

SONY[®]

VPL-VW11HT

LCD Video Projector

Operating Instructions

GB

VPL-VW11HT

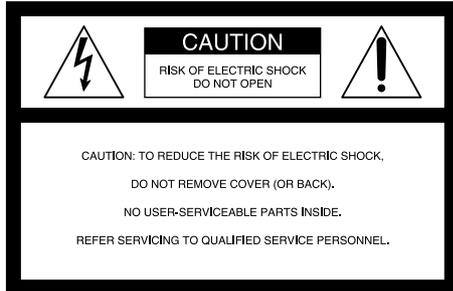
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WARNING

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.

WARNING

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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 in Europe

This product with the CE marking complies with both the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European standards:

- EN60950: Product Safety
- EN55103-1: Electromagnetic Interference (Emission)
- EN55103-2: Electromagnetic Susceptibility (Immunity)

This product is intended for use in the following Electromagnetic Environment(s):

E1 (residential), E2 (commercial and light industrial), E3 (urban outdoors) and E4 (controlled EMC environment, ex. TV studio).

This product is designed for operation in the environments E1 to E4. During EMC stress at 30 – 40MHz, the performance (evaluated according to ITU/R 562-3 and ITU/R 500-4) may degrade from Level 5 to Level 4.

Without the EMC Stress, all performance will recover to full function.

For the customers in Canada

This Class B 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



Gooi de batterij niet weg maar lever deze in als klein chemisch afval (KCA).

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

Warning on power connection

Use the proper power cord for your local power supply.

	The United States, Canada		Continental Europe		UK, Ireland, Australia, New Zealand	Japan
Plug type	VM0233	290B	YP-12A	COX-07	— ¹⁾	YP332
Female end	VM0089	386A	YC-13B	COX-02	VM0310B	YC-13
Cord type	SJT	SJT	H05VV-F	H05VV-F	N13237/CO-228	VCTF
Rated Voltage & Current	10A/125V	10A/125V	10A/250V	10A/250V	10A/250V	7A/125V
Safety approval	UL/CSA	UL/CSA	VDE	VDE	VDE	DENAN

1) Use the correct plug for your country.

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Precautions

On safety

- Check that the operating voltage of your unit is identical with the voltage of your local power supply.
- 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 to 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 place your hand or objects near the ventilation holes — the air coming out is hot.
- Be careful not to catch your fingers by the adjuster when you lift up the projector. Do not push hard on the top of the projector with the adjuster 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  key on the Remote Commander or the  key 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) on 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.

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.

On LCD projector

- The LCD projector is manufactured using high-precision technology. You may, however, see tiny black points and/or bright points (red, blue, or green) that continuously appear on the LCD projector. This is a normal result of the manufacturing process and does not indicate a malfunction.
- Air polluted by tobacco smoke, etc., may have a negative effect on the projector. Be sure to avoid tobacco smoke, etc., from directly getting in to this unit. Ventilate well when using this unit in a closed room.

Features

High brightness, high picture quality

- **New, wide LCD panel**

The newly developed high-resolution wide LCD panel (1366 × 768 dots) provides higher uniformity and reduced ghosts.

- **High-contrast**

The improvement in the LCD panel and the optical system has provided a high-contrast.

- **High-brightness – 1000 ANSI lumens**

The LCD panel with its newly developed 200W UHP lamp, optical unit and lens achieves a high brightness of 1000 ANSI lumens (16:9 projection), allowing for improved home viewing.

- **High-quality image**

In addition to the new wide LCD panel, a variety of functions are now available in the projector. These include DRC-MF (Digital Reality Creation Multifunction) (Sony's proprietary high-quality image technology); CINE MOTION; 3-D Gamma Correction, providing excellent uniformity; Cinema Black Mode, a mode that reduces the black level according to the input source/projection environment; and 3-D YC Separation/DNR (NTSC), a feature that reproduces a clear image without noise.

High-adaptability in the home environment

- **Reduced noise**

The exhaust opening at the front is connected to an internal fan and air duct. This means the distance from the fan to the exhaust opening is long, significantly reducing fan noise.

- **Flexible setup**

The projection lens has a short focus (90 inches with 2.9m (9.5 feet) (16:9)). The digital keystone correction function allows projection at a wide angle. The projector's white color goes with any color (ceilings, walls, etc.).

- **Detection of clogs in the air filter**

This projector uses the air filter which allows microcomputer to detect the condition of clogs according to the environment of use.

To detect clogs accurately, reset the air filter the first time you use the projector, and every time when you replace the air filter.

For details, see "To Reset the Air Filter" on page 35 (GB).

Wide Screen/DTV/High Definition Television

- **Wide Screen**

This projector utilizes a 16:9 aspect ratio LCD panel, allowing seven screen modes (ZOOM, FULL, SUBTITLE, WIDE ZOOM, etc.) using all panel pixels (1366 × 768).

It allows NORMAL THROUGH mode and FULL THROUGH mode as the through mode that reproduces a sharp image with one-to-one mapping.

- **DVD, DTV, High-Definition Television**

The projector's super-precise image exceeds 3.14 million pixels. It is also compatible with next-generation DTV (digital TV) and high-definition television signals. Combined with a tuner or a MUSE decoder (optional), you can enjoy DTV, high-definition television, high-definition LD, etc.

Video Memory

The projector has a video memory function. The user can store up to 6 settings (image quality, aspect, temperature color, DRC-MF, etc.) according to the input source. The user can directly recall any setting from the Remote Commander.

Multi scan compatibility

- **Scan converter built-in**

This projector has a built-in scan converter which converts the input signal within 1366 × 768 pixels.

- **Compatible with 16:9 RGB¹⁾**

This projector is compatible with 16:9 aspect ratio RGB signals.

- **Input signals**

The projector can accept the following video signals: Composite, S-video, Component, Progressive component, DTV (480i/p, 720p/1080i), HDTV, 15k RGB, VGA, SVGA, XGA and SXGA.

- **Compatible with six color systems**

NTSC^{3.58}, PAL, SECAM, NTSC^{4.43²⁾}, PAL-M or PAL-N color system can be selected automatically or manually.

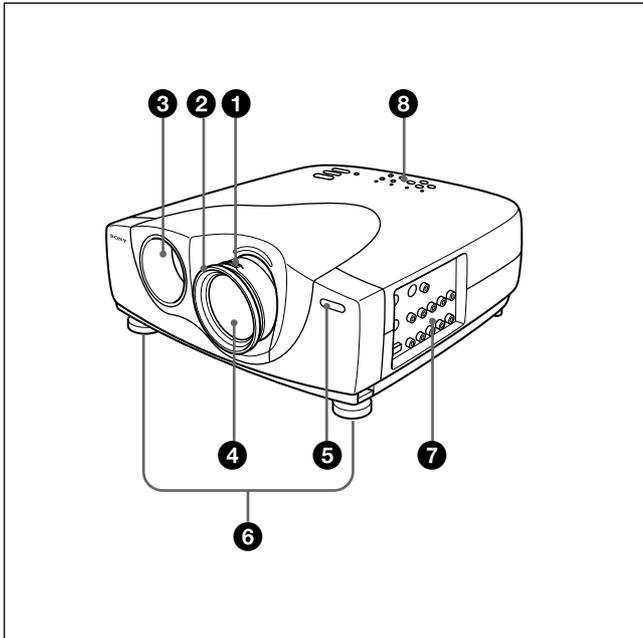
-
- VGA, SVGA, XGA and SXGA are registered trademarks of the International Business Machines Corporation, U.S.A.
 - VESA is a registered trademark of the Video Electronics Standard Association.
 - IBM and PC/AT are a trademark and a registered trademark of the International Business Machines Corporation, U.S.A.
 - Macintosh is a registered trademark of Apple Computer, Inc.
 - NEC is a registered trademark of NEC Corporation.
 - PC-98 is a trademark of NEC Corporation.

1) Compatible with specified signals only.

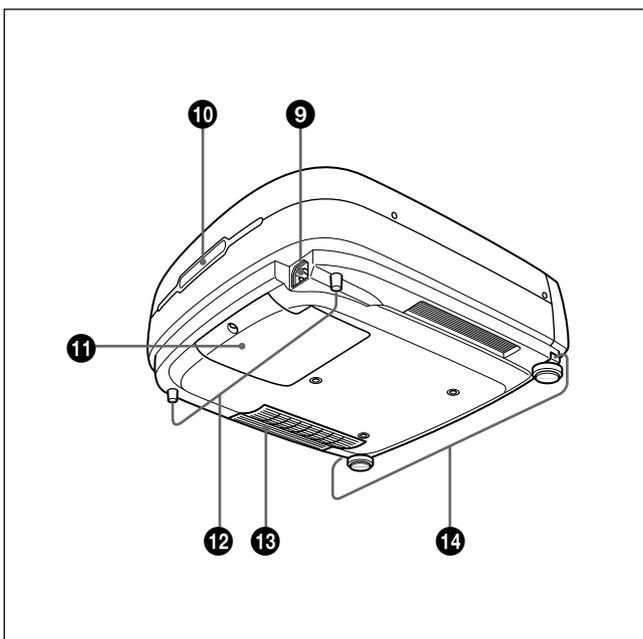
2) NTSC^{4.43} is the color system used when playing back a video recorded in the NTSC format on an NTSC^{4.43} system VCR.

Location and Function of Controls

Front/Left Side



Rear/Right Side/Bottom



1 Zoom ring

Adjusts the size of the picture.

2 Focus ring

Adjusts the picture focus.

3 Ventilation holes (exhaust)

4 Lens

Remove the lens cap before projection.

5 Front remote control detector (SIRCS receiver)

6 Adjusters

When a picture is projected on the out of the screen, adjust the picture using these adjusters.

For details on how to use the adjusters, see "How to use the adjuster" on page 10 (GB).

7 Connector panel

For details, see page 12 (GB).

8 Control panel

For details, see "Control panel" on page 11 (GB).

9 AC IN socket

Connects the supplied AC power cord.

10 Rear remote control detector (SIRCS receiver)

11 Lamp cover

12 Rear adjusters

13 Ventilation holes (intake)/air filter

About ventilation holes

Notes

- Do not place anything near the ventilation holes as it may cause internal heat build-up. Do not put your hand near the ventilation holes, or you may be burned.
- To detect clogs accurately, reset the air filter the first time you use the projector, and every time when you replace the air filter.
- **Replace and reset the air filter when a warning message is displayed on the screen to ensure optimal performance. This air filter cannot be cleaned. You should also reset the air filter when you use the projector for the first time.**

For details, see "Replacing the Air Filter" on page 35 (GB).

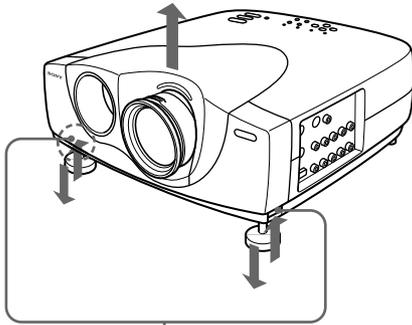
14 Adjuster buttons

How to use the adjuster

To adjust the height

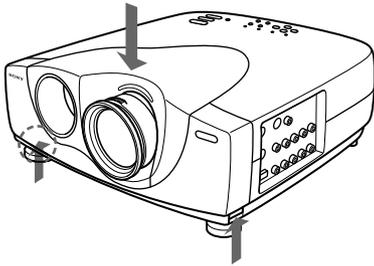
Adjust the height of the projector as follows:

- 1 Lift the projector and press the adjuster buttons. The adjusters will extend from the projector.

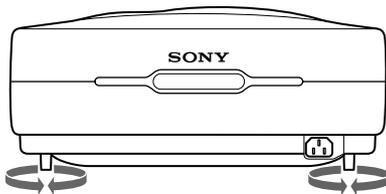


Adjuster buttons

- 2 While pressing the buttons, lower the projector. Then, release the buttons. The adjuster will be locked, then the height of the projector will be fixed.
For fine adjustment, turn the adjusters to the right and the left.



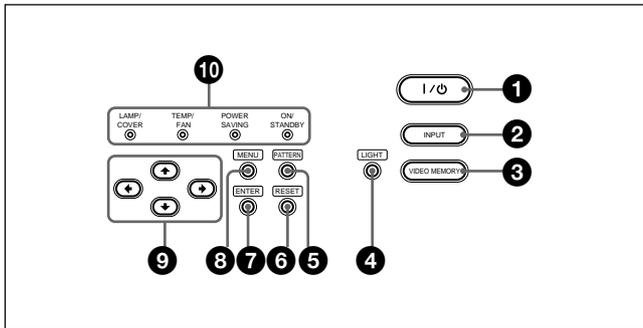
- 3 If necessary, turn the rear adjusters to the right and the left to adjust the height of the projector.



