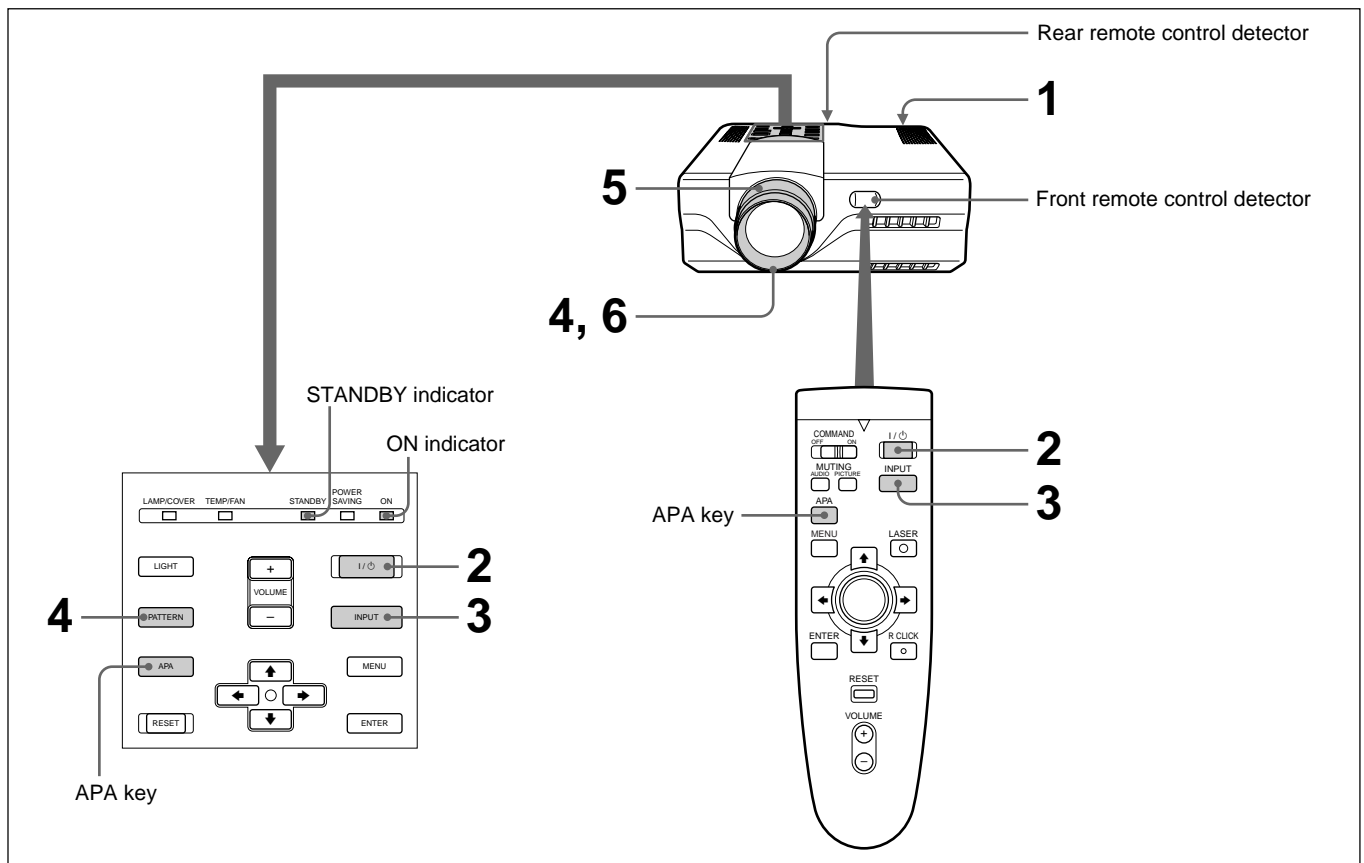
When making connections, be sure to:

- turn off all equipment before making any connections.
- use the proper cables for each connection.
- insert the plugs of the cables properly; plugs that are not fully inserted often generate noise. When pulling out a cable, be sure to pull it out from the plug, not the cable itself.
- Make sure that the RGB IN/OUT select switch is set to OUT.



Note

When the RGB IN/OUT select switch is set to OUT, the MOUSE connector and AUDIO jack on INPUT B do not function.



- 1** After all equipment is connected completely, plug the AC power cord into the wall outlet.
The STANDBY indicator lights in red and the projector goes into the standby mode.
- 2** Press the I / $\text{\textcircled{P}}$ key on the Remote Commander or on the control panel.
The ON indicator lights in green.
- 3** Turn on equipment connected to the projector. Press the INPUT key on the Remote Commander or on the control panel to select the input source.
 - INPUT A:** Selects audio and video signals input from the INPUT A connector.
 - INPUT B:** Selects audio and video signals input from the INPUT B connector.
 - VIDEO:** Selects audio and video signals input from the AUDIO IN/VIDEO (VIDEO IN) jacks.
 - S VIDEO:** Selects audio and video signals input from the AUDIO IN/S VIDEO (VIDEO IN) jacks.

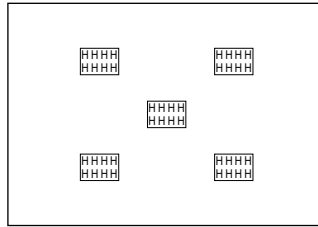
Note

The AUDIO IN jacks are used as audio outputs of both VIDEO and S VIDEO.

Note on the VPL-X1000E model

The optional IFB-X600E Interface Board is required for selecting VIDEO.

- 4** Press the PATTERN key on the control panel to display the H pattern, and turn the focus ring to adjust the focus.



Press the PATTERN key again to clear the pattern.

- 5** Turn the zoom ring to adjust the size of the picture.
- 6** Turn the focus ring again to adjust the focus.

Note

Do not look into the lens when the projector lamp is on.

To	Press
Adjust the volume	the VOLUME +/- keys on the control panel or on the Remote Commander.
Cut off the sound	the AUDIO MUTING key on the Remote Commander. To restore the sound, press the AUDIO MUTING key again or press the VOLUME + key.
Cut off the picture	the PICTURE MUTING key on the Remote Commander. To restore the picture, press the PICTURE MUTING key again.

To get the clearest picture

You can get the suitable picture when a signal from the computer is input. Press the APA key on the Remote Commander or on the control panel. The picture is automatically adjusted to be projected clearest.

Notes

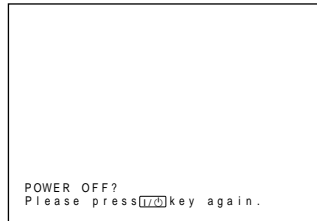
- Adjust the signal when the still picture is displayed on the screen.
- If you switch the input signal or re-connect a computer, press the APA key again to get the suitable picture.
- “ADJUSTING” appears on the screen. Press the APA key again during the adjustment to restore the original screen.
- “Complete!” appears on the screen when the picture is adjusted properly. The picture may not be adjusted properly depending on the kinds of input signals.
- Adjust DOT PHASE in the INPUT SETTING menu when you adjust the picture manually.

For details on DOT PHASE, see page 28 (EN).

To turn off the power

- 1 Press the I / ⏻ key on the Remote Commander or on the control panel.

The following message appears to confirm if you want to turn off the power.



Note

The message will disappear if you press any key except the I / ⏻ key, or if you do not press any key for five seconds.

- 2 Press the I / ⏻ key on the Remote Commander or on the control panel again.

The ON indicator flashes in green and the fan continues to run for about 90 seconds to reduce the internal heat. Also, the ON indicator flashes quickly for the first 30 seconds. During this time, you will not be able to turn the power back on with the I / ⏻ key.

- 3 Unplug the AC power cord from the wall outlet after the fan stops running and the STANDBY indicator lights in red.

When you cannot confirm the on-screen message

When you cannot confirm the on-screen message in a certain condition, you can turn off the power by holding the I / ⏻ key on the Remote Commander or on the control panel for about one second.

Note

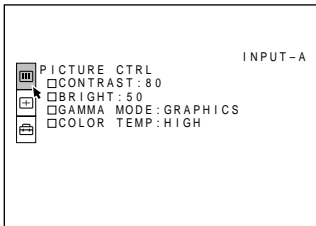
Do not unplug the AC power cord while the fan is still running; otherwise, the fan will stop although the internal heat is still high, leading to breakdown of the projector.