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.
- When the adjusters are not extending from the projector, loosen the screws by hand.

Control panel



1 I / ⏻ (on / standby) key

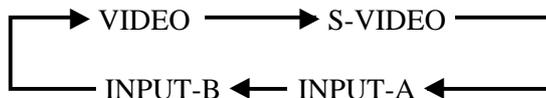
Turns the projector on and off when the projector is in the standby mode. The ON/STANDBY indicator lights in green when the power is turned on.

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 20 (GB).

2 INPUT key

Selects the input signal. Each time you press the key, the input signal switches as follows:



3 VIDEO MEMORY key

You can adjust the image in advance and store the setting in the VIDEO MEMORY 1 to 6. You can recall the setting by pressing this key. Pressing this key selects memory numbers 1 through 6. When you keep on pressing, it selects OFF, and then starts again with 1. You can easily set, change, and view the image in a suitable setting.

For more details on how to set the video memory, see the VIDEO MEMORY of the INPUT SETTING menu on page 25 (GB).

4 LIGHT key

If you press this key while the power is on, the keys on the control panel will be displayed in orange. Press this key again to turn off the light.

The light will turn off automatically if no keys are operated for 30 seconds.

5 PATTERN key

Displays the test pattern on the screen for focus adjustment. Press again to clear the test pattern.

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 ENTER key

Enters the settings of items in the menu system.

8 MENU key

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

9 Arrow keys (↑/↓/←/→)

Used to select the menu or to make various adjustments.

10 Indicators

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

- Lights up when the lamp has reached the end of its life or the lamp does not turn on as a result of high lamp temperature.
- Flashes when the lamp cover or air filter is not secured firmly.

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.

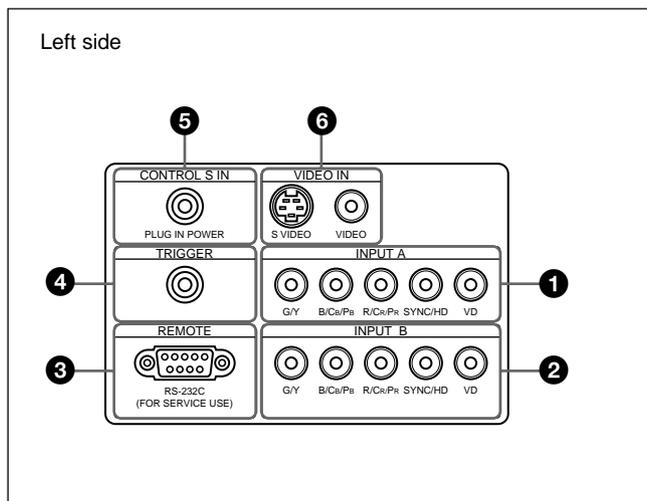
POWER SAVING: Lights up when the projector is in the power saving mode. When POWER SAVING in the SET SETTING menu is set to ON, the projector goes into the power saving mode if no signal is input or no keys are operated for 10 minutes. Although the lamp goes out, the cooling fan keeps running. In the power saving mode, no key functions for the first 40 seconds. The power saving mode is canceled when a signal is input or any key is pressed.

ON/STANDBY: Lights up or flashes under the following conditions:

- 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.
- 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 120 seconds after turning off the power. The ON/STANDBY indicator flashes quickly for the first 40 seconds. During this time, you cannot turn the power back on with the I / ⏻ key.

For details on the LAMP/COVER and the TEMP/FAN indicators, see page 37 (GB).

Connector panel



① INPUT A connectors

G/Y, B/Cb/Pb, R/Cr/Pr, SYNC/HD, VD connectors (phono type):

Connect to the RGB output of the equipment.

According to the connected equipment, computer, component (Y/Cb/Cr), HDTV or DTV (DTV GBR, DTV YPbPr) signal is selected.

② INPUT B connectors

G/Y, B/Cb/Pb, R/Cr/Pr, SYNC/HD, VD connectors (phono type):

Connect to the RGB output of the equipment.

According to the connected equipment, computer, component (Y/Cb/Cr), HDTV or DTV (DTV GBR, DTV YPbPr) signal is selected.

③ RS-232C connector (D-sub 9-pin, female)

This is a service connector.

④ TRIGGER connector (minijack)

Outputs the ON or OFF condition of the unit to the external equipment.

When the unit is turned off, 0 V is output and when the unit is turned on, 12 V is output. However, as power is not output, you cannot use the connector as a power source.

⑤ CONTROL S IN/PLUG IN POWER (DC 5V output) jack

Connects to the control S out jacks of the Sony equipment. Connects to the CONTROL S OUT jack on the supplied Remote Commander when using it as a wired Remote Commander. In this case, you do not need to install the batteries in the Remote Commander, since power is supplied from this jack.

If this connector is used, the Remote Commander key lamp is not turned on.

⑥ 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 video equipment.

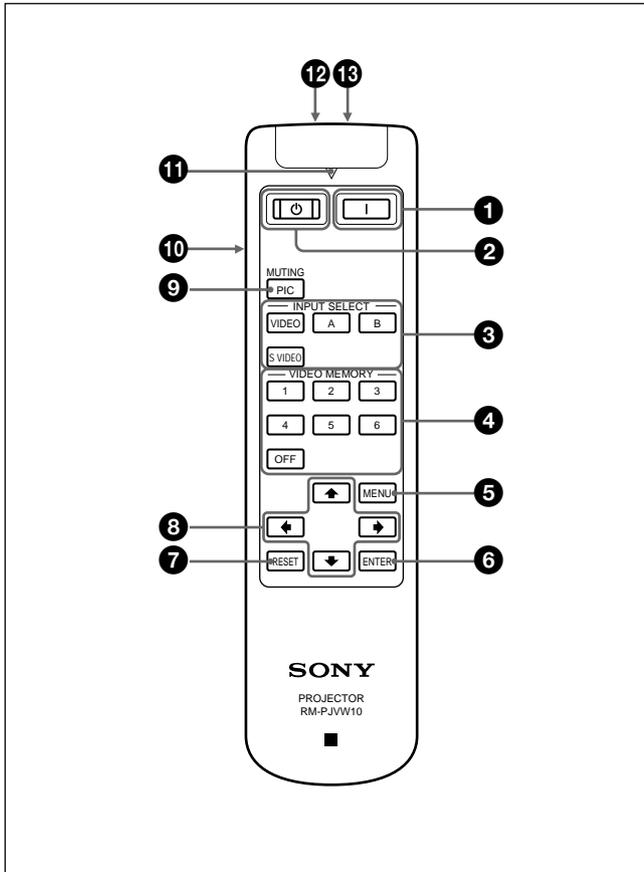
VIDEO (phono type): Connects to the composite video output of video equipment.

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 16 (GB).



1 I (ON) key

Press this key to turn on the projector. (It is assumed that the projector is in the Stand-by state.)

2 Power (OFF) key

Press this key to turn off the power immediately.

3 INPUT SELECT keys

Select the input signal.

VIDEO: Selects the signal of equipment connected to the projector's VIDEO connector.

S VIDEO: Selects the signal of equipment connected to the projector's S VIDEO connector.

A: Selects the video signal of equipment connected to the INPUT A connectors.

B: Selects the video signal of equipment connected to the INPUT B connectors.

4 VIDEO MEMORY keys

You can store an image setting to one of the VIDEO MEMORY keys (1 – 6), and you can directly recall the setting by pressing the appropriate key.

For more details on how to set the video memory, see the VIDEO MEMORY of the INPUT SETTING menu on page 25 (GB).

5 MENU key

6 ENTER key

7 RESET key

8 Arrow keys (↑/↓/←/→)

9 MUTING PIC key

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

10 LIGHT switch

Pressing this switch turns on the key light on the Remote Commander. Pressing this switch again turns off the key light. If no keys are operated, the lights will automatically turn off in 30 seconds.

Install the two batteries in the Remote Commander when you use the key light.

11 Transmission indicator

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

12 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.

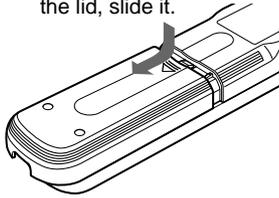
If the batteries are not installed, the Remote Commander key light is not turned on.

13 Infrared transmitter

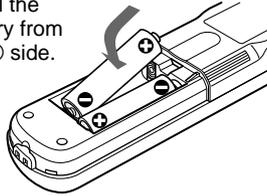
Battery installation

- 1 Push and slide to open the lid, then install the two size AA (R6) batteries (supplied) with the correct polarity.

While pressing the lid, slide it.



Be sure to install the battery from the ⊖ side.



- 2 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 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.
- To turn on the key light when using as a wired Remote Commander, install the batteries.

Note

When the Remote Commander causes malfunction, consult with qualified Sony personnel. We change the Remote Commander as new one according to the guarantee.

Installing the Projector

This section describes the installation arrangements for installing the projector.

Distance between the screen and the center of the lens

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

Unit: m (feet)

16:9 screen size (inches)	40	60	80	100	120	150	200	300
Minimum Distance	1.3 (4.1)	1.9 (6.3)	2.6 (8.5)	3.3 (10.7)	3.9 (12.9)	4.9 (16.2)	6.6 (21.7)	9.9 (32.6)
Maximum Distance	1.5 (4.8)	2.2 (7.4)	3.0 (9.8)	3.8 (12.4)	4.6 (14.9)	5.7 (18.7)	7.6 (25.0)	11.5 (37.7)

4:3 screen size (inches)	40	60	80	100	120	150	200	300
Minimum Distance	1.6 (5.1)	2.4 (7.8)	3.2 (10.5)	4.0 (13.2)	4.8 (15.9)	6.1 (19.9)	8.1 (26.6)	12.2 (40.0)
Maximum Distance	1.8 (6.0)	2.8 (9.1)	3.7 (12.3)	4.7 (15.4)	5.6 (18.3)	7.0 (23.0)	9.4 (30.8)	14.1 (46.2)

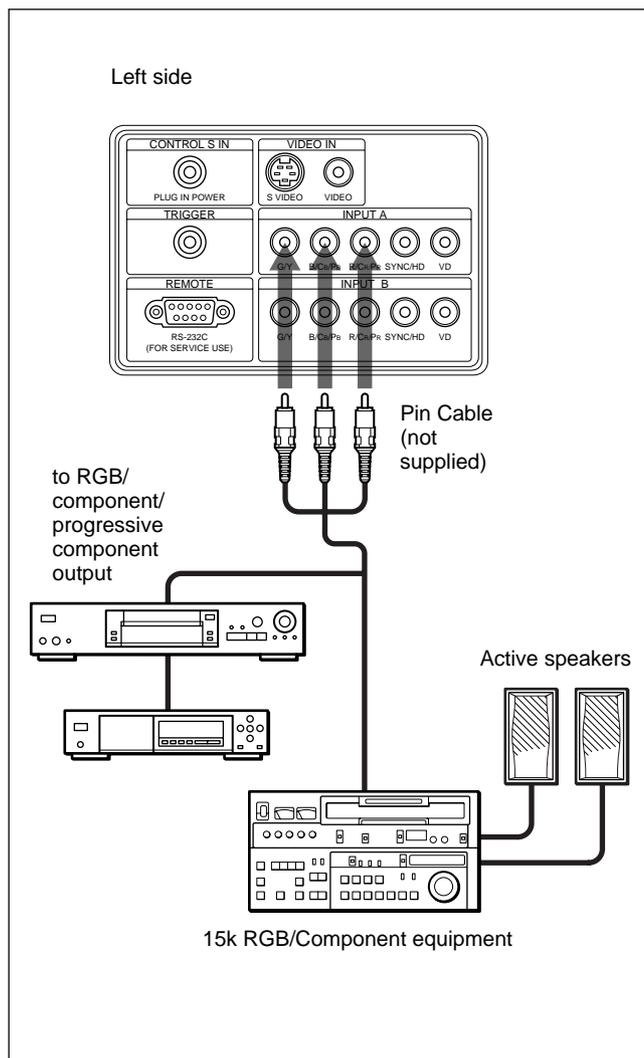
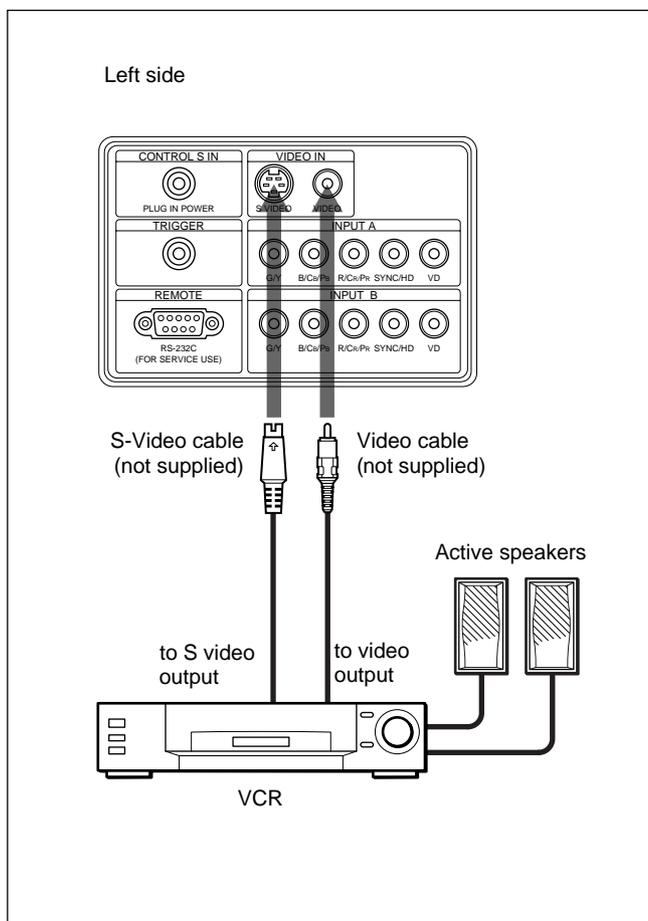
Connecting

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 by the plug, not the cable itself.