Using the MENU

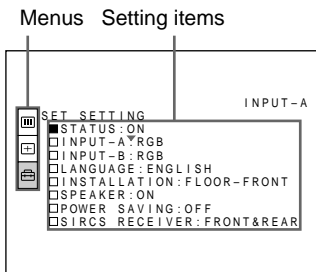
The projector is equipped with an on-screen menu for making various adjustments and settings.

To select the language used in the menu, see page 32 (EN).

- 1 Press the MENU key.
The menu display appears.
The menu presently selected is highlighted in blue.



- 2 Use the \uparrow or \downarrow key to select a menu, then press the \rightarrow or ENTER key.
The selected menu appears.



- 3 Make setting or adjustment on an item.
For details on setting individual items, see the relevant menu pages.

To clear the menu display

Press the MENU key.

The menu display disappears automatically if no key is pressed for one minute.

To reset items that have been adjusted

Press the RESET key.

“Complete!” appears on the screen and the settings appearing on the screen will be reset to their factory preset values.

Items which can be reset are:

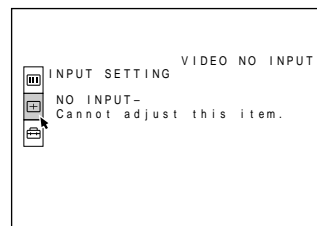
- “CONTRAST”, “BRIGHT”, “COLOR”, “HUE”, and “SHARP” in the PICTURE CTRL menu
- “DOT PHASE”, “SIZE”, and “SHIFT” in the INPUT SETTING menu.

About the memory of the settings

The settings are automatically stored in the projector memory.

When no signal is input

When there is no input signal, “NO INPUT- Cannot adjust this item.” appears on the screen, and each item cannot be adjusted.



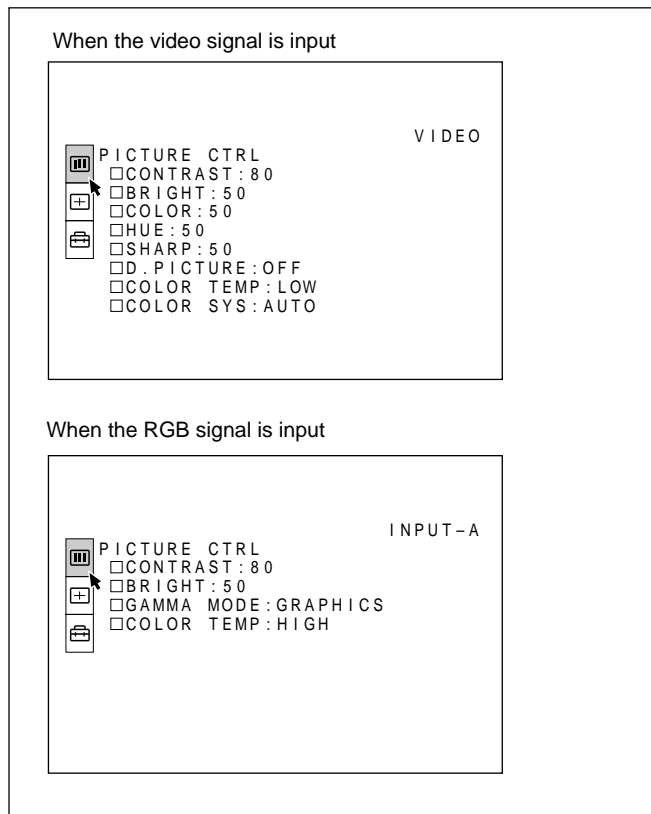
The PICTURE CTRL Menu

The PICTURE CTRL (control) menu is used for adjusting the picture.

Unadjustable items depending on the input signal are not displayed in the menu.

Note on the VPL-X1000E model

The optional IFB-X600E Interface Board is required for inputting the video signal. If you do not install the video board into the unit, the video signal cannot be selected.



Operation

1. Select an item

Use the \uparrow or \downarrow key to select the item, then press the \rightarrow or ENTER key.

2. Adjust an item

- When changing the adjustment level:
 - To increase the number, press the \uparrow or \rightarrow key.
 - To decrease the number, press the \downarrow or \leftarrow key.
 - Press the ENTER key to restore the original screen.
- When changing the setting:
 - Press the \uparrow or \downarrow key to change the setting.
 - Press the ENTER or \leftarrow key to restore the original screen.

CONTRAST

Adjusts the picture contrast.



The higher the setting, the greater the contrast.
The lower the setting, the lower the contrast.

BRIGHT

Adjusts the picture brightness.



The higher the setting, the brighter the picture.
The lower the setting, the darker the picture.

COLOR

Adjusts color intensity.



The higher the setting, the greater the intensity.
The lower the setting, the lower the intensity.

HUE

Adjusts skin tones.



The higher the setting, the picture becomes greenish.
The lower the setting, the picture becomes purplish.

SHARP

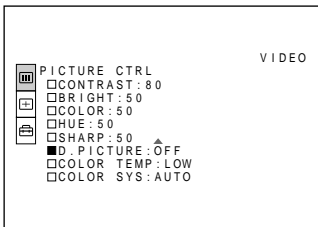
Adjusts the picture sharpness.



The higher the setting, the sharper the picture.
The lower the setting, the softer the picture.

D. (Dynamic) PICTURE

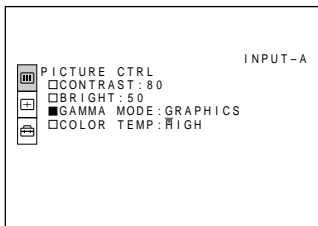
Emphasizes the black color.



ON: Emphasizes the black color to produce a bolder “dynamic” picture.
OFF: Reproduces the dark portions of the picture accurately, in accordance with the source signal.

GAMMA MODE

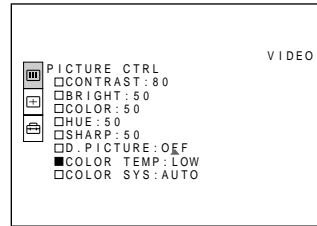
Selects a gamma correction curve.



GRAPHICS: Improves the reproduction of half tones. Photos can be reproduced in natural tones.
TEXT: Contrasts black and white. Suitable for images that contains lots of text.

COLOR TEMP

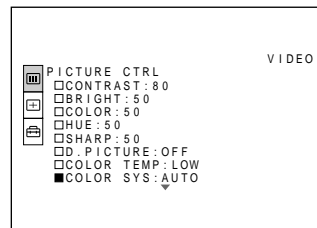
Adjusts the color temperature.



HIGH: Makes the white color bluish.
LOW: Makes the white color reddish.

COLOR SYS (System)

Selects the color system of the input signal.



Normally, set to AUTO.
If the picture is distorted or colorless, select the color system according to the input signal.

Input signals and adjustable/setting items

Item	Input signal			
	Video or S video (Y/C)	Component	RGB	B&W
CONTRAST	●	●	●	●
BRIGHT	●	●	●	●
COLOR	●	●	–	–
HUE	● (NTSC3.58/ 4.43 only)	–	–	–
SHARP	●	●	–	●
D. PICTURE	●	●	–	●
GAMMA MODE	–	–	●	–
COLOR TEMP	●	●	●	●
COLOR SYS	●	–	–	●

● : Adjustable/can be set
– : Not adjustable/can not be set

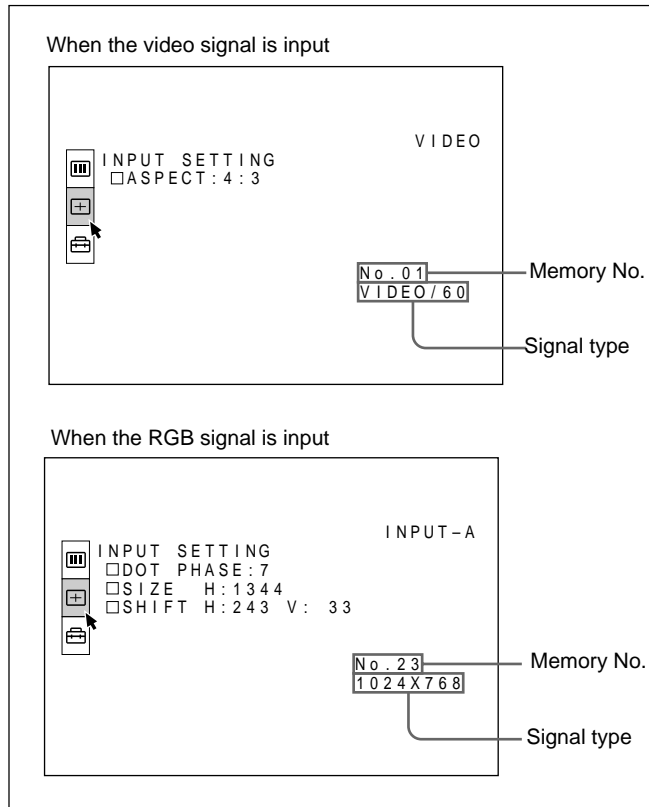
The INPUT SETTING Menu

The INPUT SETTING menu is used to adjust the input signal.

Unadjustable items depending on the input signal are not displayed in the menu.

Note on the VPL-X1000E model

The optional IFB-X600E Interface Board is required for inputting the video signal. If you do not install the video board into the unit, the video signal cannot be selected.



Operation

1. Select an item

Use the \uparrow or \downarrow key to select the item, then press the \rightarrow or ENTER key.

2. Adjust an item

- When changing the adjustment level:
 - To increase the number, press the \uparrow or \rightarrow key.
 - To decrease the number, press the \downarrow or \leftarrow key.
 - Press the ENTER key to restore the original screen.
- When changing the setting:
 - Press the \uparrow or \downarrow key to change the setting.
 - Press the ENTER or \leftarrow key to restore the original screen.

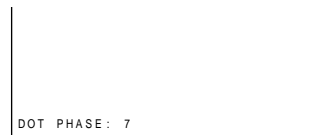
Note

When the HDTV signal is input, the items in the INPUT SETTING menu cannot be adjusted.

DOT PHASE

Adjusts the dot phase of the LCD panel and the signal input from the INPUT A/B connectors. Adjust the picture further for finer picture after the picture is adjusted with pressing the APA key.

Adjust the picture to where it looks clearest.



SIZE

Adjusts the horizontal size of picture input from the INPUT A/B connectors.



The higher the setting, the larger the horizontal size of the picture.

The lower the setting, the smaller the horizontal size of the picture. Adjust the setting according to the dots of the input signal. For details on the suitable value for the preset signals, see page 30 (EN).

SHIFT

Adjusts the position of the picture input from the INPUT A/B connectors.



H adjusts the horizontal position of the picture.

V adjusts the vertical position of the picture.

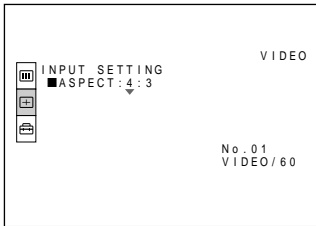
As the setting for H increases, the picture moves to the right, and as the setting decreases, the picture moves to the left.

As the setting for V increases, the picture moves up, and as the setting decreases, the picture moves down.

Use the \leftarrow or the \rightarrow key to adjust the horizontal position and the \uparrow and \downarrow key for the vertical position.

ASPECT

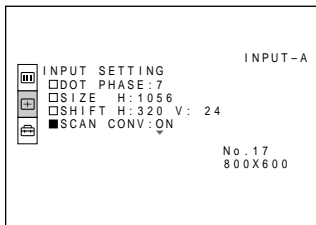
Sets the aspect ratio of the picture.
When inputting 16:9 (squeezed) signal from equipment such as a DVD player, set to 16:9.



- 4:3:** When the picture with ratio 4:3 is input.
- 16:9:** When the picture with ratio 16:9 (squeezed) is input.

SCAN CONV (Scan converter)

Converts the signal to display the picture according to the screen size.



- ON:** Displays the picture according to the screen size. The picture will lose some clarity.
- OFF:** Displays the picture while matching one pixel of input picture element to that of the LCD. The picture will be clear but the picture size will be smaller.

Note

When the XGA or SXGA signal is input, this item will not be displayed.

Input signals and adjustable/setting items

Item	Input signal			
	Video or S video (Y/C)	15k RGB Component	RGB	B&W
DOT PHASE	–	–	●	–
SIZE	–	–	●	–
SHIFT	–	–	●	–
ASPECT	●	●	–	●
SCAN CONV	–	–	●	–

- : Adjustable/can be set
- : Not adjustable/can not be set

About the preset memory No.

This projector has 38 kinds of preset data for input signals for each INPUT A/B (the preset memory). The memory number of the current input signal and the signal type are displayed when the preset signal is input. This projector automatically detects the signal type. When the signal is registered to the preset memory, a suitable picture is displayed on the screen according to the signal type. You can adjust the picture through the INPUT SETTING menu.

This projector also has 20 kinds of user memories for each INPUT A/B. When an unpreset signal is input for the first time, memory number is displayed as 00. If the input signal is adjusted in the INPUT SETTING menu, the setting via INPUT A is stored under the memory number 51 to 70, and the setting via INPUT B is stored under 71 to 90. When more than 20 user memories are registered for each INPUT A/B, the newest memory is automatically stored over the oldest one.

The INPUT SETTING Menu

Preset signals

Memory No.	Preset signal	fH (kHz)	fV (Hz)	Sync	SIZE	
1	Video 60 Hz	15.734	59.940	H-neg V-neg		
2	Video 50 Hz	15.625	50.000	H-neg V-neg		
3	15k RGB/Component 60 Hz	15.734	59.940	H-neg V-neg		
4	15k RGB/Component 50 Hz	15.625	50.000	H-neg V-neg		
6	640 × 350	VGA mode 1	31.469	70.086	H-pos V-neg	800
7		VGA VESA ^{a)} 85 Hz	37.861	85.080	H-pos V-neg	832
8	640 × 400	PC-9801 ^{b)} Normal	24.823	56.416	H-neg V-neg	848
9		VGA mode 2	31.469	70.086	H-neg V-pos	800
10		VGA VESA 85 Hz	37.861	85.080	H-neg V-pos	832
11	640 × 480	VGA mode 3	31.469	59.940	H-neg V-neg	800
12		Macintosh 13"	35.000	66.667	H-neg V-neg	864
13		VGA VESA 72 Hz	37.861	72.809	H-neg V-neg	832
14		VGA VESA 75 Hz	37.500	75.000	H-neg V-neg	840
15		VGA VESA 85 Hz	43.269	85.008	H-neg V-neg	832
16	800 × 600	SVGA VESA 56 Hz	35.156	56.250	H-pos V-pos	1024
17		SVGA VESA 60 Hz	37.879	60.317	H-pos V-pos	1056
18		SVGA VESA 72 Hz	48.077	72.188	H-pos V-pos	1040
19		SVGA VESA 75 Hz	46.875	75.000	H-pos V-pos	1056
20		SVGA VESA 85 Hz	53.674	85.061	H-pos V-pos	1048
21	832 × 624	Macintosh 16"	49.724	74.550	H-neg V-neg	1152
22	1024 × 768	XGA VESA 43 Hz	35.522	43.479	H-pos V-pos	1264
23		XGA VESA 60 Hz	48.363	60.004	H-neg V-neg	1344
24		XGA VESA 70 Hz	56.476	70.069	H-neg V-neg	1328
25		XGA VESA 75 Hz	60.023	75.029	H-pos V-pos	1312
26		XGA VESA 85 Hz	68.677	84.997	H-pos V-pos	1376
27	1152 × 864	SXGA VESA 70 Hz	63.995	70.016	H-pos V-pos	1472
28		SXGA VESA 75 Hz	67.500	75.000	H-pos V-pos	1600
29		SXGA VESA 85 Hz	77.487	85.057	H-pos V-pos	1568
30	1152 × 900	Sunmicro LO	61.795	65.960	H-neg V-neg	1504
31		Sunmicro HI	71.713	76.047	H-neg V-neg	1472
32	1280 × 960	SXGA VESA 60 Hz	60.000	60.000	H-pos V-pos	1800
33		SXGA VESA 75 Hz	75.000	75.000	H-pos V-pos	1728
34	1280 × 1024	SXGA VESA 43 Hz	46.433	43.436	H-pos V-pos	1696
35		SXI-5	53.316	50.062	H-neg V-neg	1680
36		SXGA VESA 60 Hz	63.974	60.013	H-pos V-pos	1696
37		SXGA VESA 75 Hz	79.976	75.025	H-pos V-pos	1688
38		SXGA VESA 85 Hz	91.146	85.024	H-pos V-pos	1728

a) VESA is a registered trademark of Video Electronics Standard Association.

b) PC-98 is a registered trademark of NEC Corporation.

Since the data is recalled from the preset memory about the following signals, you can use these preset data by adjusting SIZE. Make fine adjustment by adjusting SHIFT.