Connecting with a VCR/15k RGB/Component/Progressive Component Equipment

This section describes how to connect the projector with a VCR, external active speakers, and 15k RGB/component/progressive component equipment. Also refer to the instruction manuals of the equipment to be connected.



Notes

- Set the aspect ratio using ASPECT in the INPUT SETTING menu according to the input signal.
- To connect a 15k RGB/component/progressive component equipment, select the COMPUTER/COMPONENT/DTV YPbPr/DTV GBR in the INPUT-A or INPUT-B in the SET SETTING menu according to the input signal.
For details on setting, see page 27 (GB).
- You can connect a high definition equipment. The connection method is the same as above.

Connecting with a Computer

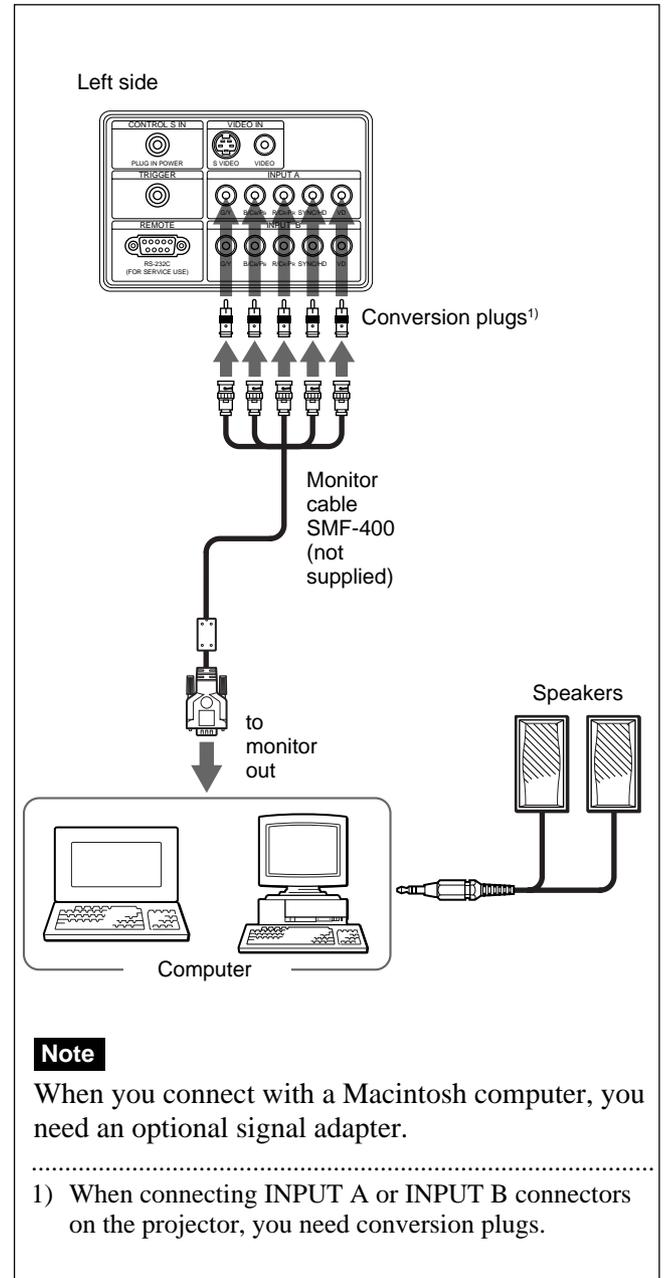
This section describes how to connect the projector to a computer.

Select the “COMPUTER” in the INPUT-A or INPUT-B of the SET SETTING menu.

Notes

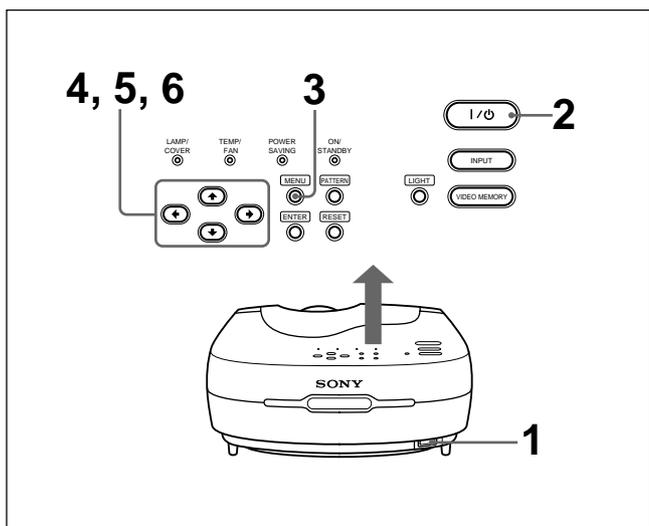
- This unit accepts the VGA, SVGA, XGA or SXGA signals. However, we recommend you to set the output signal of your computer to the XGA.
 - If you set your computer, such as a notebook type IBM PC/AT compatible, to output the signal to both the display of your computer and the external monitor, the picture of the external monitor may not appear properly. In such cases, set the output mode of your computer to output the signal only to the external monitor.
- For details, refer to the operating instructions supplied with your computer.*
- Connect all the connecting cables to the INPUT A connector when you input a signal from the INPUT A connector.
- Connect all the connecting cables to the INPUT B connector when you input a signal from the INPUT B connector as well.

When connecting with a computer



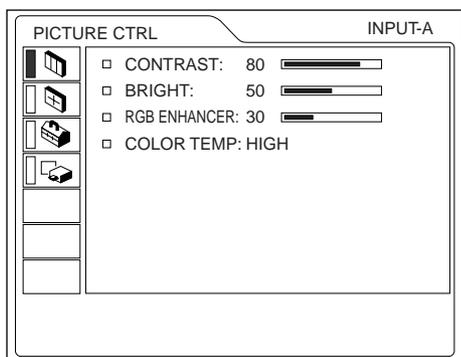
Selecting the Menu Language

You can select the language for displaying in the menu and other on screen display. The factory setting is ENGLISH.



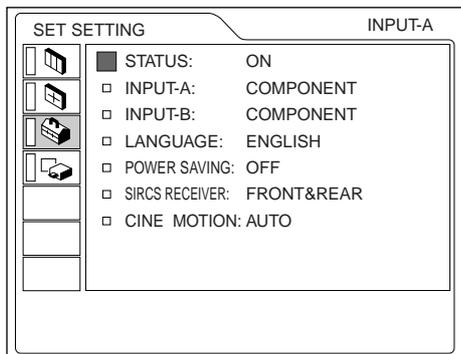
- 1 Plug the AC power cord into the wall outlet.
- 2 Press the I / ⏻ key to turn on the power.
- 3 Press the MENU key.

The menu display appears.

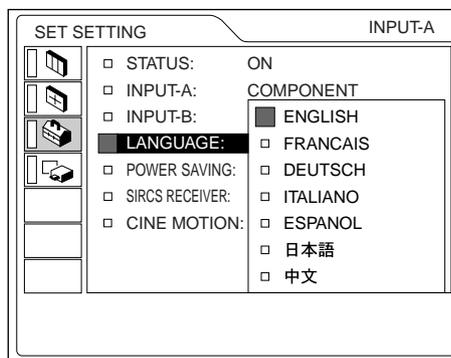


- 4 Select the icon of SET SETTING Menu, the third one, by using the ↑ or ↓ key, then press the → or ENTER key.

The SET SETTING Menu appears.



- 5 Select LANGUAGE with the ↑ or ↓ key, then press the → or ENTER key.



- 6 Select the language desired with the ↑ or ↓ key, then press the ← or ENTER key.

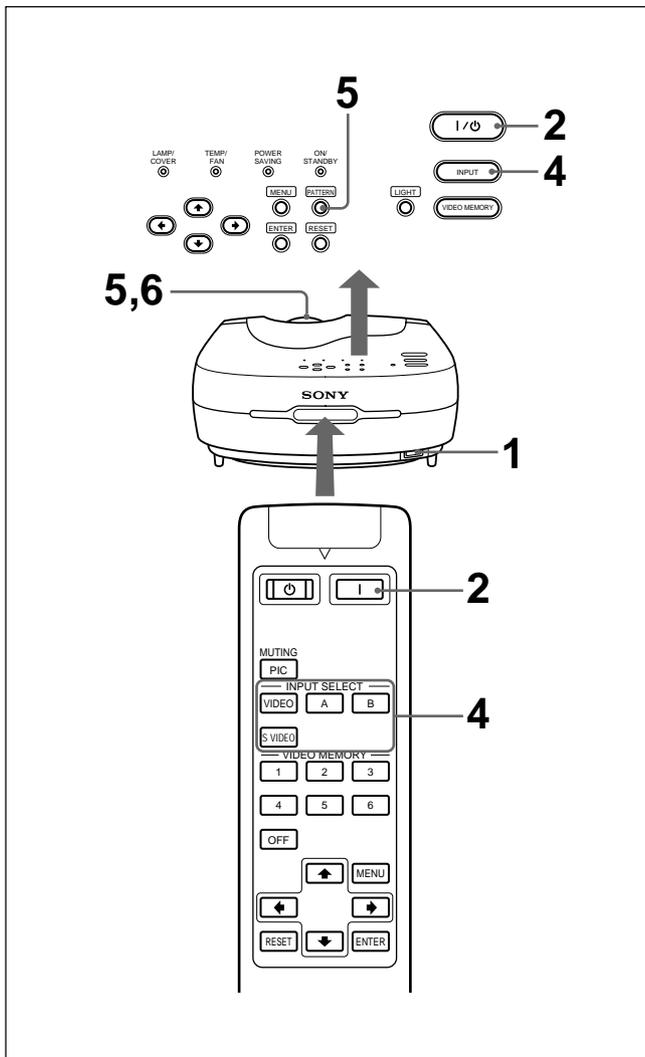
The menu changes into the selected language .

To clear the menu display

Press the MENU key.

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

Projecting



- 1** After all equipment is completely connected, plug the AC power cord into the wall outlet.
The ON/STANDBY indicator lights in red and the projector goes into the standby mode.
- 2** Press the I / ⏻ key on the control panel or the I key on the Remote Commander.
The ON/STANDBY indicator lights in green.
- 3** Turn on equipment connected to the projector.

- 4** Press the INPUT key to select the input source.

INPUT-A: Selects video signal input from the INPUT A connector, such as component equipment.

INPUT-B: Selects video signal input from the INPUT B connector, such as component equipment.

VIDEO: Selects video signal input from the VIDEO (VIDEO IN) jack.

S-VIDEO: Selects video signal input from the S VIDEO (VIDEO IN) jack.