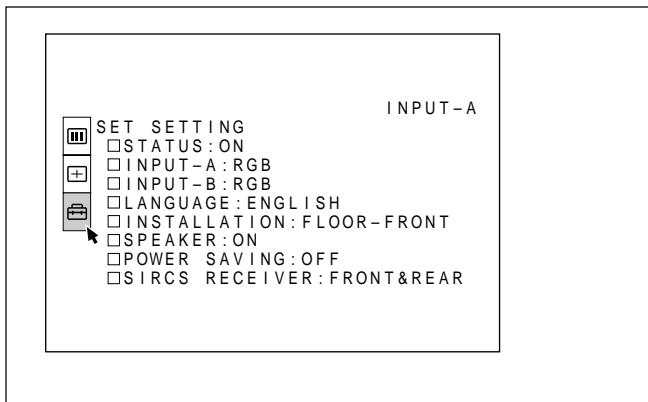
Signal	Memory No.	SIZE
Super Mac-2	23	1312
SXI-1	23	1320
Macintosh 19"	25	1328
Macintosh 21"	28	1456
Sony News	36	1708
PC-9821 1280 × 1024	36	1600
WS Sunmicro	37	1664

Note

When the aspect ratio of input signal is other than 4:3, a part of the screen is displayed in black.

The SET SETTING Menu

The SET SETTING menu is used for changing the settings of the projector.



Operation

1. Select an item

Use the **▲** or **▼** key to select the item, then press the **▶** or **ENTER** key.

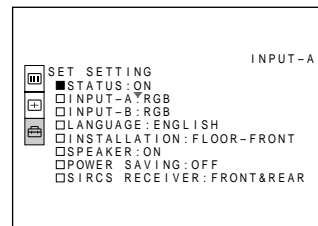
2. Change the setting

Press the **▲** or **▼** key to change the setting.

To restore the original screen, press the **ENTER** or **◀** key.

STATUS (on-screen display)

Sets up the on-screen display.



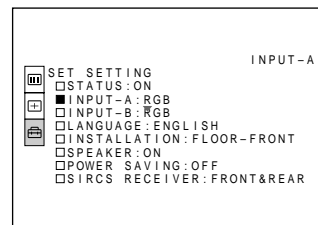
ON: Shows all of the on-screen displays.

OFF: Turns off the on-screen displays except for the menus, a message when turning off the power, and warning messages.

For details on the warning messages, see page 39 (EN).

INPUT-A

Selects the RGB or component signal input from the INPUT A connector.

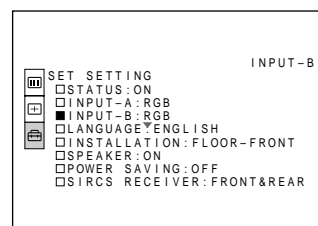


Note

If the setting is not correct, “Please check INPUT-A in SET SETTING.” appears on the screen and the color of the picture becomes strange or the picture is not displayed.

INPUT-B

Selects the RGB or component signal input from the INPUT B connector.



Note

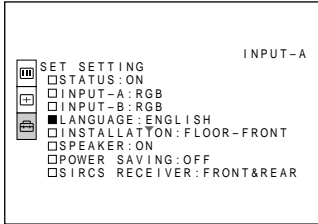
If the setting is not correct, “Please check INPUT-B in SET SETTING.” appears on the screen and the color of the picture becomes strange or the picture is not displayed.

(Continued)

The SET SETTING Menu

LANGUAGE

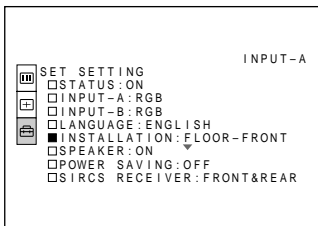
Selects the language used in the menu and on-screen displays.



Available languages are: English, French, German, Italian, Spanish, Japanese and Chinese.

INSTALLATION

Sets to reverse the picture horizontally or vertically.



FLOOR-FRONT: The picture is not reversed.

CEILING-FRONT: The picture is reversed horizontally and vertically.

FLOOR-REAR: The picture is reversed horizontally.

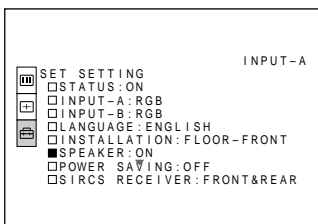
CEILING-REAR: The picture is reversed vertically.

Note

In case of using a mirror, be careful of installation since the picture may be reversed.

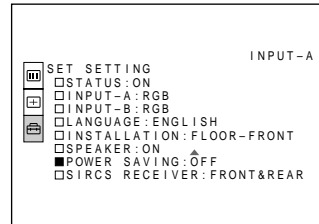
SPEAKER

Set to OFF to cut off the sound of the internal speakers. When set to OFF, "SPEAKER OFF" appears on the screen when you turn on the power.



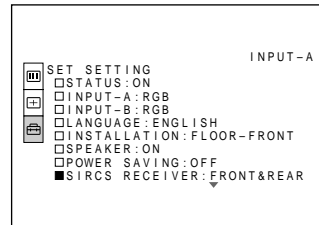
POWER SAVING

When set to ON, the projector goes into the power saving mode if no signal is input for 10 minutes.



SIRCS RECEIVER

Selects the remote control detectors on the front and rear of the projector.



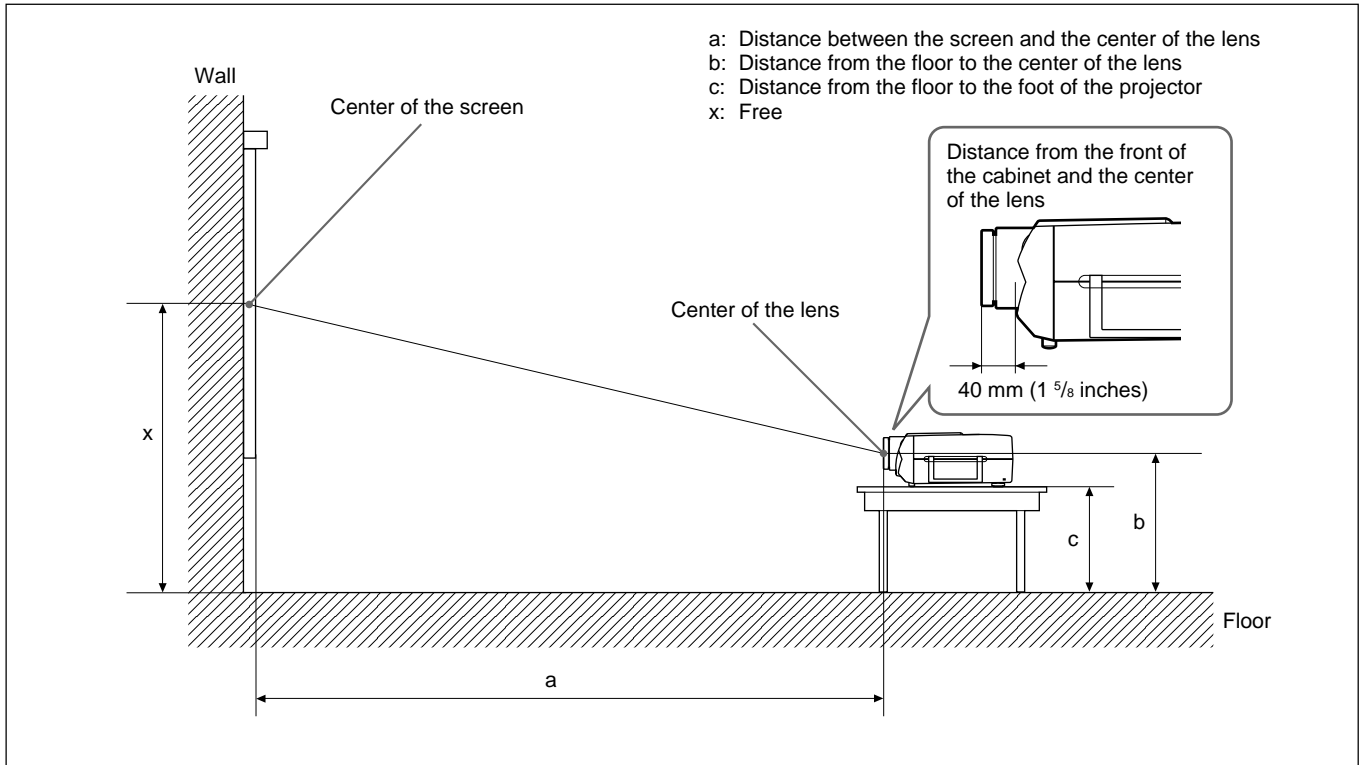
FRONT & REAR: Activates both the front and rear detectors.

FRONT: Activates the front detector only.

REAR: Activates the rear detector only.

Installation Examples

Floor Installation



Unit: mm (inches)

Screen size (inches)	40	60	80	100	120	150	180	200	250	300	
a	Minimum	1560 (61 1/2)	2380 (93 3/4)	3210 (126 1/2)	4040 (159 1/8)	4860 (191 3/8)	6100 (240 1/4)	7340 (289 1/8)	8170 (321 3/4)	10240 (403 1/4)	12300 (484 3/8)
	Maximum	1980 (78)	3020 (118 15/16)	4050 (159 1/2)	5090 (200 1/2)	6120 (241)	7680 (302 3/8)	9230 (363 1/2)	10270 (404 3/8)	12860 (506 3/8)	15450 (608 3/8)
b	x-290 (11 1/2)	x-435 (17 1/4)	x-580 (22 7/8)	x-725 (28 5/8)	x-870 (34 3/8)	x-1088 (42 7/8)	x-1305 (51 1/2)	x-1450 (57 1/8)	x-1813 (71 3/8)	x-2175 (85 3/4)	
c	x-373 (14 3/4)	x-518 (20 1/2)	x-663 (26 1/8)	x-808 (31 7/8)	x-953 (37 5/8)	x-1171 (46 1/8)	x-1388 (54 3/4)	x-1533 (60 3/8)	x-1896 (74 3/4)	x-2258 (89)	

To calculate the installation measurement (unit: mm)

SS: screen size diagonal (inches)

$$a \text{ (minimum)} = \{(SS \times 52.83/1.3102) - 95.032\} \times 1.025$$

$$a \text{ (maximum)} = \{(SS \times 69.64/1.3102) - 96.167\} \times 0.975$$

$$b = x - SS/1.3102 \times 9.5$$

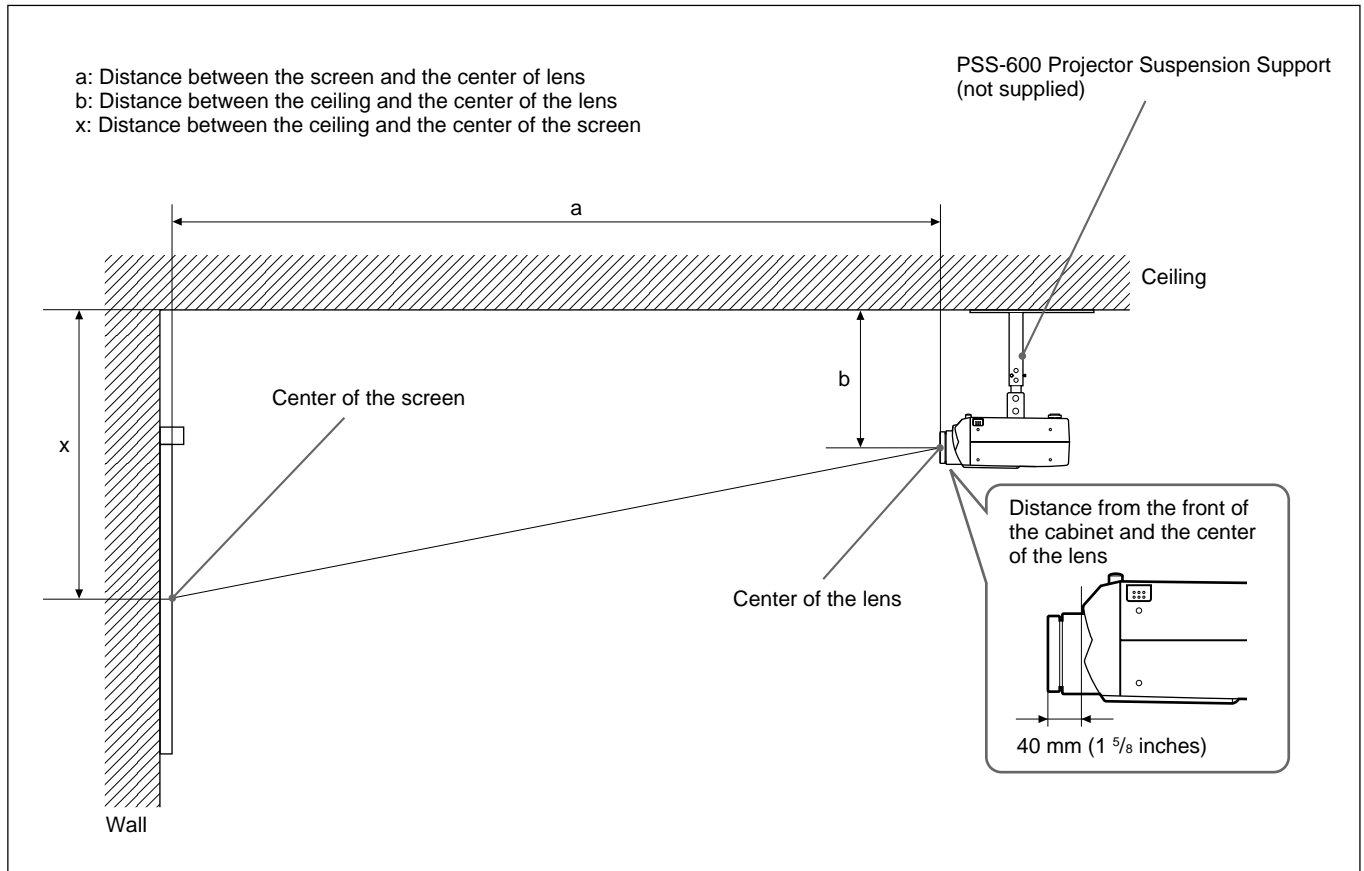
$$c = x - (SS/1.3102 \times 9.5 + 83.3)$$

Installation Examples

Ceiling Installation

When installing the projector on the ceiling, use the PSS-600 Projector Suspension Support.

For ceiling installation, consult with qualified Sony personnel.



Unit: mm (inches)

Screen size (inches)		80	100	120	150	180	200	250	300	
a	Minimum	3210 (126 1/2)	4040 (159 1/8)	4860 (191 3/8)	6100 (240 1/4)	7340 (289 1/8)	8170 (321 3/4)	10240 (403 1/4)	12300 (484 3/8)	
	Maximum	4050 (159 1/2)	5090 (200 1/2)	6120 (241)	7680 (302 3/8)	9230 (363 1/2)	10270 (404 1/2)	12860 (506 3/8)	15450 (608 3/8)	
x		b+580 (22 7/8)	b+725 (28 5/8)	b+870 (34 3/8)	b+1088 (42 7/8)	b+1305 (51 1/2)	b+1450 (57 1/8)	b+1813 (71 3/8)	b+2175 (85 3/4)	
b		226/251/276/326/351/376 mm (9/10/10 7/8/12 7/8/13 7/8/14 7/8 inches) adjustable when using PSS-600								

To calculate the installation measurement (unit: mm)

SS: screen size diagonal (inches)

$$a \text{ (minimum)} = \{(SS \times 52.83/1.3102) - 95.032\} \times 1.025$$

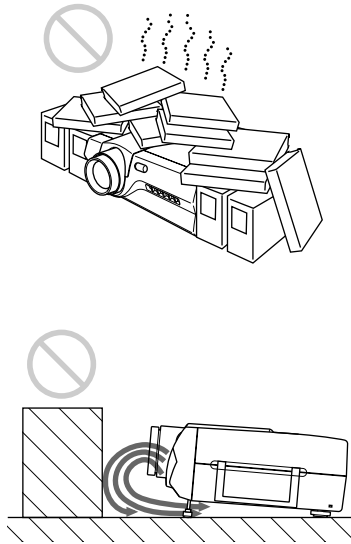
$$a \text{ (maximum)} = \{(SS \times 69.64/1.3102) - 96.167\} \times 0.975$$

$$x = b + SS/1.3102 \times 9.5$$

Unsuitable Installation

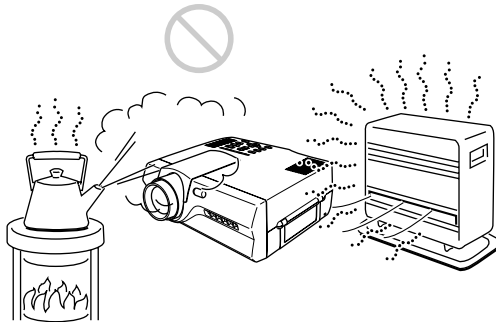
Do not install the projector in the following situations. These installations may cause malfunction or damage to the projector.