- 5** Press the PATTERN key on the control panel to display the test pattern, and turn the focus ring to adjust the focus.
Press the PATTERN key again to clear the test pattern.

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

Note

Looking into the lens when projecting may cause injury to your eyes.

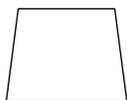
To	Press
Cut off the picture	the MUTING PIC key on the remote commander. To restore the picture, press the MUTING PIC key again.

To correct the trapezoid

When the projecting image is a trapezoid, change the projector's position/height by moving the adjuster.
 For details on "How to use the adjuster", see page 10 (GB).

If the image is still a trapezoid, correct it in DIGIT KEYSTONE in the INSTALL SETTING menu.

When the base edge is longer than the upper edge as shown in the figure below:



Set the value to negative.

When the upper edge is longer than the base edge as shown in the figure below:



Set the value to positive.

Note

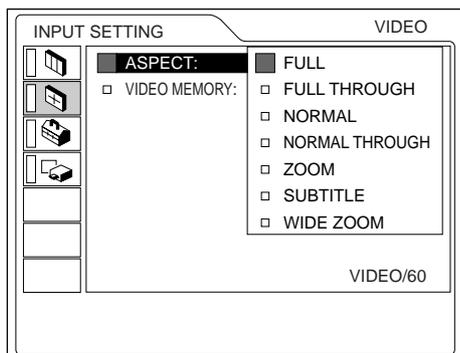
If "ZOOM", "FULL" or "NORMAL" have been selected in the ASPECT of the INPUT SETTING menu, you can change the trapezoid.

For details on "DIGIT KEYSTONE", see page 28 (GB).

Changing the aspect

You can change the aspect according to the video signal. For details on the menu screen operation, see "Using the Menu" on page 21 (GB).

- 1 Press the MENU key to display the menu.
- 2 Press the **↑** or **↓** key to select INPUT SETTING menu, then press the **→** or ENTER key.
- 3 Press the **↑** or **↓** key to select ASPECT, then press the **→** or ENTER key.



4 Make setting or adjustment on an item.

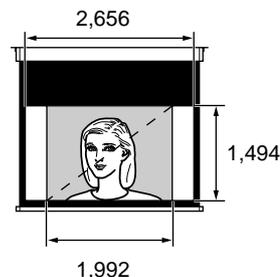
For details on setting individual items, see page 24 (GB).

The picture size for the screen size

Refer to the following for selecting the aspect.

When the 4:3 picture is displayed on the 16:9 screen

Example: The 120 inch screen is used.

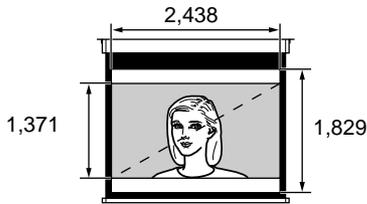


The 98 inch picture is displayed

	16:9 screen	4:3 picture	
Size (Inch)	Unit (mm)	Unit (mm)	Size (Inch)
90			73
110			90
120			98

When the 16 : 9 picture is displayed on the 4 : 3 screen

Example: The 120 inch screen is used.



The 110 inch picture is displayed.

4:3 screen		16:9 picture	
Size (Inch)	Unit (mm)	Unit (mm)	Size (Inch)
80			73
100			91
120			110

Notes on changing the aspect

This projector provides you with the various choices of aspects. When changing the aspect, check the following:

- Select an aspect taking into account that one which changes the aspect ratio of the original picture will provide a different look from that of the original image.
- Also note that if the projector is used for profit or for public viewing, modifying the original picture by switching aspects may constitute an infringement of the rights of authors or producers which are legally protected by laws.

To turn off the power

To turn off the power from the control panel

- 1 Press the I / ⏻ key on the control panel.
“Power OFF?” appears on the screen.

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.

The ON/STANDBY indicator flashes in green and the fan continues to run for about 120 seconds to reduce the internal heat. Also, the ON/STANDBY indicator flashes quickly for the first 40 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 ON/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 for about one second.

To turn off the power from the Remote Commander

- 1 Press the ⏻ key on the Remote Commander.
- 2 Unplug the AC power cord from the wall outlet after the fan stops running and the ON/STANDBY indicator lights in red.

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.

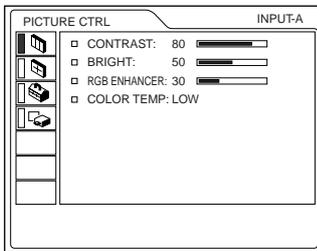
Using the MENU

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

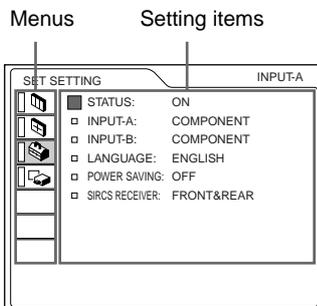
You can select the language for displaying in the menu.

For details on the selecting the language used in the menu, see page 17 (GB).

- 1 Press the MENU key.
The menu display appears.
The menu presently selected is shown as a yellow button.



- 2 Use the **↑** or **↓** key to select a menu, then press the **→** or ENTER key.
The selected menu appears.



- 3 Select an item.
Use the **↑** or **↓** key to select the item, then press the **→** or ENTER key.

- 4 Adjust an item.
 - When changing the adjustment level:
To increase the number, press the **↑** or **→** key.
To decrease the number, press the **↓** or **←** key.
Press the ENTER key to restore the original screen.
 - When changing the setting:
Press the **↑** or **↓** key to change the setting.
Press the **←** or ENTER key to restore the original screen.

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”, “SHARP” and “RGB ENHANCER” in the PICTURE CTRL menu.
- “DOT PHASE”, “SIZE H” and “SHIFT” in the INPUT SETTING menu.

About the memory of the settings

The settings are automatically stored in the projector memory.

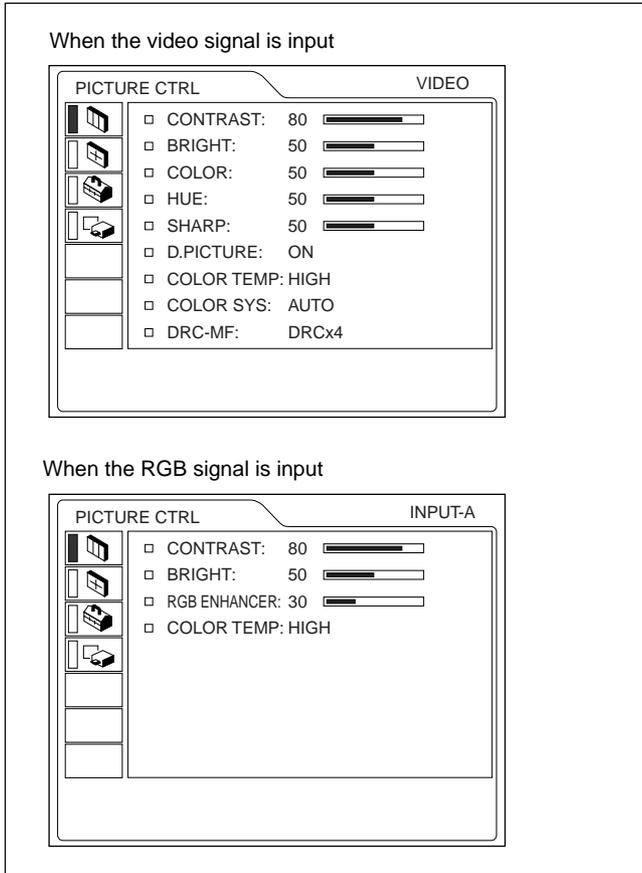
When no signal is input

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.



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 color 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.

RGB ENHANCER

Adjusts the picture sharpness when the computer signals are input.
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.

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.
AUTO: Automatically selects one of the following signals: NTSC_{3.58}, PAL, SECAM, NTSC_{4.43}.
PAL-M/N: Automatically selects one of the following signals: PAL-M/PAL-N, NTSC_{3.58}.
Normally, set to AUTO.
If the picture is distorted or colorless, select the color system according to the input signal.

DRC-MF

Smooths out a large size video image.
DRC × 4: Doubles the number of the video signal scanning lines and the number of horizontal pixels, resulting in quadrupled image quality.
DRC PROGRESSIVE: Displays a clear line or characters without line flickering.

Input signals and adjustable/setting items

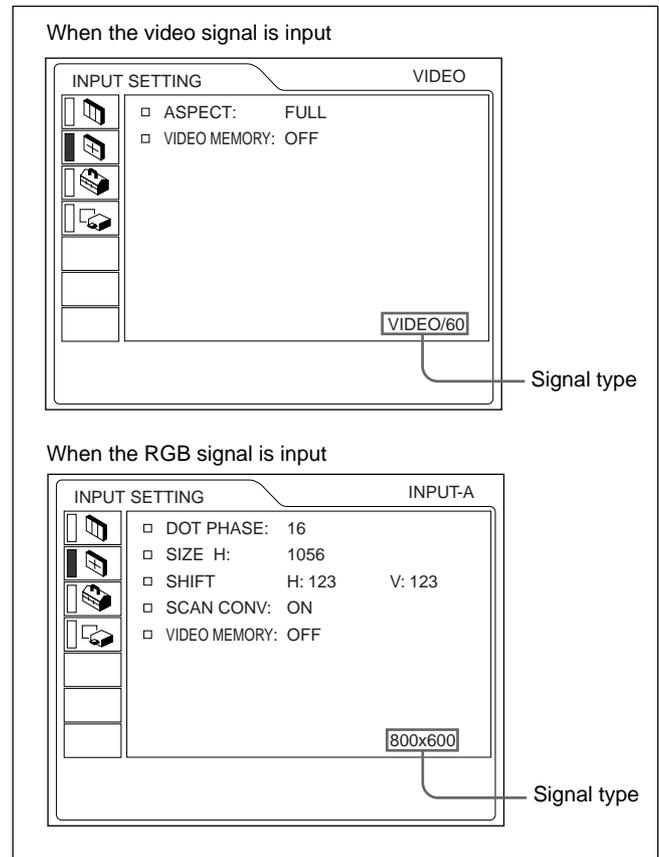
Item	Input signal				
	Video or S video (Y/C)	Component/15k RGB	Progressive Component/HDTV/DTV	RGB ¹⁾	B&W
CONTRAST	●	●	●	●	●
BRIGHT	●	●	●	●	●
COLOR	●	●	●	-	-
HUE	● (NTSC3.58/ 4.43 only)	●	●	-	-
SHARP	●	●	●	-	●
RGB ENHANCER	-	-	-	●	-
D. PICTURE	●	●	-	-	●
COLOR TEMP	●	●	●	●	●
COLOR SYS	●	-	-	-	●
DRC-MF	●	●	-	-	●

● : 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.



DOT PHASE

Adjusts the phase of the LCD dots and the computer signal input from the INPUT A/B connector. Adjust the picture to where it looks clearest.

SIZE H

Adjusts the horizontal size of the picture input from the INPUT A/B connector. 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 26 (GB).

1) The RGB signals of a computer

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.

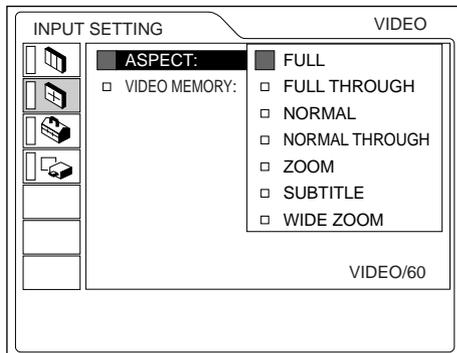
Use the ← or the → key to adjust the horizontal position and the ↑ and ↓ key for the vertical position.

ASPECT

Sets the following aspect setting:

4:3 NORMAL, NORMAL THROUGH

16:9 FULL, FULL THROUGH, ZOOM, SUBTITLE, WIDE ZOOM.



FULL: The 16:9 squeezed image is displayed with the correct aspect. The 4:3 image is enlarged horizontally.



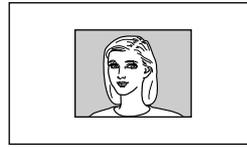
FULL THROUGH: One-to-one mapping is done on a squeezed 16:9 image. The image is displayed at the center of the screen.



NORMAL: The picture with normal ratio 4:3 is displayed.



NORMAL THROUGH: One-to-one mapping is done on the picture with a normal ratio of 4:3. The picture is displayed at the center of the screen.



ZOOM: The picture with normal ratio 4:3 is enlarged vertically and horizontally (with same ratio) to the screen size. This mode is ideal for capturing the full-screen drama of wide-format movies.



SUBTITLE: The subtitle area is compressed. This mode leaves the subtitles on the lower part of the screen.



WIDE ZOOM: The picture with normal ratio 4:3 is enlarged and the upper and lower portions of the picture are compressed. This is ideal for general programs, such as news or variety shows.



Note

You cannot change the image mode while the projector is projecting a high definition image or DTV signal.

The adjustable/unadjustable items depending on the aspect setting

Items	V SCROLL	TITLE AREA	DIGIT KEYSTONE
FULL	—	—	●
FULL THROUGH	—	—	—
NORMAL	—	—	●
NORMAL THROUGH	—	—	—
ZOOM	●	—	●
SUBTITLE	●	●	—
WIDE ZOOM	—	—	—

● : Adjustable — : Unadjustable

SCAN CONV (Scan converter)

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

- ON:** Enlarges the picture according to the screen aspect. 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.

V SCROLL

Adjusts the vertical position of the picture.
Adjustable range is 0 to +7.

As the setting increases, the picture moves up, and as the setting decreases, the picture moves down. To resume the normal position, press the RESET key.

TITLE AREA

Adjusts the subtitle area.
Adjustable range is 0 to +7.
As the setting increases, the subtitle area becomes wide, and as the setting decreases, the subtitle area becomes narrow.
To resume the normal area, press the RESET key.

Note

Although the adjustable range displayed is 0 to +7, the actual range may be limited depending on the V SCROLL setting.

VIDEO MEMORY

Displays the selected video memory number. There are 6 memory settings. If you select OFF, the image is displayed according to the settings stored in each channel memory.

How to set the VIDEO MEMORY

Using the Remote Commander

- 1** Press the desired number (1 – 6) of the VIDEO MEMORY keys.
The selected memory number is displayed in the menu.
- 2** From an appropriate menu, select an item to be adjusted and adjust the setting using the **↑**, **↓**, **←** or **→** keys.
- 3** Press the **←** or ENTER key.
The adjusted item (setting) is stored in the selected memory number. The screen returns to the previous screen.

Using the Control Panel

- 1** Select a VIDEO MEMORY number (1 – 6) by pressing the VIDEO MEMORY key.
(You can also set the VIDEO MEMORY with the menu operation.)
- 2** From an appropriate menu, select an item to be adjusted and adjust the setting using the **↑**, **↓**, **←** or **→** keys.
- 3** Press the **←** or ENTER key.
The adjusted item (setting) is stored in the selected memory number. The screen returns to the previous screen.

Input signals and adjustable/setting items

Item	Input signal				
	Video or S video (Y/C)	15k RGB/ Progressive Component	HDTV/ DTV	RGB ¹⁾	B&W
DOT PHASE	–	–	●	●	–
SIZE H	–	●	●	●	–
SHIFT	–	●	●	●	–
ASPECT	●	●	–	–	●
SCAN CONV	–	–	–	● (lower than SVGA only)	–
V SCROLL	○	○	–	–	○
TITLE AREA	○	○	–	–	○
VIDEO MEMORY	●	●	●	●	●

- : Adjustable/can be set
- : Not adjustable/can not be set
- : Aspect ratio dependent item

About the preset memory

This projector has 45 kinds of preset data for input signals (the preset memory). 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. The type of input signal is displayed in the INPUT SETTING menu. You can adjust the preset data through the INPUT SETTING menu.

This projector also has 20 kinds of user memories for each INPUT-A/B. You can register a new type of signal that is not preset. When an unpreset signal is input for the first time, the setting via INPUT-A/B adjusted in the INPUT SETTING menu is stored. When more than 20 user memories are registered for each INPUT-A/B, the newest memory is automatically stored over the oldest one.

1) The RGB signals of a computer

Preset signals

Memory No.	Preset signal	fH (kHz)	fV (Hz)	Sync	SIZE H	
1	Video 60 Hz	15.734	59.940	H-neg V-neg	1050	
2	Video 50 Hz	15.625	50.000	H-neg V-neg	1072	
3	15k RGB/Component 60 Hz	15.734	59.940	SonG/Y or composite sync	1050	
4	15k RGB/Component 50 Hz	15.625	50.000	SonG/Y or composite sync/composite video	1072	
5	HDTV(1080/60i)	33.750	60.000	SonG/Y or composite sync	2200	
6	640 × 350	VGA mode 1	31.469	70.086	H-pos V-neg	800
7		VGA VESA 85 Hz	37.861	85.080	H-pos V-neg	832
8	640 × 400	PC-9801 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	SonG	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	35.524	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	69.955	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	70.019	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	C-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		SGL-5	53.316	50.062	SonG	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

43	480/60p	480/60p (Progressive component)	31.470	60.000		1050
44	575/50p	575/50p (Progressive component)	31.250	50.000	SonG/Y	1072
45	1080/50i	1080/50i	28.130	50.000	or	2640
47	720/60p	720/60p	45.000	60.000	composite	1650
48	720/50p	720/50p	37.500	50.000	sync	1980
49 ¹⁾	1080/24PsF	1080/24PsF	27.000	48.000		2750
50	HDTV	540/60p	33.750	60.000	H-pos V-pos	2200
51	1366 × 768	16:9 RGB	45.000	56.000	H-neg V-neg	1766

After the data has been recalled from the preset memory about the following signals, you can use these preset data by adjusting SIZE H. Make fine adjustment by adjusting SHIFT.

Signal	Memory No.	SIZE H
Super Mac-2	23	1312
SGL-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

Notes

- A part of the screen is displayed in black depending on the aspect ratio of the input signal.
- Use the following signals to input the sync signal externally from the SYNC/HD connector.
 - 15k RGB signal: Composite sync signal or composite video signal
 - Component signal(15K): Cannot externally input sync signal.
 - Progressive component signal or DTV (Preset No. 3 – 5 or No. 43 – 48), 1080/24PsF: Composite sync signal

The adjustable items in the VIDEO MEMORY

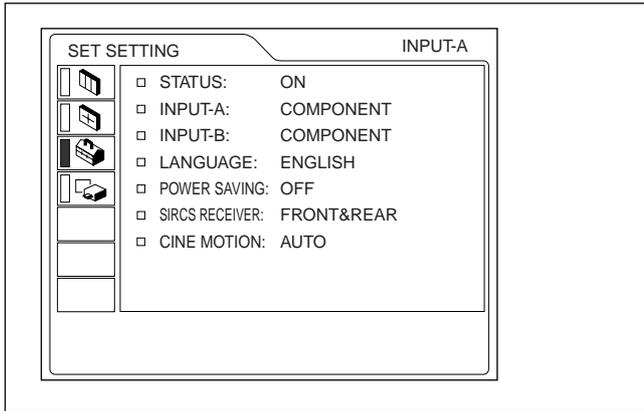
Items which can set in the VIDEO MEMORY are:

- “CONTRAST”, “BRIGHT”, “COLOR”, “HUE”, “SHARP”, “RGB ENHANCER”, “D.PICTURE”, “COLOR TEMP”, “COLOR SYS” and “DRC-MF” in the PICTURE CTRL menu.
- “ASPECT”, “SCAN CONV”, “V SCROLL” and “TITLE AREA” in the INPUT SETTING menu.

1) No. 49 is an interlace signal.

The SET SETTING Menu

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



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.

INPUT-A

Selects the computer, component, DTV YPbPr or DTV GBR signal input from the INPUT A connectors.

Note

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

INPUT-B

Selects the computer, component, DTV YPbPr or DTV GBR signal input from the INPUT-B connectors.

Notes

- If the setting is not correct, “Please check INPUT-B setting.” appears on the screen and the color of the picture becomes strange or the picture is not displayed.
- Set the progressive component signal, e.g. DVD, to “COMPONENT”; 15k RGB signal, e.g. game machines, to “DTV GBR.”

The signals that can be output for each setting of INPUT-A and -B are as shown below.

Signal	Setting of INPUT -A and -B			
	COMPUTER	COMPONENT	DTV YP _b Pr	DTV GBR
15k RGB (DVD output in PAL system, etc.)	–	–	–	●
Component	–	●	●	–
Progressive Component (Progressive DVD output etc.)	–	●	●	–
DTV (Digital BS output, etc.)	–	–	●	●
Computer	●	–	–	–

● : can be output – : cannot be output

LANGUAGE

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

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

POWER SAVING

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

The power saving mode is canceled when a signal is input or any key is pressed.

SIRCS RECEIVER

Selects the remote control detectors (SIRCS receiver) 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.

CINE MOTION

Selects either position according to the signal source for the NTSC_{3.58/4.43}, 15k RGB (60 Hz) or 525/60 signal.

AUTO: Set to AUTO when the input signal is from a film-originated material. 2-3 pull down is applied.

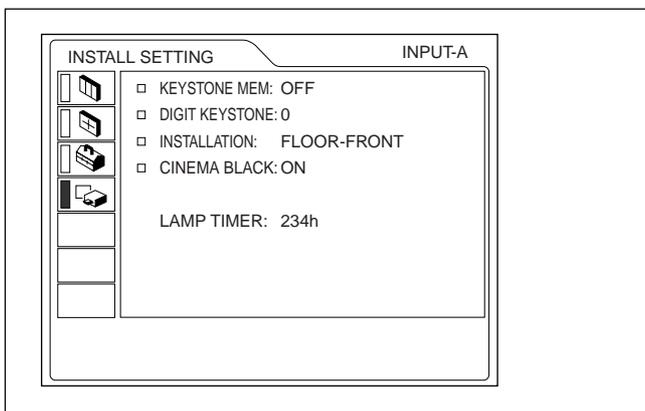
OFF: 2-3 pull down is not applied.

Note

This function will not operate for signals of 50Hz.

The INSTALL SETTING Menu

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



KEYSTONE MEM

ON: DIGIT KEYSTONE setting is stored.

The data is retrieved when the projector power is turned on. The setting will remain the same every time.

OFF: DIGIT KEYSTONE is reset to 0 when the power is turned on the next time.

DIGIT KEYSTONE

Corrects the trapezoid caused by the projection angle. If the base edge is longer, set a negative value; if the upper edge is longer, set a positive value to square the image.

Note

If “ZOOM”, “FULL” or “NORMAL” have been selected in the ASPECT of the INPUT SETTING, you can change the trapezoid.

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.

CINEMA BLACK

Switches the lamp wattage during projection.

OFF: Normal wattage.

ON: Enhances the black by reducing the lamp wattage.

Notes

- It will take a few seconds for the projector to change the lamp wattage during projection.
- If the CINEMA BLACK is set to ON, it starts with OFF when the power is turned on, then changes to ON after a while.

LAMP TIMER

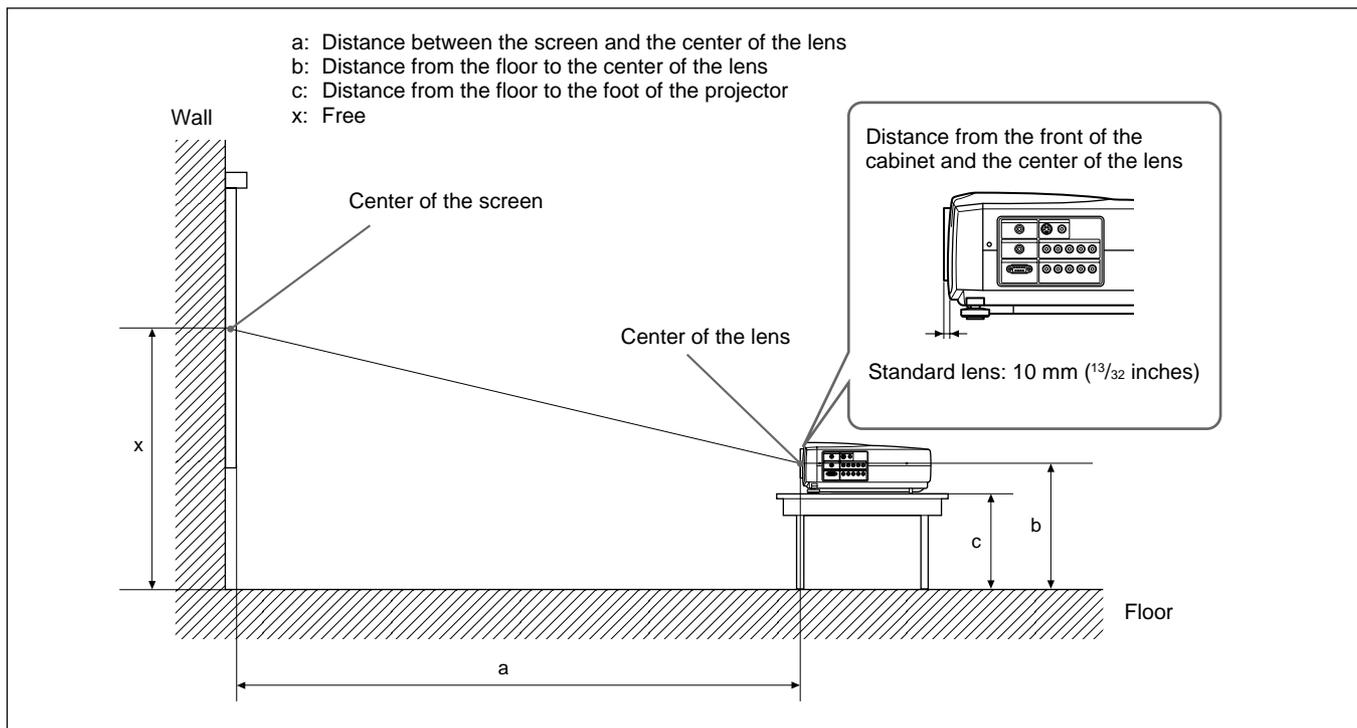
Indicates how long the lamp has been turned on.