Poorly ventilated



- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes. When the internal heat builds up due to the block-up, the temperature sensor will function with the message “High Temperature! Power off in 1 min.” The power will be turned off automatically after one minute.
- Leave space of more than 30 cm (11 7/8 inches) around the front ventilation holes.
- Be careful that the bottom ventilation holes may inhale tininess such as a piece of paper.
- If you put something in front of the front ventilation holes, the exhaust may be inhaled into the projector through the ventilation holes at the bottom, causing the internal temperature to rise, which activates the protection circuit. Install the projector so that the exhaust is not blocked.

Highly heated and humid



- Avoid installing the unit in a location where the temperature or humidity is very high, or temperature is very low.
- To avoid moisture condensation, do not install the unit in a location where the temperature may rise rapidly.

Very dusty

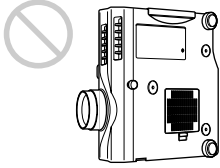


Avoid installing the unit in a location where there is a lot of dust; otherwise, the air filter will be obstructed. The dust blocking the air through the filter may cause raising the internal heat of the projector. Clean it up periodically.

Notes on Installation

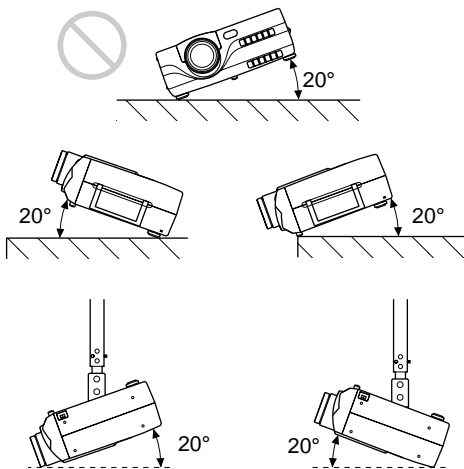
Carry out the followings.

No toppling of the unit



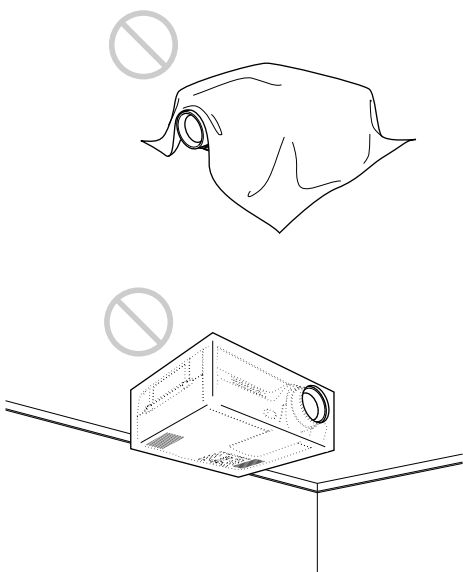
Avoid using as the unit topples over on its side. It may cause malfunction.

Use to be level



Avoid using as the unit tilts more than 20 degrees. Do not install the unit other than on the floor or ceiling. These installation may cause malfunction.

No blocking the ventilation holes



Avoid using something to cover over the front ventilation holes; otherwise, the internal heat may build up.

Use the supplied front cover only when the power is turned off. Do not turn on the projector with the front cover on. It may cause malfunction.

Note on the Time to Replace the Lamp

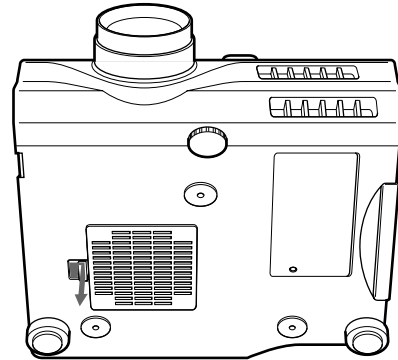
When it is time to replace the lamp, replace the lamp promptly with a new LMP-600 Projector Lamp.
For details on replacement, refer to the instruction manual supplied with the LMP-600 Projector Lamp.

Cleaning the Air Filter

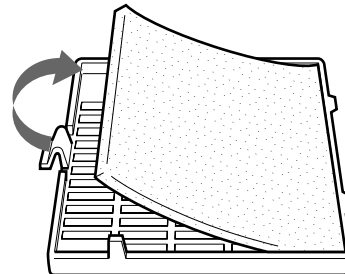
The air filter should be cleaned every 300 hours. When it becomes difficult to remove the dust from the filter, replace the filter with a new one.

To clean the air filter, follow the steps below:

- 1** Turn off the power and unplug the power cord.
- 2** Remove the air filter cover on the bottom of the projector.



- 3** Remove the air filter.



- 4** Remove the dust from the filter with a vacuum cleaner.
- 5** Attach the air filter and replace the cover.

Notes

- If the air filter is excessively dirty, wash it with a mild detergent solution and dry it in a shaded place. If the dust cannot be removed, replace the air filter with the supplied new one.
- Be sure to attach the air filter cover firmly; the power will not be turned on if it is not closed securely.

Troubleshooting

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

Symptom	Cause	Remedy
The power is not turned on.	The power has been turned off and on with the I / ⏻ key at a short interval.	Wait for about one minute before turning on the power (see page 22 (EN)).
	The lamp cover is detached.	Close the lamp cover securely.
	The air filter cover is detached.	Close the air filter cover securely (see page 37 (EN)).
No picture and no sound.	Cable is disconnected.	Check that the proper connections have been made (see pages 18 (EN) to 21 (EN)).
	Wrong connection.	Check that the proper connections have been made (see pages 18 (EN) to 21 (EN)).
	Input selection is incorrect.	Select the input source correctly using the INPUT key (see page 22 (EN)).
No picture or no sound.	Either the picture or the sound is cut off.	Press the MUTING keys to release the muting function (see page 23 (EN)).
No picture.	The computer signal is not set to output to external monitor.	Set the computer signal to output to external monitor (see page 18 (EN)).
	The computer signal is set to output to both the LCD of the computer and external monitor.	Set the computer signal to output only to external monitor (see page 18 (EN)).
The picture is noisy.	Noise may appear on the background depending on the combination of the numbers of dot input from the connector and numbers of pixel on the LCD panel.	Change the desktop pattern on the connected computer.
When inputting sound through INPUT A/B connector, sound comes through one channel only.	Monaural sound is being input through the INPUT A/B connector.	Input stereo sound.
The picture from INPUT A/B connector is colored strange.	Setting for INPUT-A/INPUT-B in the SET SETTING menu is incorrect.	Select RGB or COMPONENT for INPUT-A or INPUT-B in the SET SETTING menu according to the input signal (see page 31 (EN)).
"Please check INPUT-A in SET SETTING." appears in spite of inputting the correct signal from INPUT A.	Setting for INPUT-A in the SET SETTING menu is incorrect.	Select RGB or COMPONENT for INPUT-A in the SET SETTING menu according to the input signal (see page 31 (EN)).
"Please check INPUT-B in SET SETTING." appears in spite of inputting the correct signal from INPUT B.	Setting for INPUT-B in the SET SETTING menu is incorrect.	Select RGB or COMPONENT for INPUT-B in the SET SETTING menu according to the input signal (see page 31 (EN)).
"NO INPUT" appears when 15k RGB or component signal is input.	The sync signal is incorrect.	Input the correct sync signal (composite sync or sync on G signal (sync on Y for component signal)).
On-screen displays do not appear.	STATUS in the SET SETTING menu has been set to OFF.	Set STATUS in the SET SETTING menu to ON (see page 31 (EN)).
Color balance is incorrect.	Picture has not been adjusted properly.	Adjust the picture (see pages 26 (EN) and 27 (EN)).
	Projector is set to wrong color system.	Set COLOR SYS in the PICTURE CTRL menu to match the color system being input (see page 27 (EN)).
The picture is too dark.	Contrast or brightness has not been adjusted properly.	Adjust the contrast or brightness in the PICTURE CTRL menu properly (see page 26 (EN)).
The picture is not clear.	Picture is out of focus.	Adjust the focus (see page 23 (EN)).
	Condensation has occurred on the lens.	Leave the projector for about two hours with the power on (see page 35 (EN)).