Note

This only displays the time. You cannot alter the display.

Installation Examples

Floor Installation



Unit: mm (inches)

16:9 Screen size (inches)		40	60	80	100	120	150	180	200	250	300
a	Minimum	1260 (49 5/8)	1930 (76)	2600 (102 3/8)	3270 (128 7/8)	3930 (154 3/4)	4940 (194 5/8)	5940 (234)	6610 (260 3/8)	8270 (325 3/4)	9940 (391 1/2)
	Maximum	1470 (58)	2240 (88 1/4)	3010 (118 5/32)	3780 (148 7/8)	4550 (179 1/4)	5710 (224 7/8)	6860 (270 1/8)	7630 (300 1/2)	9560 (376 1/2)	11480 (452 1/8)
b		x-249 (9 7/8)	x-374 (14 3/4)	x-498 (19 5/8)	x-623 (24 5/8)	x-747 (29 1/2)	x-934 (36 7/8)	x-1121 (44 1/8)	x-1245 (49 1/8)	x-1556 (61 3/8)	x-1868 (73 5/8)
c		x-349 (13 3/4)	x-473 (18 5/8)	x-598 (23 5/8)	x-722 (28 1/2)	x-847 (33 3/8)	x-1033 (40 3/4)	x-1220 (48 1/8)	x-1345 (53)	x-1656 (65 1/4)	x-1967 (77 1/2)

To calculate the installation measurement (unit: mm)

SS: screen size diagonal (inches)

$$a \text{ (minimum)} = \{(SS \times 44.22/1.3573) - 70.76208\} \times 1.025$$

$$b = x - (SS/1.3573 \times 8.45)$$

$$a \text{ (maximum)} = \{(SS \times 53.599173/1.3573) - 70.17171\} \times 0.975$$

$$c = x - (SS/1.3573 \times 8.45 + 99.5)$$

Unit: mm (inches)

4:3 Screen size (inches)		40	60	80	100	120	150	180	200	250	300
a	Minimum	1560 (61 1/2)	2380 (93 3/4)	3200 (126)	4020 (158 5/8)	4830 (190 1/4)	6060 (238 5/8)	7290 (287 1/8)	8100 (319)	10150 (399 3/4)	12190 (480)
	Maximum	1820 (71 3/4)	2760 (108 3/4)	3700 (145 3/4)	4650 (183 1/8)	5590 (220 1/8)	7000 (275 5/8)	8420 (331 5/8)	9360 (368 5/8)	11720 (461 1/2)	14070 (554 1/8)
b		x-305 (12)	x-457 (18 1/8)	x-610 (24 1/8)	x-762 (30 1/8)	x-915 (36 1/8)	x-1143 (45 1/8)	x-1372 (54 1/8)	x-1524 (60 1/8)	x-1905 (75 1/8)	x-2287 (90 1/8)
c		x-404 (16)	x-557 (22)	x-709 (28)	x-862 (34)	x-1014 (40)	x-1243 (49)	x-1471 (58)	x-1624 (64)	x-2005 (78 31/32)	x-2386 (94)

To calculate the installation measurement (unit: mm)

SS: screen size diagonal (inches)

$$a \text{ (minimum)} = \{(SS \times 44.22/1.1087) - 70.76208\} \times 1.025$$

$$b = x - (SS/1.1087 \times 8.45)$$

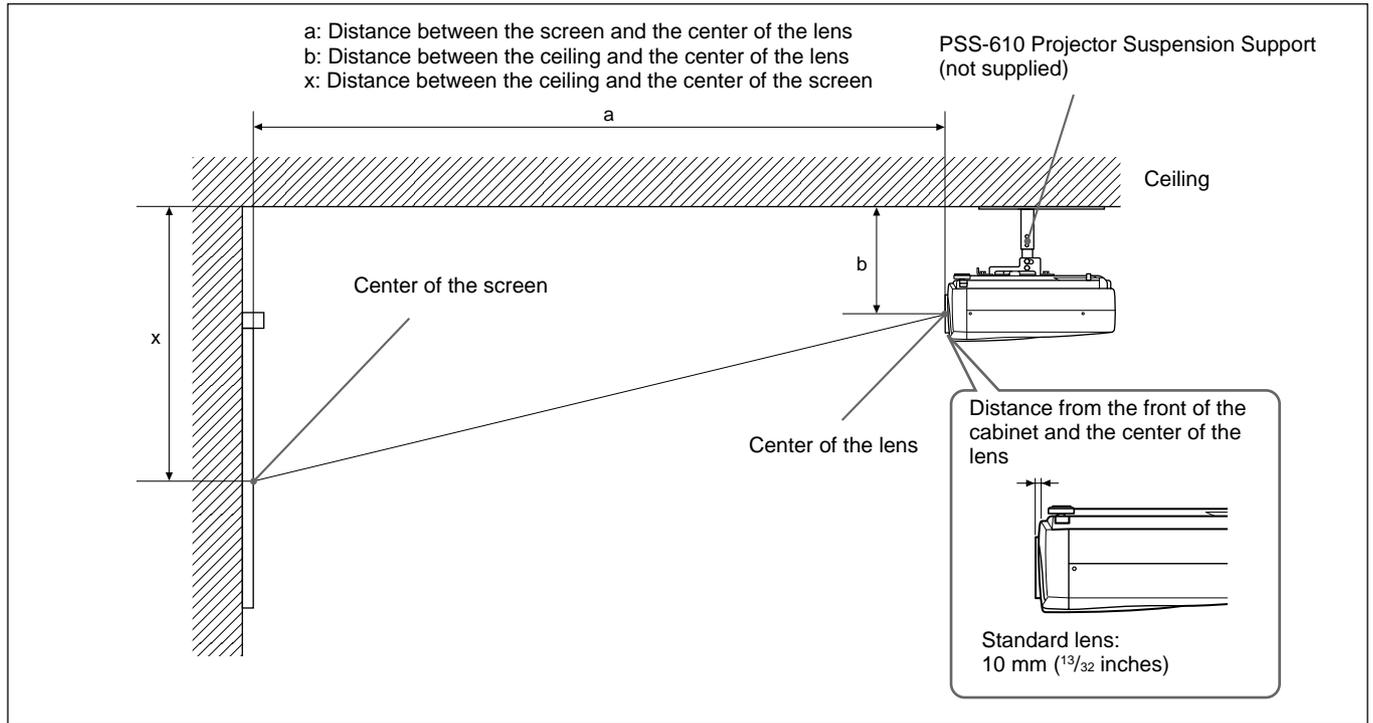
$$a \text{ (maximum)} = \{(SS \times 53.597384/1.1087) - 70.27214\} \times 0.975$$

$$c = x - (SS/1.1087 \times 8.45 + 99.5)$$

Ceiling Installation

When installing the projector on the ceiling, use the PSS-610 Projector Suspension Support.

For ceiling installation, consult with qualified Sony personnel.



Unit: mm (inches)

16:9 Screen size (inches)		80	100	120	150	180	200	250	300
a	Minimum	2600 (102 3/8)	3270 (128 7/8)	3930 (154 3/4)	4940 (194 5/8)	5940 (234)	6610 (260 3/8)	8270 (325 3/4)	9940 (391 1/2)
	Maximum	3010 (118 5/32)	3780 (148 7/8)	4550 (179 1/4)	5710 (224 7/8)	6860 (270 1/8)	7630 (300 1/2)	9560 (376 1/2)	11480 (452 1/8)
x		b+498 (19 5/8)	b+623 (24 5/8)	b+747 (29 1/2)	b+934 (36 7/8)	b+1121 (44 1/8)	b+1245 (49 1/8)	b+1556 (61 3/8)	b+1868 (73 5/8)
b		247/272/297/347/372/397 mm (9 3/4/10 3/4/11 3/4/13 3/4/14 3/4/15 3/4 inches) adjustable when using PSS-610							

To calculate the installation measurement (unit: mm)

SS: screen size diagonal (inches)

$$a \text{ (minimum)} = \{(SS \times 44.22/1.3573) - 70.76208\} \times 1.025$$

$$a \text{ (maximum)} = \{(SS \times 53.599173/1.3573) - 70.17171\} \times 0.975$$

$$x = b + (SS/1.3573 \times 8.45)$$

Unit: mm (inches)

4:3 Screen size (inches)		80	100	120	150	180	200	250	300
a	Minimum	3200 (126)	4020 (158 5/16)	4830 (190 1/4)	6060 (238 5/8)	7290 (287 1/8)	8100 (319)	10150 (399 3/4)	12190 (480)
	Maximum	3700 (145 3/4)	4650 (183 1/8)	5590 (220 1/8)	7000 (275 5/8)	8420 (331 5/8)	9360 (368 5/8)	11720 (461 1/2)	14070 (554 1/8)
x		b+610 (24 1/8)	b+762 (30 1/8)	b+915 (36 1/8)	b+1143 (45 1/8)	b+1372 (54 1/8)	b+1524 (60 1/8)	b+1905 (75 1/8)	b+2287 (90 1/8)
b		247/272/297/347/372/397 mm (9 3/4/10 3/4/11 3/4/13 3/4/14 3/4/15 3/4 inches) adjustable when using PSS-610							

To calculate the installation measurement (unit: mm)

SS: screen size diagonal (inches)

$$a \text{ (minimum)} = \{(SS \times 44.22/1.1087) - 70.76208\} \times 1.025$$

$$a \text{ (maximum)} = \{(SS \times 53.597384/1.1087) - 70.27214\} \times 0.975$$

$$x = b + (SS/1.1087 \times 8.45)$$

Attaching the projector suspension support PSS-610

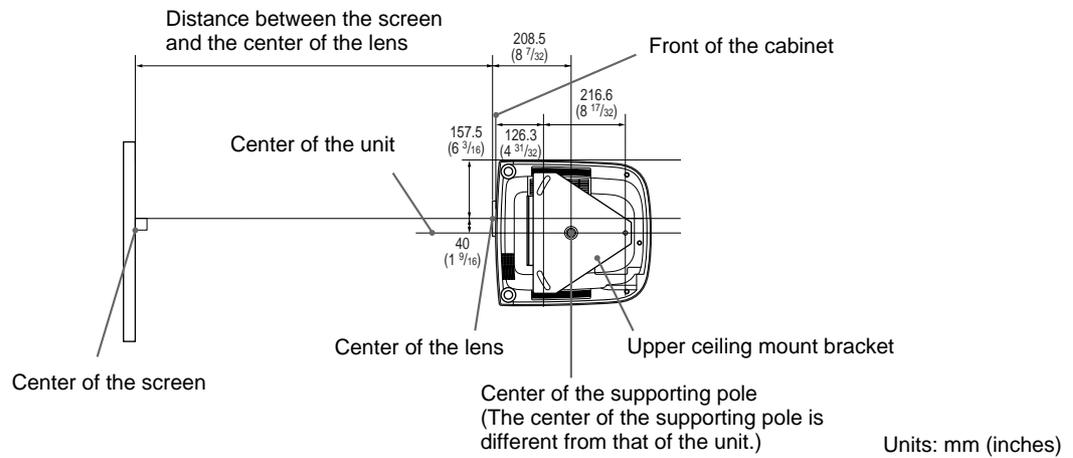
When installing the projector on the ceiling, use the PSS-610 Projector Suspension Support. For more details on the ceiling installation, refer to the

Installation manual for Dealers of the PSS-610. The installation measurements are shown below when you install the projector on the ceiling.

Installation Diagram

Top view

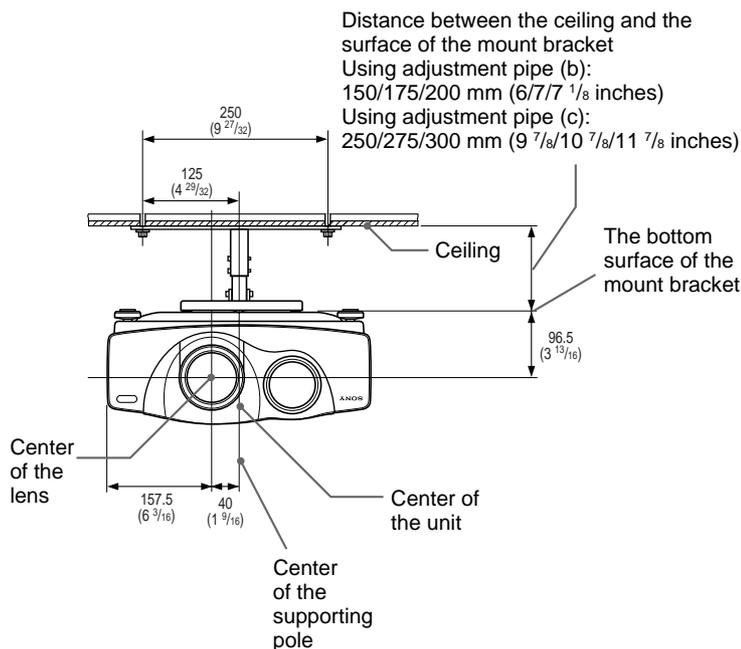
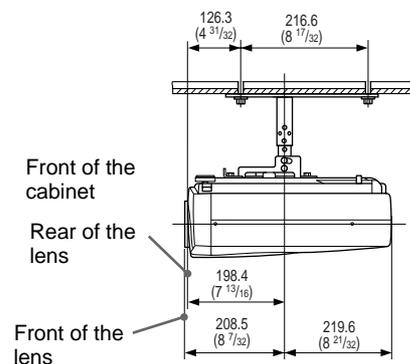
Align the center of the lens with the center of the screen.



Front view

The lens is offset 40 mm (1 9/16 inch) to the right from the center of the supporting pole. When mounting, take care to align the center of the lens with the center of the screen; not the center of the supporting pole.

Side view

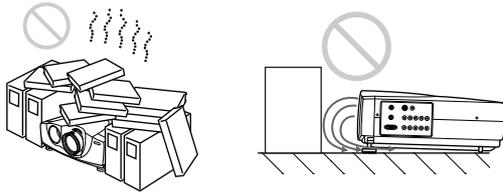


Notes for Installation

Unsuitable Installation

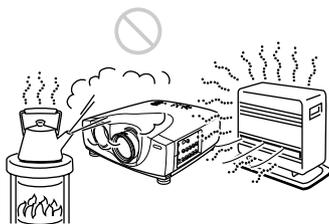
Do not install the projector in the following situations. These installations may cause malfunction or damage to the projector.

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 Temp.! Lamp 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 unit.
- Be careful that the 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

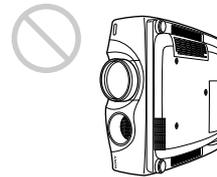


Avoid installing the unit in a location where there is a lot of dust; otherwise, the air filter will be obstructed. The dust blocking the air through the filter may cause raising the internal heat of the projector. Replace it with a new one periodically.

Unsuitable Conditions for Use

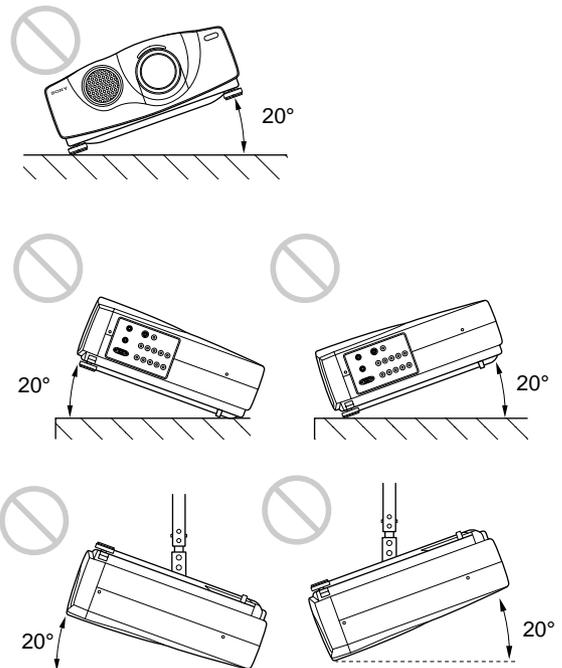
Do not do any of the following.

Topping of the unit



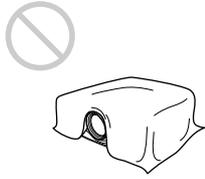
Avoid using as the unit topples over on its side. It may cause malfunction.

Tilting front/rear and right/left



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.

Blocking the ventilation holes



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



Maintenance

Notes

- If the lamp breaks, consult with qualified Sony personnel.
- Pull out the lamp unit by holding the handle. If you touch the lamp unit, you may be burned or injured.
- When removing the lamp unit, make sure it remains horizontal, then pull straight up. Do not tilt the lamp unit. If you pull out the lamp unit while tilted and if the lamp breaks, the pieces may scatter, causing injury.

Replacing the Lamp

When the lamp becomes darker, replace the lamp promptly with a new LMP-P201 Projector Lamp (not supplied).

It is recommended to replace the lamp with a new one after about 1500 hours for the OFF setting, or about 3000 hours for the ON setting in the CINEMA BLACK.

When it is time to change the lamp, a message which says, "Please replace the LAMP." will be displayed.

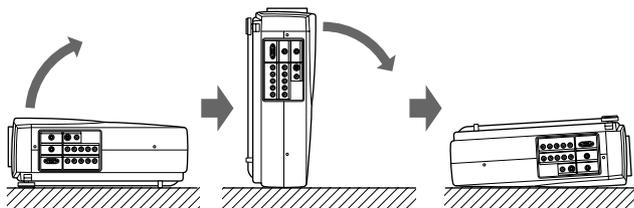
When replacing the lamp after using the projector

Turn off the projector, then unplug the power cord. Wait for at least an hour for the lamp to cool.

Note

The lamp becomes a high temperature after turning off the projector with the I /  key. If you touch the lamp, you may scald your finger. When you replace the lamp, wait for at least an hour for the lamp to cool.

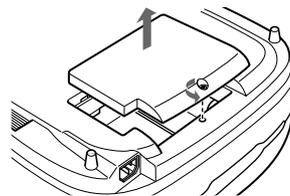
- 1 Place a protective sheet (cloth) beneath the projector.
Hold the projector and turn the projector toward the back as shown below.



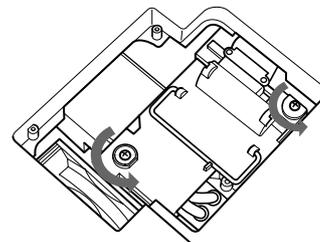
Note

When replacing the lamp, be sure the unit is on a flat and stable surface.

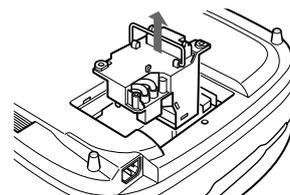
- 2 Open the lamp cover by loosening one screw with the Philips screwdriver (supplied with the LMP-P201 Projector Lamp).



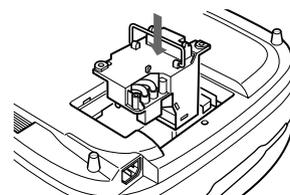
- 3 Loosen two screws on the lamp unit with the Philips screwdriver.



- 4 While holding the handle and keeping the lamp unit horizontal, pull straight up.



- 5 Insert the new lamp all the way in until it is securely in place. Tighten the screws. Fold down the handle.



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.
- LMP-P200 cannot be used with this projector.

- 6 Close the lamp cover and tighten the screw.
- 7 Turn the projector back over.
- 8 Connect the power cord and turn the projector to the standby mode.
- 9 Press the following keys on the control panel in the following order for less than in five seconds each: RESET, ←, →, ENTER.

Notes

- Do not put your hands into the lamp replacement spot, or not fall any liquid or object into it to avoid electrical shock or fire.
- Be sure to use the LMP-P201 Projector Lamp for replacement. If you use lamps other than LMP-P201, the projector may cause a malfunction.
- Be sure to turn off the projector and unplug the power cord before replacing the lamp.

Disposal of used projector lamp

As the materials used in this lamp are similar to those of a fluorescent lamp, you should dispose of a used projector lamp in the same way as a fluorescent lamp.

Replacing the Air Filter

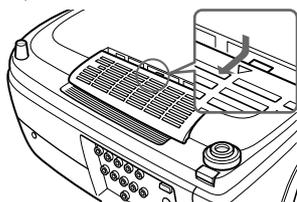
The air filter should be replaced when a warning message is displayed on the screen.

To replace the air filter, follow the steps below:

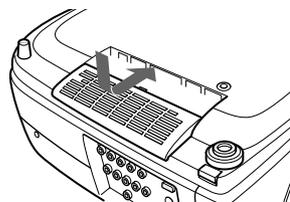
Note

If you keep on using this unit without replacing the air filter, the filter may start to clog with dust. If this happens and the internal temperature of the unit rises, the heat protection function may prevent the use of the projector for a short time. This filter cannot be cleaned; please replace it on a regular basis. You may need to replace the filter earlier than suggested, depending on the environment of use.

- 1 Turn off the power and unplug the power cord.
- 2 While pressing the triangle mark on the air filter, slide and remove the air filter (at the bottom of the projector).



- 3 Attach the new air filter aligning with the guides on the projector. Slide the air filter until it clicks.



Notes

- Be sure to attach the air filter firmly; the power will not be turned on if it is not closed securely.
- Time for the replacement of the air filter depends on the environment in which the projector is being used.
- When the air filter clogs with dust, a message which says, "Please replace the filter." will be displayed.

To reset the air filter

After replacing the air filter, follow the steps below to reset the air filter. When you are using the projector for the first time, you should also reset the air filter for the clog detection function to operate correctly.

- 1 Connect the power cord and turn the projector to the standby mode.
- 2 Press the following keys on the control panel in the following order for less than in five seconds each: RESET, MENU, ↓, ENTER.
- 3 Turn the power on by pressing the I / ⏻ key on the control panel or the I key on the Remote Commander.

Note

Be sure to follow the operations described above. The clog detection function for the filter will not operate correctly if you do not follow these steps.

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.

Power

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 120 seconds before turning on the power (see page 20 (GB)).
	The lamp cover is detached.	Close the lamp cover securely (see page 34 (GB)).
	The air filter is detached.	Close the air filter securely (see page 35(GB)).

Image

Symptom	Cause	Remedy
No picture.	Cable is disconnected or not connected properly.	Check that the proper connections have been made (see pages 15 (GB) and 16 (GB)).
	Invalid input setting.	Set the INPUT-A/B setting according to the input signal.
	Input selection is incorrect.	Select the input source correctly using the INPUT key (see page 18 (GB)).
	Picture is cut off.	Press the MUTING PIC key to release the muting function (see page 18 (GB)).
	The computer output signals are not set to output from an external monitor.	Set the computer signal to output to external monitor (see page 16 (GB)).
	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 16 (GB)).
The picture is noisy.	If you input computer signals, some noise will appear in the background on certain screens depending on the number of dots in the input signals and LCD pixels.	Change the desktop pattern on the connected computer.
On-screen display does not appear.	STATUS in the SET SETTING menu has been set to OFF.	Set STATUS in the SET SETTING menu to ON (see page 27 (GB)).

Remote Commander

Symptom	Cause	Remedy
The Remote Commander does not work.	The Remote Commander batteries are dead.	Replace with new batteries (see page 14 (GB)).
	The remote control cable is not connected to the CONTROL S IN connector (projector) or CONTROL S OUT (Remote Commander).	Connect the remote control cable to both the projector and Remote Commander, or disconnect the cable. (see page 13 (GB)).
	The front/rear remote control detector is near the fluorescent lamp.	Change the setting of SIRCS RECEIVER in the SET SETTING menu (see page 27 (GB)).
	The Remote Commander is used as wired without batteries.	Install batteries (see page 14 (GB)).