Symptom	Cause	Remedy
The LAMP/COVER indicator flashes.	The lamp cover or the air filter cover is detached.	Attach the cover securely (see page 37 (EN)).
The LAMP/COVER indicator lights up.	The lamp has reached the end of its life.	Replace the lamp (see page 37 (EN)).
The TEMP/FAN indicator flashes.	The fan is broken.	Consult with qualified Sony personnel.
The TEMP/FAN indicator lights up.	The internal temperature is unusually high.	Check to see if nothing is blocking the ventilation holes.
The Remote Commander does not work.	The Remote Commander batteries are dead.	Replace with new batteries (see page 16 (EN)).
	The COMMANDER ON/OFF switch is set to the OFF position.	Set the switch to ON position (see page 16 (EN)).
	You are using the Remote Commander as a wireless Remote Commander, and it is connected to the projector.	Disconnect the cable.
	The front/rear remote commander detector is near the fluorescent lamp.	Change the setting of SIRCS RECEIVER in the SET SETTING menu (see page 32 (EN)).
The laser pointer is not emitted.	The batteries are dead.	Replace with new batteries (see page 16 (EN)).
	The Remote Commander is used as wired without batteries.	Install batteries (see page 16 (EN)).
The joystick, R CLICK, or L CLICK key does not function.	The mouse port on the computer does not recognize the mouse cable.	Restart the computer.

Warning messages

Use the list below to check the meaning of the messages displayed on the screen.

Message	Meaning	Remedy
High Temperature! Power off in 1 min.	Internal temperature is too high.	Turn off the power. Check to see if nothing is blocking the ventilation holes.
Frequency is out of range!	This input signal cannot be projected as the frequency is out of the acceptable range of the projector.	Input a signal that is within the range of the frequency.
	The resolution setting of the output signal of a computer is too high.	Set the setting of output to the XGA.
Please check INPUT-A in SET SETTING.	You have input RGB signal from the computer when INPUT-A in the SET SETTING menu is set to COMPONENT.	Set INPUT-A correctly.
Please check INPUT-B in SET SETTING.	You have input RGB signal from the computer when INPUT-B in the SET SETTING menu is set to COMPONENT.	Set INPUT-B correctly.

Caution messages

Use the list below to check the meaning of the messages displayed on the screen.

Message	Meaning	Remedy
NO INPUT	No input signal	Check connections.
Not applicable!	You have pressed the wrong key.	Press the appropriate key.

Specifications

Optical characteristics

Projection system	3 LCD panels, 1 lens, projection system
LCD panel	1.3-inch TFT LCD panel, 2, 359, 296 pixels (786, 432 pixels × 3)
Lens	1.3 times zoom lens f 54 to 70 mm/F 2.0 to 2.4
Lamp	120 W UHP
Projection picture size	Range: 40 to 300 inches (diagonal measure)
Light output	ANSI lumen ¹⁾ 1100 lm
Throwing distance	(1024 × 768 dots display) 40-inch: 1560 to 1980 mm (61 1/2 to 78 inches) 80-inch: 3210 to 4050 mm (126 1/2 to 159 1/2 inches) 100-inch: 4040 to 5090 mm (159 1/8 to 200 1/2 inches) 120-inch: 4860 to 6120 mm (191 3/8 to 241 inches) 200-inch: 8170 to 10270 mm (321 3/4 to 404 3/8 inches) 300-inch: 12300 to 15450 mm (484 3/8 to 608 3/8 inches)

Electrical characteristics

Color system	NTSC _{3.58} /PAL/SECAM/NTSC _{4.43} /PAL-M system, switched automatically/manually
Resolution	750 horizontal TV lines (Video input) 1024 × 768 dots (RGB input)
Acceptable computer signals	fH:15, 24 to 91 kHz fV:43 to 85 Hz
Speaker	Wide frequency range 3 speakers system, Woofer: 57 mm (2 1/4 inches) diameter, max. 1 W Tweeter: 28 mm (1 1/8 inches) diameter, max. 0.2 W × 2 (stereo)

Input/Output

VIDEO IN (only for VPL-X1000U/M)	VIDEO: phono type Composite video: 1 Vp-p ±2 dB sync negative (75 ohms terminated) S VIDEO: Y/C mini DIN 4-pin type (male)
----------------------------------	--

Y (luminance): 1 Vp-p ±2 dB sync negative (75 ohms terminated)
C (chrominance): burst
0.286 Vp-p ±2 dB (NTSC) (75 ohms terminated),
burst 0.3 Vp-p ±2 dB (PAL) (75 ohms terminated)

AUDIO IN (only for VPL-X1000U/M)
Phono type × 2
500 mVrms, impedance more than 47 kilohms

INPUT A/INPUT B

HD D-sub15-pin (female)
Analog RGB/component:

When using as input
R/R-Y: 0.7 Vp-p ±2 dB (75 ohms terminated)
G: 0.7 Vp-p ±2 dB (75 ohms terminated)
G with sync/Y: 1 Vp-p ±2 dB sync negative (75 ohms terminated)

B/B-Y: 0.7 Vp-p ±2 dB (75 ohms terminated)

SYNC/HD:

Composite sync input: 1-5 Vp-p high impedance, positive/negative
Horizontal sync input: 1-5 Vp-p high impedance, positive/negative
VD:
Vertical sync input: 1-5 Vp-p high impedance, positive/negative

When using as output (INPUT B only) (input/output switching, outputs signal input from RGB connector on INPUT A)

R/R-Y: Gain unity (75 ohms terminated)

G: Gain unity (75 ohms terminated)

B/B-Y: Gain unity (75 ohms terminated)

SYNC/HD: Composite sync output 4Vp-p (open), 1Vp-p (75 ohms input)

Horizontal sync output 4Vp-p (open) 1Vp-p (75 ohms input)

VD: Vertical sync output 4Vp-p (open) 1Vp-p (75 ohms input)

MOUSE (output): 13-pin (female)
(For details, see "Pin assignment" on page 42 (EN).)

	AUDIO: Stereo minijack 500 mVrms, impedance more than 47 kilohms		Mouse Cable SIC-S20 (for Macintosh) (2 m) (1) SIC-S21 (for Serial) (2 m) (1) SIC-S22 (for PS/2) (2 m) (1)
AUDIO OUT (variable out): stereo minijack	Max. 1 Vrms, when an output signal is 500 mVrms, impedance less than 5 kilohms		Audio/video cable (1.5 m) (1) (except for VPL-X1000E)
CONTROL S IN/PLUG IN POWER	Stereo minijack 5 Vp-p, plug in power, DC 5 V maximum output 60 mA		Strap for Remote Commander (1) AC power cord (1) Lens cap (1) Front cover (1) Air filter (for replacement) (1) Operating Instructions (1) Installation Manual for Dealers (1) Quick Reference Card (1) Warranty Card (1) (only for VPL-X1000U)
Safety regulations	VPL-X1000U: UL1950, cUL (CSA C22.2 No.950), FCC Class A, IC Class A, DHHS VPL-X1000E/X1000M: EN60 950 EN60825-1, CE, C-Tick		

Laser beam

Laser type	Class 2
Wavelength	645 nm
Output	1 mW

General

Dimensions	333 × 120 × 291 mm (13 1/4 × 4 3/4 × 11 1/2 inches) (w/h/d) (excluding lens, adjusters, and protruding parts) 339 × 136 × 322 mm (13 3/8 × 5 3/8 × 12 3/4 inches) (w/h/d)
Mass	Approx. 5.9 kg (13 lb)
Power requirements	AC 100 to 120 V/220 to 240 V, 2A/0.9A, 50/60 Hz
Power consumption	Max. 220 W (Standby mode: 2 W)
Heat dissipation	750.7 BTU
Operating temperature	0°C to 40°C (32°F to 104°F)
Operating humidity	35% to 85% (no condensation)
Storage temperature	-20°C to 60°C (-4°F to 140°F)
Storage humidity	10% to 90%
Supplied accessories	Remote Commander RM-PJM600 (1) Size AA (R6) batteries (2) Video Signal Cable SMF-401 (1) Signal Adapter (for Macintosh) (1)

Design and specifications are subject to change without notice.