Others

Symptom	Cause	Remedy
The LAMP/COVER indicator flashes.	The lamp cover or the air filter is detached.	Attach the lamp cover or the air filter securely (see pages 34 (GB) and 35 (GB)).
The LAMP/COVER indicator lights up.	The lamp has reached the end of its life.	Replace the lamp (see page 34 (GB)).
	The lamp becomes a high temperature.	Wait for 120 seconds to cool down the lamp and turn on the power again (see page 20 (GB)).
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. Check to see if the air filter has been used over 500 hours. Check to see if the air filter is clogged with dust.
Both LAMP/COVER and TEMP/FAN indicators light up.	The electric system failed.	Consult with qualified Sony personnel.

Warning messages

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

Message	Meaning	Remedy
High temp.! Lamp off in 1 min.	Internal temperature is too high.	Turn off the power. Check to see if nothing is blocking the ventilation holes. Check to see if the air filter has been used over 500 hours. Check to see if the air filter is clogged with dust.
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 (see page 16 (GB)).
Please check INPUT-A setting.	You have input RGB signal from the computer when INPUT-A in the SET SETTING menu is set to COMPONENT, DTV YPbPr or DTV GBR.	Set INPUT-A correctly (see page 27 (GB)).
Please check INPUT-B setting.	You have input RGB signal from the computer when INPUT-B in the SET SETTING menu is set to COMPONENT, DTV YPbPr or DTV GBR.	Set INPUT-B correctly (see page 27 (GB)).
Please replace the LAMP.	It is time to replace the lamp.	Please replace the lamp.
Please replace the filter.	The air filter is clogged with dust.	Please replace the air filter.

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 (see page 15 (GB) and 16 (GB)).
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	1.35-inch p-Si TFT LCD panel 3,147,264 pixels (1,049,088 pixels × 3)
Lens	Approx. 1.2 times zoom lens f 44.6 to 53.6 mm/F 2.2 to 2.5
Lamp	200 W UHP
Projection picture size	Range: 40 to 300 inches (diagonal measure)
Light output	ANSI lumen ¹⁾ 1000 lm
Throwing distance	<16:9> 40-inch: 1260 to 1470 mm (49 ⁵ / ₈ to 58 inches) 60-inch: 1930 to 2240 mm (76 to 88 ¹ / ₄ inches) 80-inch: 2600 to 3010 mm (102 ³ / ₈ to 118 ⁵ / ₈ inches) 100-inch: 3270 to 3780 mm (128 ⁷ / ₈ to 148 ⁷ / ₈ inches) 120-inch: 3930 to 4550 mm (154 ³ / ₄ to 179 ¹ / ₄ inches) 150-inch: 4940 to 5710 mm (194 ⁵ / ₈ to 224 ⁷ / ₈ inches) 180-inch: 5940 to 6860 mm (234 to 270 ¹ / ₈ inches) 200-inch: 6610 to 7630 mm (260 ³ / ₈ to 300 ¹ / ₂ inches) 250-inch: 8270 to 9560 mm (325 ³ / ₄ to 376 ¹ / ₂ inches) 300-inch: 9940 to 11480 mm (391 ¹ / ₂ to 452 ¹ / ₈ inches) <4:3> 40-inch: 1560 to 1820 mm (61 ¹ / ₂ to 71 ³ / ₄ inches) 60-inch: 2380 to 2760 mm (93 ³ / ₄ to 108 ³ / ₄ inches) 80-inch: 3200 to 3700 mm (126 to 145 ³ / ₄ inches) 100-inch: 4020 to 4650 mm (158 ⁵ / ₁₆ to 183 ¹ / ₈ inches) 120-inch: 4830 to 5590 mm (190 ¹ / ₄ to 220 ¹ / ₈ inches) 150-inch: 6060 to 7000 mm (238 ⁵ / ₈ to 275 ⁵ / ₈ inches) 180-inch: 7290 to 8420 mm (287 ¹ / ₈ to 331 ⁵ / ₈ inches)

200-inch:	8100 to 9360 mm (319 to 368 ⁵ / ₈ inches)
250-inch:	10150 to 11720 mm (399 ³ / ₄ to 461 ¹ / ₂ inches)
300-inch:	12190 to 14070 mm (480 to 554 ¹ / ₈ inches)

Electrical characteristics

Color system	NTSC _{3.58} /PAL/SECAM/NTSC _{4.43} /PAL-M/PAL-N system, switched automatically/manually
Resolution	750 horizontal TV lines (Video input) 1366 × 768 pixels (RGB input)
Acceptable computer signals	fH: 15 to 80 kHz fV: 50 to 85 Hz

Input/Output

VIDEO IN	VIDEO: RCA type Composite video: 1 Vp-p ±2 dB sync negative (75 ohms terminated) S VIDEO: Y/C mini DIN 4-pin type (female) 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)
INPUT A/B	Component/Progressive component/HDTV/RGB: RCA type (female) 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/CB/PB: 0.7 Vp-p ±2 dB R/CR/PR: 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

1) ANSI lumen is a measuring method of American National Standard IT 7.228.

	VD:
	Vertical sync input: 1-5 V _{p-p} high impedance, positive/ negative
REMOTE CONTROL S IN/PLUG IN POWER	RS-232C: D-sub 9-pin (female)
	Stereo minijack 5V _{p-p} , plug in power, DC5V
TRIGGER	Power on: DC 12V 4.7k ohm output impedance Power off: 0 V
Safety regulations:	UL, cUL, FCC Class B, IC Class B, NEMKO, CE(LVD/EMC), C- Tick

Optional accessories

Projector Lamp LMP-P201 (for replacement)
Projector Suspension Support PSS-610
Air Filter PK-VW11FL

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

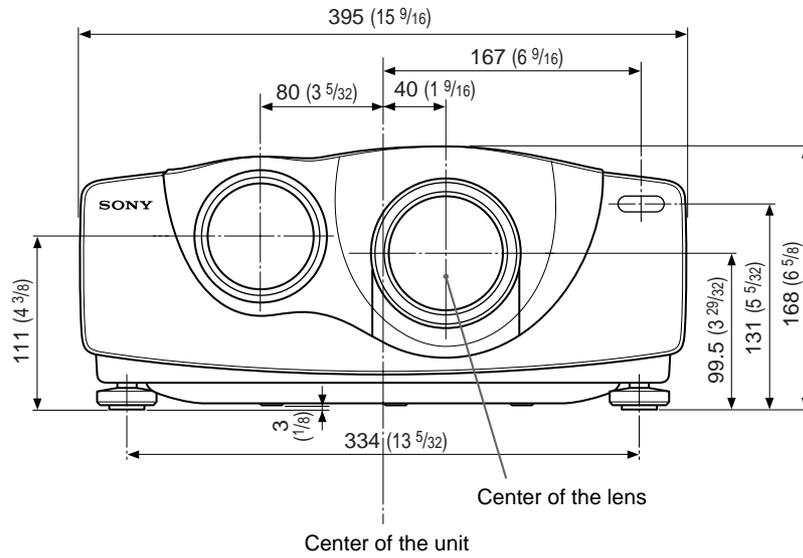
General

Dimensions	395 × 168 × 427 mm (13 ³ / ₈ × 5 ⁵ / ₈ × 13 ¹ / ₄ inches) (w/h/d)
Mass	Approx. 8 kg (17 lb 10 oz)
Power requirements	AC 100 to 240 V, 50/60 Hz
Power consumption	Max. 300 W (Standby mode: 6 W)
Peak inrush current	(1) Power ON, current probe method: 58.0A (240V) (2) Hot switching inrush current, measured in accordance with European standard EN55103-1: 24.3A (230V)
Operating temperature	0°C to 35°C (32°F to 95°F)
Operating humidity	35% to 85% (no condensation)
Storage temperature	-20°C to 60°C (-4°F to 140°F)
Storage humidity	10% to 90%
Supplied accessories	Remote Commander RM-PJVW10 (1) Size AA (R6) batteries (2) Lens Cap (1) AC power cord (1) Air filter (for replacement) (3) Operating Instructions (1)

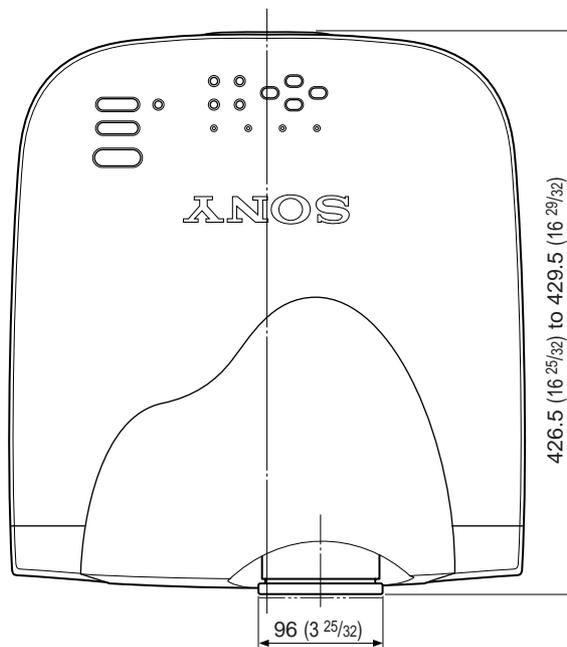
Design and specifications are subject to change
without notice.

Dimensions

Front

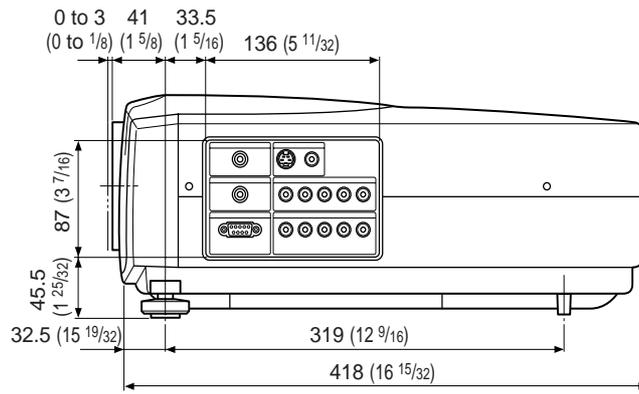


Top

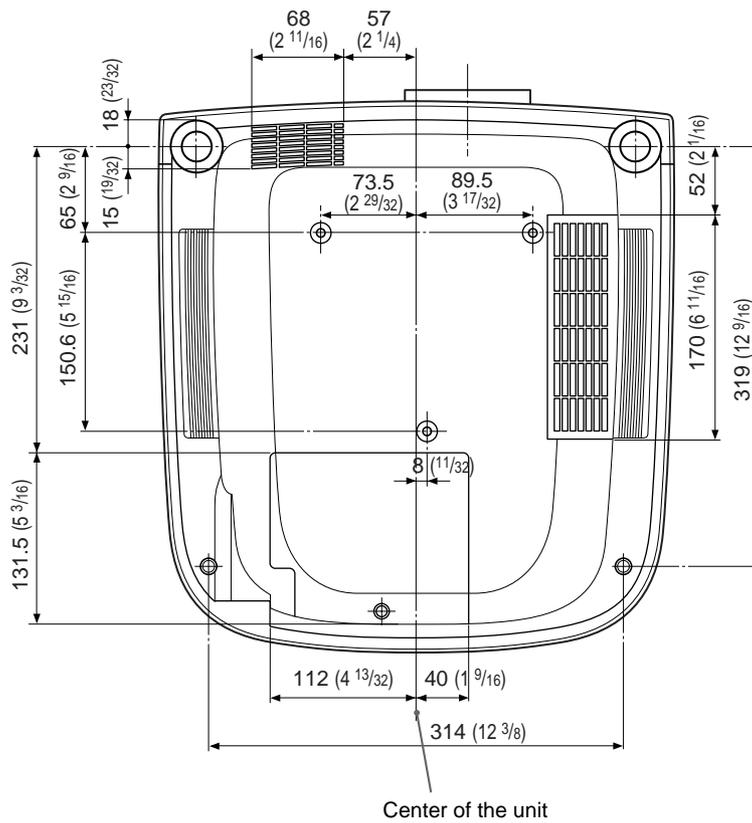


Unit: mm (inches)

Side



Bottom



Unit: mm (inches)

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