Optional accessories

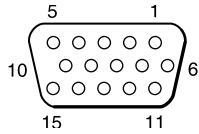
Projector Lamp LMP-600 ¹⁾ (for replacement)
Projector Suspension Support PSS-600
Interface Board IFB-X600E (only for VPL-X1000E)
Video Signal Cable
SMF-400 (HD D-sub 15-pin (male) ↔ 5 × BNC (male))
SMF-401 (HD D-sub 15-pin (male) ↔ HD D-sub 15-pin (male))
Signal Cable
SMF-402 (HD D-sub 15-pin (male) ↔ 3 × phono type (male))
Mouse Cable
SIC-S20 (for Macintosh) (2 m)
SIC-S21 (for Serial) (2 m)
SIC-S22 (for PS/2) (2 m)
Signal Adapter ADP-20 (Macintosh ↔ HD D-sub 15-pin)
Projection Lens
2 times Zoom Long Focus Lens VPLL-ZM100
Fixed Short Focus Lens VPLL-FM20
Fixed Short Focus Lens VPLL-FM30
Carrying Case VLC-600 ¹⁾
Screens
50-inch Portable VPS-50C
80-inch Portable VPS-80C
100-inch Flat Screen VPS-100FH
120-inch Flat Screen VPS-120FH

Some of the items may not be available in some areas. For details, please consult your nearest Sony office.

Specifications

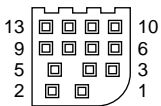
Pin assignment

RGB input (INPUT A)/RGB IN/OUT (INPUT B) connector (HD D-sub 15-pin, female)



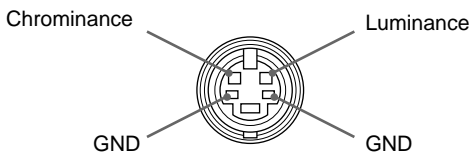
1	R/R-Y	9	N.C.
2	G/Y	10	GND
3	B/B-Y	11	GND
4	N.C.	12	N.C.
5	GND	13	HD/C.Sync
6	GND (R)	14	VD
7	GND (G)	15	N.C.
8	GND (B)		

MOUSE connector (13-pin, female)



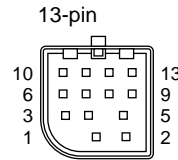
1	RTS	8	R
2	GND	9	98/AT/TXD
3	XA	10	+5V/DTR
4	XB	11	CLOCK
5	YA	12	DATA
6	YB	13	RXD
7	L/PS		

S VIDEO jack (4 pin, mini-DIN)



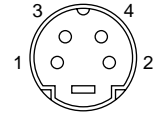
Mouse cable pin assignment

SIC-S20



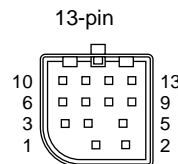
1	RTS	8	R
2	GND	9	98/AT/TXD
3	XA	10	+5V/DTR
4	XB	11	CLOCK
5	YA	12	DATA
6	YB	13	RXD
7	L/PS		

mini DIN 4-pin



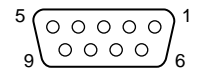
1	ADB
2	NC
3	+5V
4	GND

SIC-S21



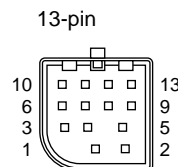
1	RTS	8	R
2	GND	9	98/AT/TXD
3	XA	10	+5V/DTR
4	XB	11	CLOCK
5	YA	12	DATA
6	YB	13	RXD
7	L/PS		

D-sub 9-pin



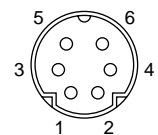
1	DCD
2	RXD
3	TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI

SIC-S22



1	RTS	8	R
2	GND	9	98/AT/TXD
3	XA	10	+5V/DTR
4	XB	11	CLOCK
5	YA	12	DATA
6	YB	13	RXD
7	L/PS		

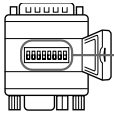
mini DIN 6-pin



1	DATA
2	NC
3	GND
4	+5V
5	CLOCK
6	NC

Switch position for signal adapter

to Macintosh



DIP switch

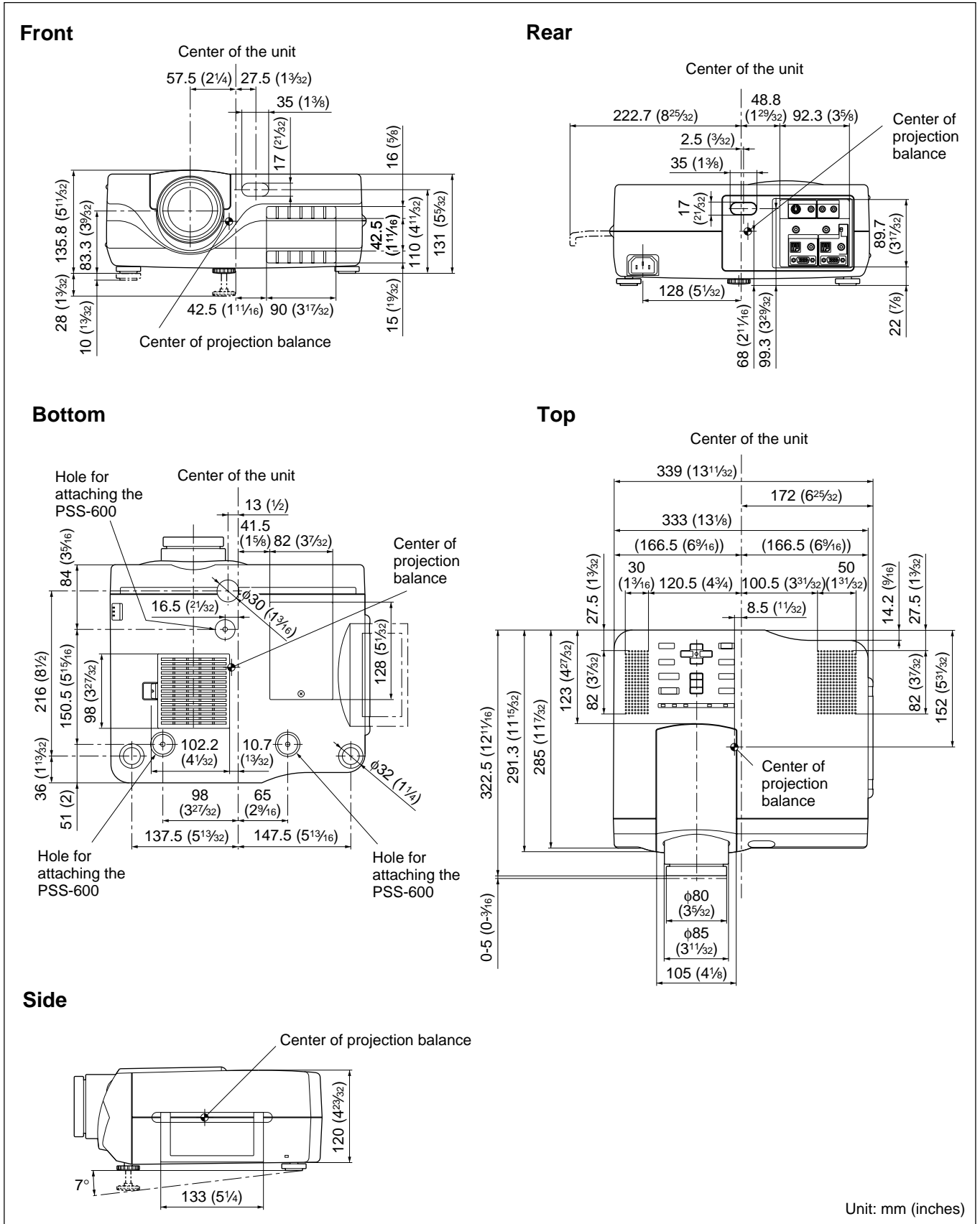
to Projector

ON (upper position) = 1
OFF (lower position) = 0

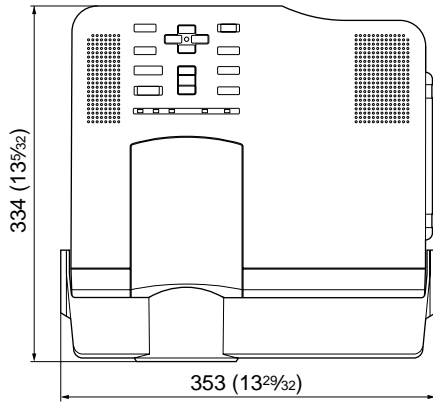
Mode	fH	DIP switch 12345678
VGA/S VGA	31.5 kHz/37.8 kHz	00111001
Macintosh 13"	35.0 kHz	11001001
Macintosh 16"	49.7 kHz	01011001
Macintosh 19"	60.2 kHz	01101001
Macintosh 21"	68.7 kHz	11111001
Macintosh 1280 × 960	75.0 kHz	11001101
Macintosh 1280 × 1024	75.0 kHz	11001101

Specifications

Dimensions



Top (with the front cover)



Unit: mm (inches)

